

No. 621,903.

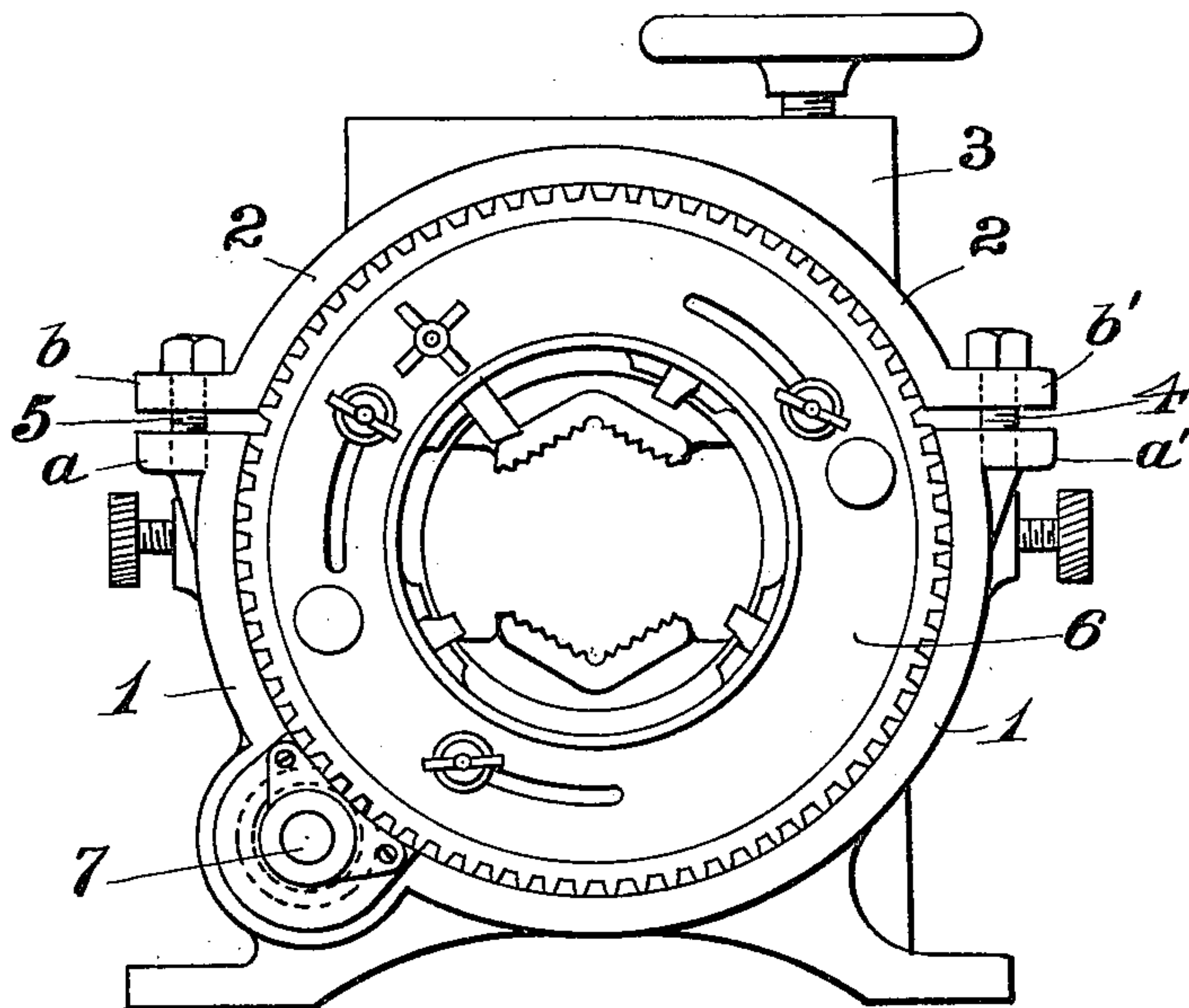
Patented Mar. 28, 1899.

