

No. 640,639.

Patented Jan. 2, 1900.

C. DILLY.
DIE STOCK.

(Application filed Oct. 27, 1898.)

(No Model.)

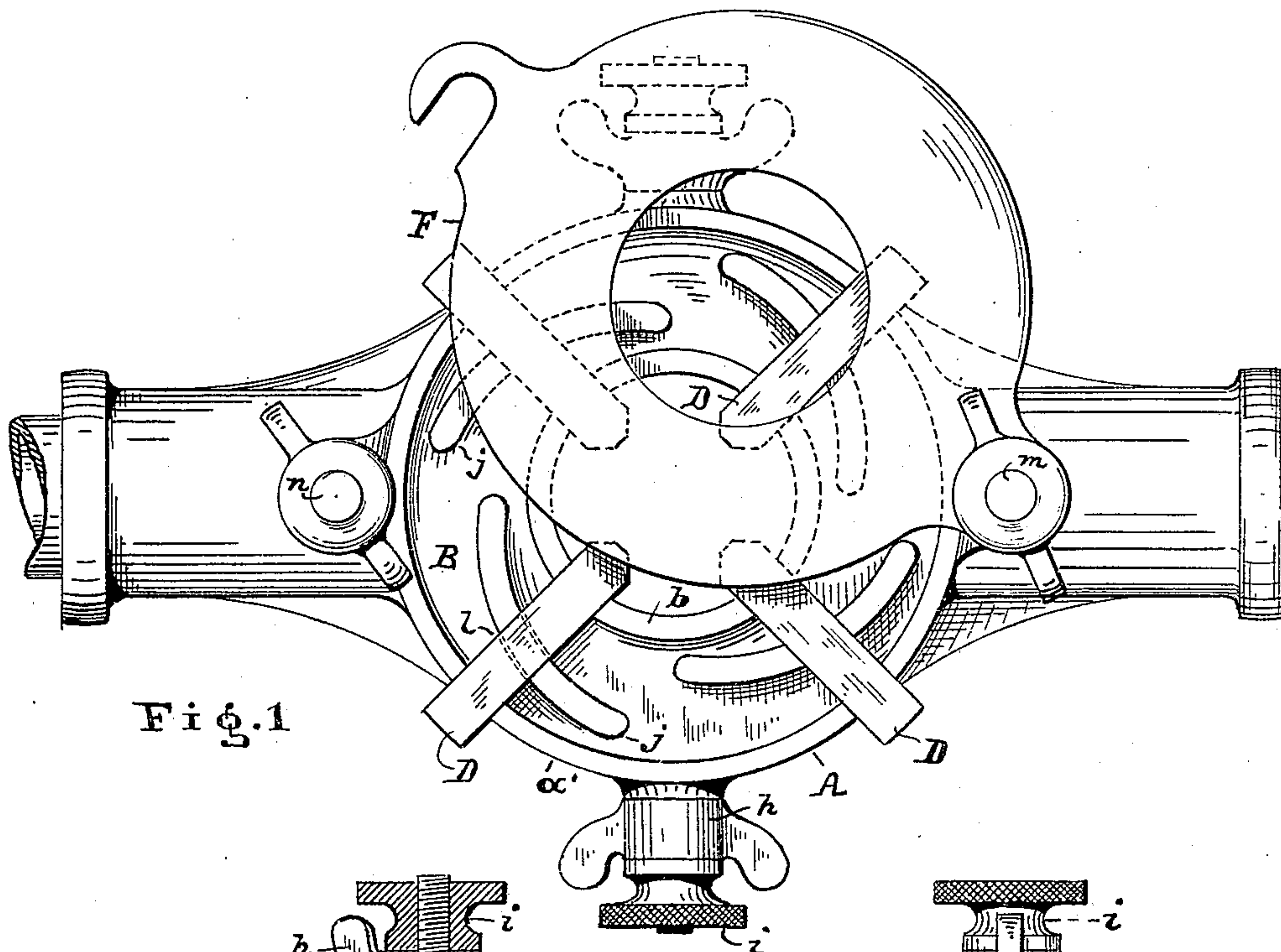


Fig. 1

