

(No Model.)

J. MILLER.

SCREW THREADING DEVICE.

No. 274,630.

Patented Mar. 27, 1883.

Fig. 1.

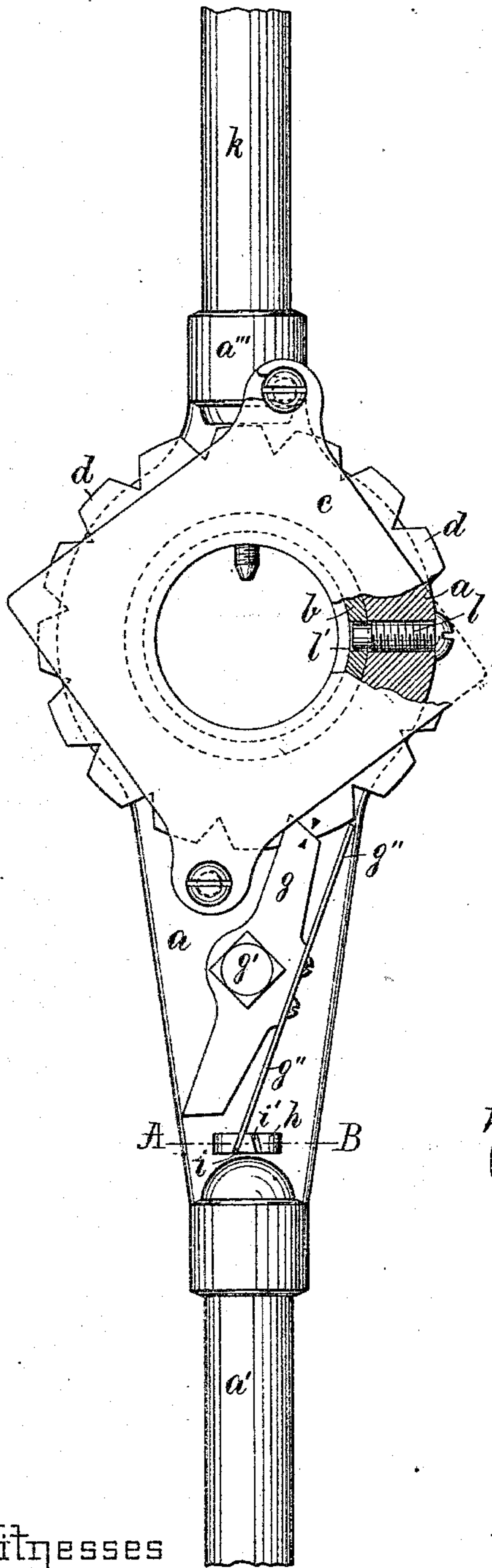
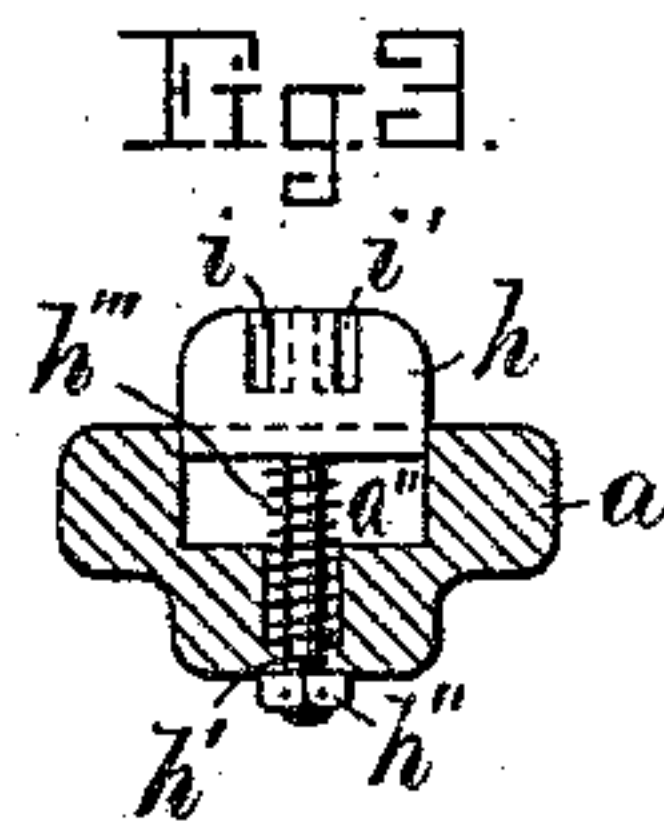
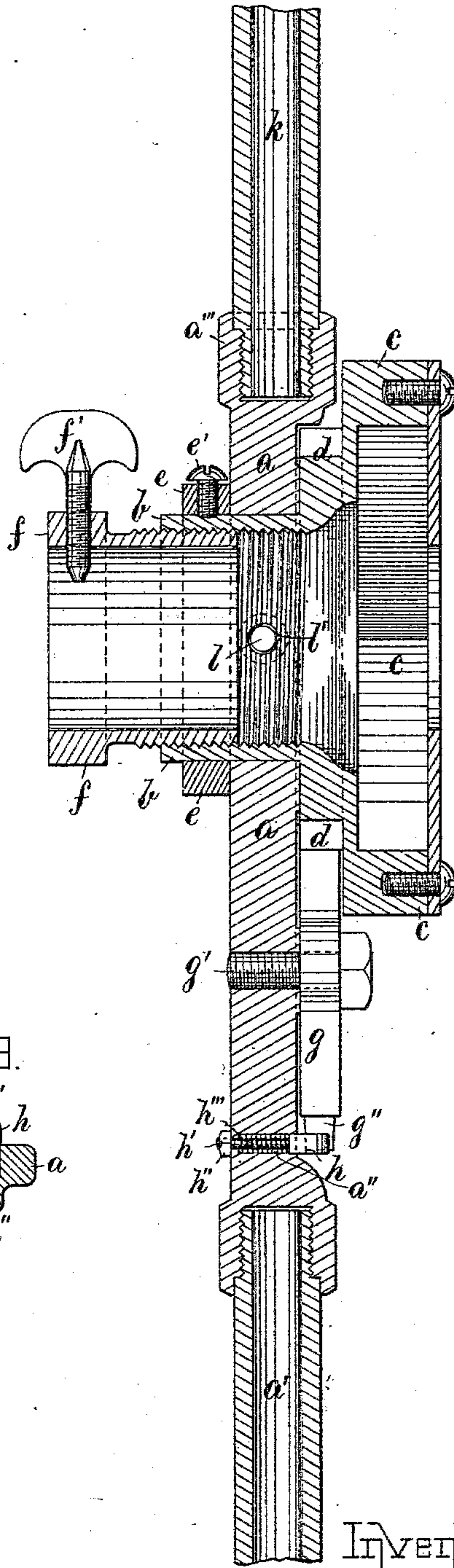