R. P. CURTIS.  
PIPE THREADING MACHINE.

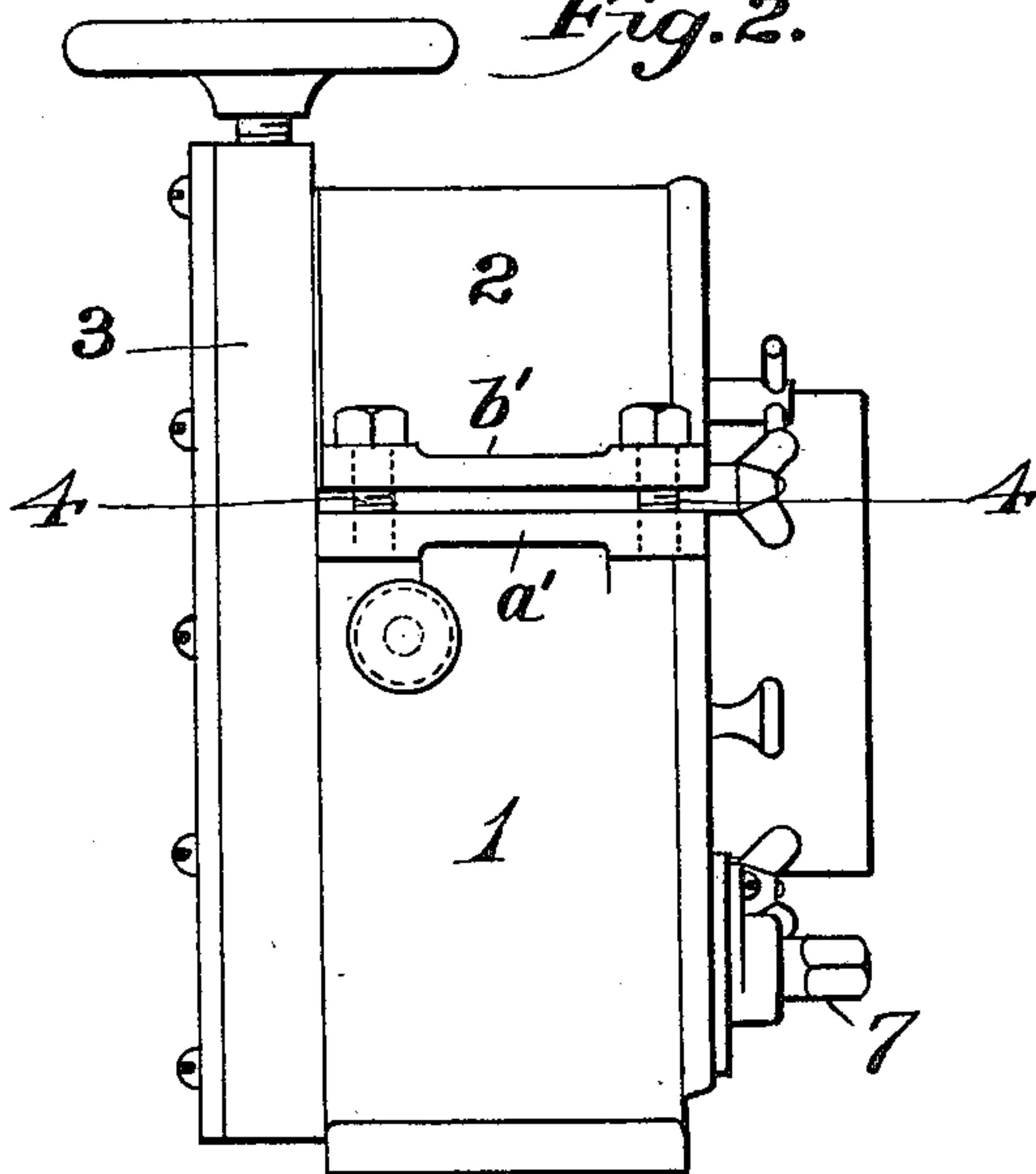
(Application filed June 7, 1898.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*J. F. Finckl.*  
*M. J. Longden.*

INVENTOR

*R. P. Curtis*

*by M. Smith*  
ATT'Y.

# UNITED STATES PATENT OFFICE.

RODERICK P. CURTIS, OF SOUTHPORT, CONNECTICUT, ASSIGNOR TO  
CURTIS & CURTIS, OF BRIDGEPORT, CONNECTICUT.

## PIPE-THREADING MACHINE.

SPECIFICATION forming part of Letters Patent No. 621,903, dated March 28, 1899.