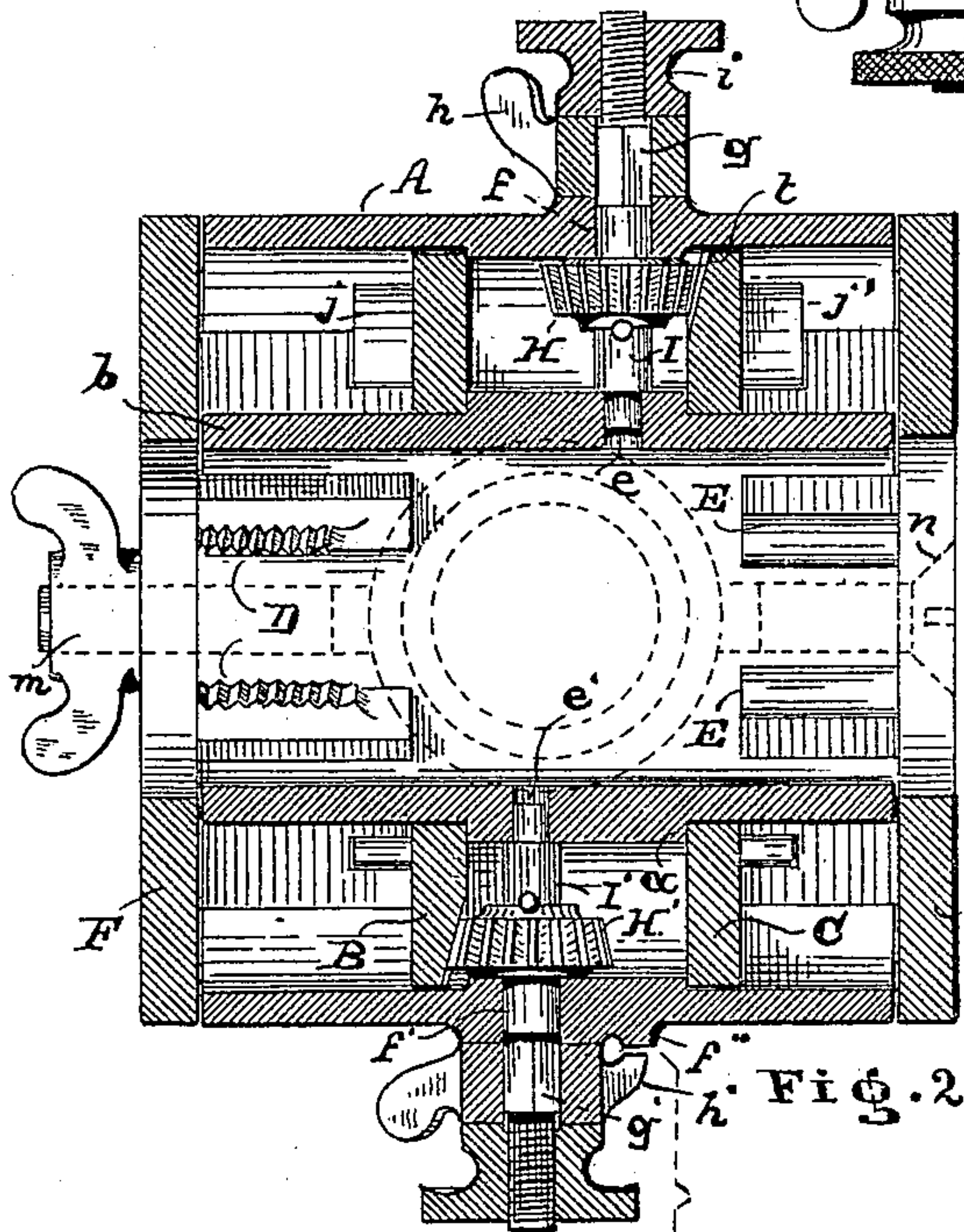


Fig. 2

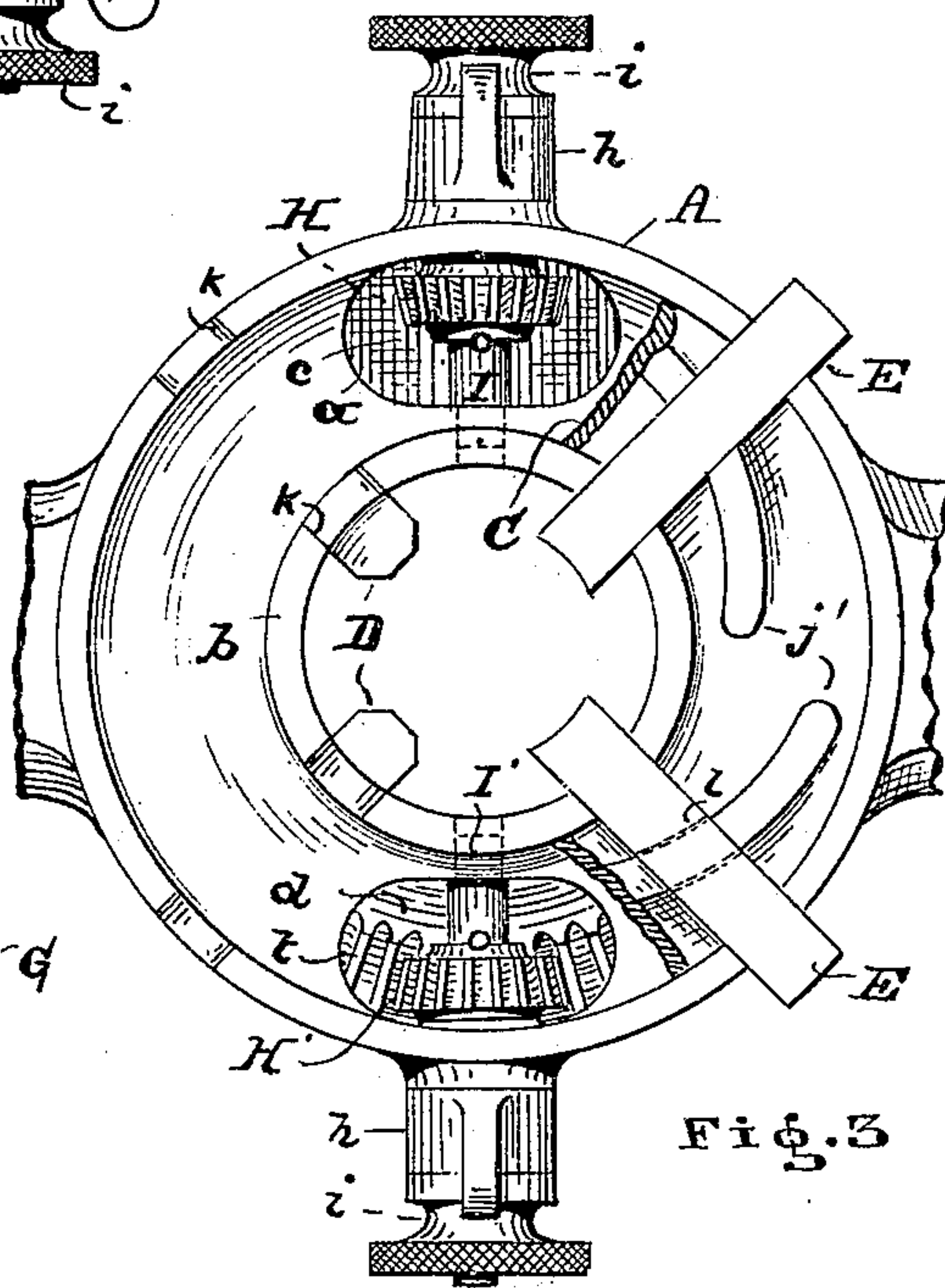


Fig. 3

WITNESSES

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UNITED STATES PATENT OFFICE.

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DIE-STOCK.

SPECIFICATION forming part of Letters Patent No. 640,639, dated January 2, 1900.