Fig. 2.



Witnesses

Henry Chadbourne.
John H. Foster.

Inventor

John Miller.
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his atty.

UNITED STATES PATENT OFFICE.

JOHN MILLER, OF CAMBRIDGEPORT, MASSACHUSETTS.

SCREW-THREADING DEVICE.

SPECIFICATION forming part of Letters Patent No. 274,630, dated March 27, 1883.

Application filed November-6, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN MILLER, a citizen of the United States, residing at Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Screw-Threading Devices; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

This invention relates to improvement in devices for threading pipes or cylindrical metal bars with a right or left handed screw-thread, as may be desired.

My present invention is an improvement on the patent granted to me July 5, 1881, No. 243,941, and it is carried out as follows, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan view of my invention, and Fig. 2 a central longitudinal section of the same. Fig. 3 represents a cross-section on the line A B, shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings, *a* represents the stock, with its handle *a'*, as usual. Said stock *a* is provided, as usual, with an opening in its larger end, into which is inserted the tubular shank *b* of the pipe-cutter holding-frame *c*, which latter is provided on its under side with a ratchet-wheel, *d*, in the ordinary way.

e is a collar, secured to the tubular shank *b* by means of set-screw *e'*, so as to retain the frame *c* in its position on the stock *a*, and at the same time to allow the latter to turn in either direction around the tubular shank *b*.

f is the externally-screw-threaded feeder fitting into an internal screw-thread in the tubular shank *b*, and provided with holding-screw *f'*, as usual.

g is the double-acting pawl arranged to turn around the fulcrum pin or screw *g'*, and provided on its side with the flat spring *g''*. In combination with said reversible pawl *g* and its spring *g''*, I use the improved keeper, as shown in the drawings, which keeper consists of a metal block, *h*, adapted to fit loosely in a recess, *a''*, in the stock *a*, and provided with a pin or shank, *h'*, that projects through a cor-

responding perforation in the bottom of recess *a''*, and is provided with a stop-nut or collar or washer, *h''*, in its lower end, as shown in Fig. 3.

h''' is a coiled spring surrounding the pin or shank *h'*, for the purpose of automatically holding the keeper-block *h* in its normal position, as shown in Figs. 2 and 3. The upper surface of the up-and-down-movable block *h* is provided with slits *i i'*, as shown, into which one of the ends of the pawl-spring *g''* is confined and held in position, as shown in Figs. 1 and 2. To reverse the pawl *g* in its action on the ratchet-wheel *d* it is only necessary to depress the keeper-block *h* into the recess *a''* against the influence of the spring *h'''* until one end of the pawl-spring *g''* is released from its notch *i*, when the pawl *g* may be turned about half a revolution around its fulcrum-pin *g'* until the other end of the flat spring *g''* comes opposite to the second slit or notch, *i'*, into which it is temporarily locked by the operator releasing the block *h*, which is then automatically forced upward by the action of the spring *h'''*, to hold the end of the spring *g''* until it is again desired to reverse the action of the tool.

By means of this improved keeper I am enabled to use a very short and straight pawl-spring, *g''*, as shown in Fig. 1, and one that does not project beyond the side of the stock *a* to interfere with the proper action of the tool.

This improved keeper is very easily operated, and when in use it will keep the pawl-spring securely locked in one of its ends without liability of being accidentally unlocked when the tool is in use.

It is often desirable to increase the power and leverage of the screw-threading device, and for this reason I provide the stock *a* in its opposite end with a screw-threaded hub, *a'''*, into which is fitted the detachable handle *k*, which latter is used, in combination with the stock *a* and its ordinary handle *a'*, for cutting heavy pipes. By means of the set-screw *l*, which is screwed through the central part of the stock *a*, and having its inner end projecting into a perforation, *l'*, in the side of the tubular projection or shank *b*, as shown in Fig. 1, I am enabled to lock and secure together the stock *a* and hollow shank *b*, as may be desired, when using the tool independent of the ratchet

and pawl, in which condition it has the function of an ordinary solid tool. By the removal of the additional handle *k* and unscrewing the set-screw *l* from the perforation *l'* the tool is in
5 condition to be used as a ratchet-tool, as may be desired, when threading pipes in corners of rooms or in narrow or confined spaces.

What I wish to secure by Letters Patent, and claim, is—

10 1. In combination, the stock *a*, holder *b* *c* *d*, and pawl *g*, having flat spring *g''*, with the improved keeper, consisting of the block *h*,

having slits *i* *i'*, shank *h'*, stop-nut *h''*, and spring *h'''*, as and for the purpose set forth.

2. In a screw-threading device, the combination of the stock *a*, handles *a'* *k*, holder *b* *c* *d*, reversible pawl *g*, with locking-screw *l*, substantially as and for the purpose set forth.

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

JOHN MILLER.

Witnesses:

ALBAN ANDRÉN,
HENRY CHADBOURN.