Application filed June 7, 1898. Serial No. 682,807. (No model.)

*To all whom it may concern:*

Be it known that I, RODERICK P. CURTIS, a citizen of the United States, residing at Southport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Pipe-Threading Machines; 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.

My invention has reference to certain new and useful improvements in pipe-threading machines, but more particularly refers to the construction of the casing which surrounds the die-carrying ring, the object being to so construct said casing that all wear thereon caused by the thrust of the die-carrying ring may be compensated for, while at the same time when this wear becomes so great that further compensation therefor is impractical a portion of the casing may be removed and a new portion substituted therefor without sacrificing the entire casing, bed, and vise-box.

In the accompanying drawings, which form a part of this application, Figure 1 is a front elevation of a pipe-threading machine constructed in accordance with my improvement, and Fig. 2 a side elevation of the same.

Similar numbers and letters of reference denote like parts in both figures of the drawings.

Heretofore in machines of this description the casing has been split at one point and provided at such point with flanged portions which are drawn together by means of screw-bolts in order to contract the casing to compensate for wear, and while this construction has proved efficient, nevertheless it is necessary to rely entirely upon the resiliency of the casing and to run the risk of breaking the same by forcing the contraction thereof, and my present improvement is intended to do away with these possibilities and to provide a safe and ready adjustment. In my present construction the casing is made of two parts 1 2, the portion 1 being the lower or greater part of the casing; which is made integral with the vise-box 3 at the back of the machine, while the upper portion 2 is entirely separate and is a simple shell conformed to

fit the die-carrying ring and secured to the portion 1 by means of screw-bolts 4 5 on opposite sides of the casing, said lower and upper portions being provided on opposite sides and respectively with flanges *a a'* and *b b'* for the passage of said screw-bolts.

6 is the die-carrying ring, which fits snugly within the casing, composed of the parts 1 2, and 7 is the pinion journaled in any suitable manner within the lower portion of the casing and engaging with circumferential gear-teeth on the die-carrying ring. It will be clear that when the ring is rotated by the turning of the pinion there will be a thrusting of the ring against the upper portion of the casing—namely, the part 2—and this thrusting action will be exerted mainly in a line drawn through the axes of said pinion and ring.

The wear against the casing occurs mainly at the top portion thereof, but tends generally to so cut away the inner surface of the entire casing that such surface really lies in a curve, which is swept from a radius longer than the normal radius of the die-carrying ring. Therefore it really becomes advisable to divide the casing at points considerably above the horizontal diameter thereof, so that the upper portion 2 may constitute substantially that part of the casing which is subjected to the most wear, although said casing may be divided at any desired points so long as the lower portion is integral with the base of the machine and the vise-box.

The parts 1 2 are normally so secured by the bolts 4 5 that a space is left between the flanges *a a'* and *b b'*, and this space of course grows less as the upper portion 2 is crowded down to compensate for wear. When the adjustment of the upper portion 2 has caused these flanges to come in contact, then said portion is removed and a new upper portion substituted therefor, so that it will be clear that the life of the machine is greatly increased by the use of my improvement.

Whenever by frequent use the upper portion 2 is so worn away that further adjustment will not accomplish the desired result, said portion is simply removed and a new upper portion substituted therefor, and this saves the great expense of either an entire new cas-



ing, including the vise-box, or of bushing the ring-casing, so as to properly inclose the ring.

Having thus described my invention, what I claim as new, and desire to secure by Letters  
5 Patent, is—

In a pipe-threading machine which comprises a die-carrying ring revolving within a surrounding casing, the combination of the vise-box and the lower portion of the casing  
10 made integral, said lower portion extending up to a point considerably above the horizontal diameter of the casing and provided with flanges on opposite sides, the upper portion of said casing provided with flanges at  
15 its extremities, the screw-bolts passed through

the flanges on the two portions of the casing whereby said portions are bound together, the die-carrying ring journaled within the casing formed by the upper and lower portions, and the pinion journaled within the  
20 bottom of the casing and engaging with gear-teeth on the circumference of the die-carrying ring, substantially as set forth.

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

RODERICK P. CURTIS.

Witnesses:

F. W. SMITH, Jr.,

M. I. LONGDEN.