Application filed October 27, 1898. Serial No. 694,650. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DILLY, a citizen of the United States of America, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Die-Stocks, of which the following is a specification.

My invention relates to improvements in die-stocks containing movable or adjustable dies; and the object of my improvement is to so construct and equip said stocks as to afford an accurate adjustment of the dies, as well as a positive setting and convenient interchanging or exchanging thereof. I attain this object in a construction substantially as illustrated in the accompanying drawings, in which—

Figure 1 represents a face view of said die-stock with the cover partially removed. Fig. 2 is a central vertical section of same, and Fig. 3 is a rear view of the stock with the back cover or plate entirely removed.

Like letters of reference denote like parts in the drawings and specification.

Substantially the stock comprises the casing A, the cam-disks B C, with adjusting-gears for same, the cutting-dies D D, guiding-blocks E E, and the clamping-plates F G for the dies and blocks. (See Figs. 1, 2, and 3.)

Integral with the casing A is formed the partition *a* and hub *b*. In the partition *a* there are openings *c d* for reception of the pinions H H', which are mounted upon the spindles I I', and the spindles in turn are journaled, as at *e f* and *e' f'*. Over the square part *g g'* of the spindles is placed a wing-nut *h*, outside of which is a threaded jam-nut *i*. The wing-nuts are provided for turning of the spindles, (pinions,) respectively, while the jam-nuts serve the purpose of locking said pinions. Teeth *t* are formed around a portion of the inner face of each of the cam-disks, whereby engagement is afforded with said pinions. Upon the outer faces of said disks are eccentric projections or cams *j j'*. Furthermore, there are a corresponding number of slots *k* in the rim *a'* and the hub *b* for reception of the dies D D and blocks E E. A slanting notch *l* in each of the blocks and dies enables engagement with said cams, as seen in Figs. 1 and 3.

Upon turning of the pinion-carrying spindles each of the disks can be moved in either direction, which effects a closing or opening of the dies and blocks. The adjustment of the dies and blocks is independent; but the movement of either dies or blocks is simultaneous, the same being effected by the cams, which are rigidly connected with the disks.

The cutting of threads upon rods, pipes, or tubes is done by means of the dies D D, while the blocks simply serve the purpose of guiding the tool and of preventing undue strains upon the dies in and during the cutting operation.

When once set for a particular pipe or tube both the dies and blocks are tightly clamped upon the casing by means of the plates F and G and the screws *m m* and *n n*. The pinions afford a most sensitive adjustment for the said disks, respectively dies and blocks, while the plates serve as convenient powerful mediums for retaining the said dies, blocks, and disks in secure position after adjustment thereof. An indicator *h'* and dial *f''* may be provided for in combination with the nut *h* and the face of the bearing *f* to facilitate the setting of the dies for or to particular sizes of pipes, &c. Furthermore, this die-stock may be constructed devoid of adjustable blocks, and simply interchangeable bushings may be used in place thereof.

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

1. An adjustable die-stock comprising a slotted casing with a partition and slotted hub, bevel-gear cam-disks fitting between the outer rim and hub of said casing, pinions in gear with said disks and adapted for being turned and locked from the outside of said casing, a series of notched dies and blocks extending through the slotted casing and hub and engaging cams of said disks and perforated plates provided with suitable means for clamping said dies, blocks and disks against the partition of said casing all constructed and arranged substantially as and for the purpose set forth.

2. In an adjustable die-stock for screw-cutting the combination with a recessed slotted casing of a disk fitting the recess of said casing and having cams upon its outer face a pin-

ion journaled in the casing for engagement
with said teeth and provided with suitable
means for being turned and locked from the
outside, a series of notched dies traversing
5 the slots in the casing and its hub and engag-
ing the cams of said disks and a perforated
plate equipped for clamping said dies and
disk against said casing all constructed and

arranged substantially as shown and for the
purpose described.

Signed by me at Cleveland, Ohio, this 20th
day of October, 1898.

CHARLES DILLY.

Witnesses:

BERNHARD F. EIBLER,
OSCAR J. CAMPBELL.