

No. 885,175.

PATENTED APR. 21, 1908.

H. L. E. PETERSON.
PIPE THREADING MACHINE.
APPLICATION FILED JUNE 17, 1907.

Fig. 1.

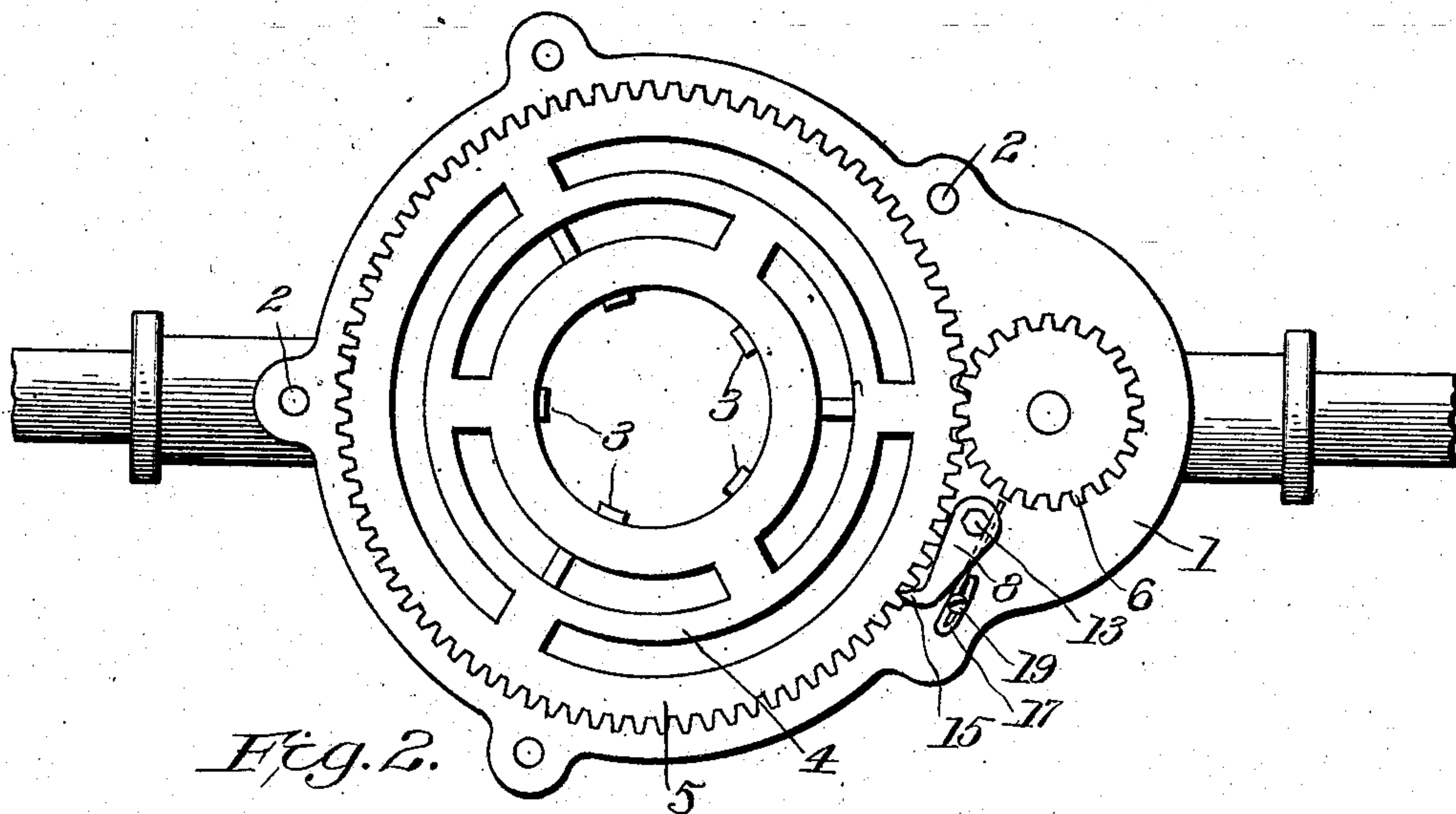


Fig. 2.

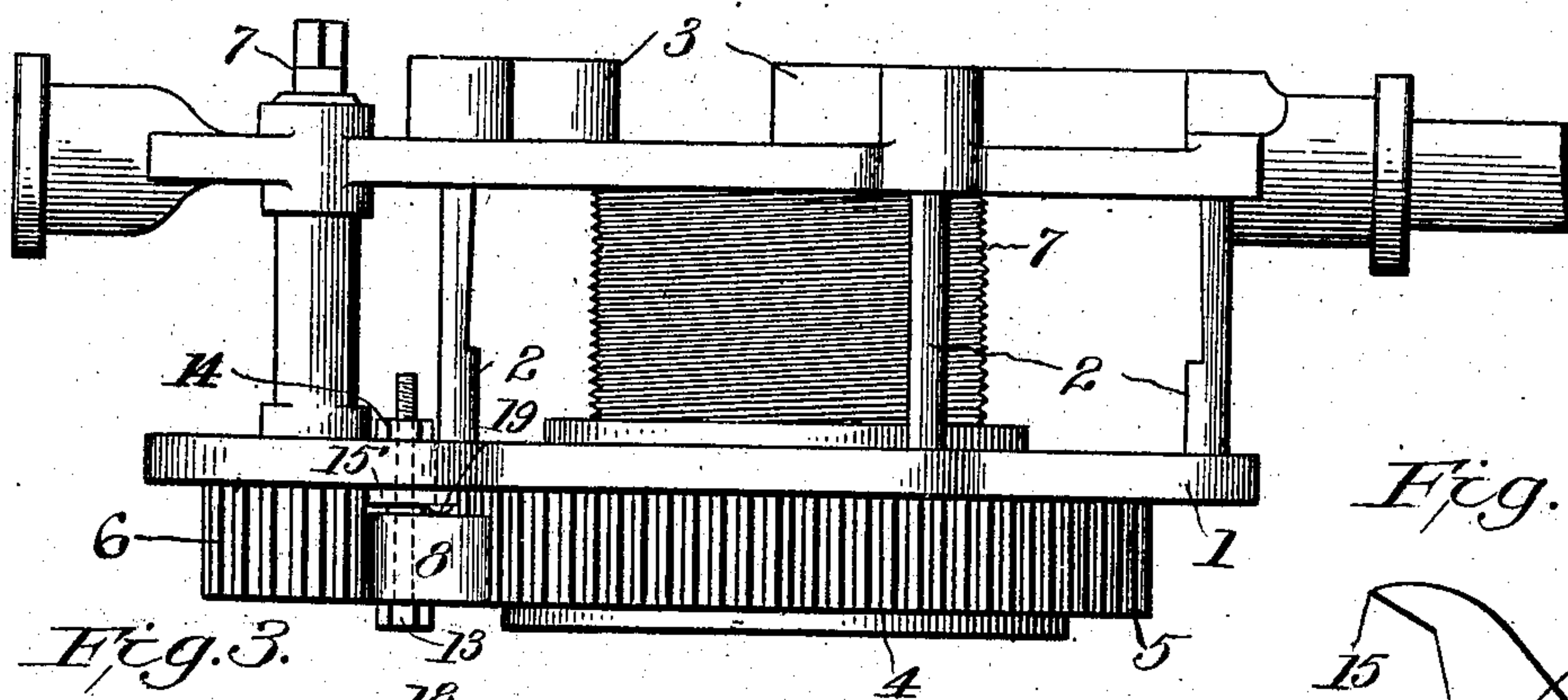
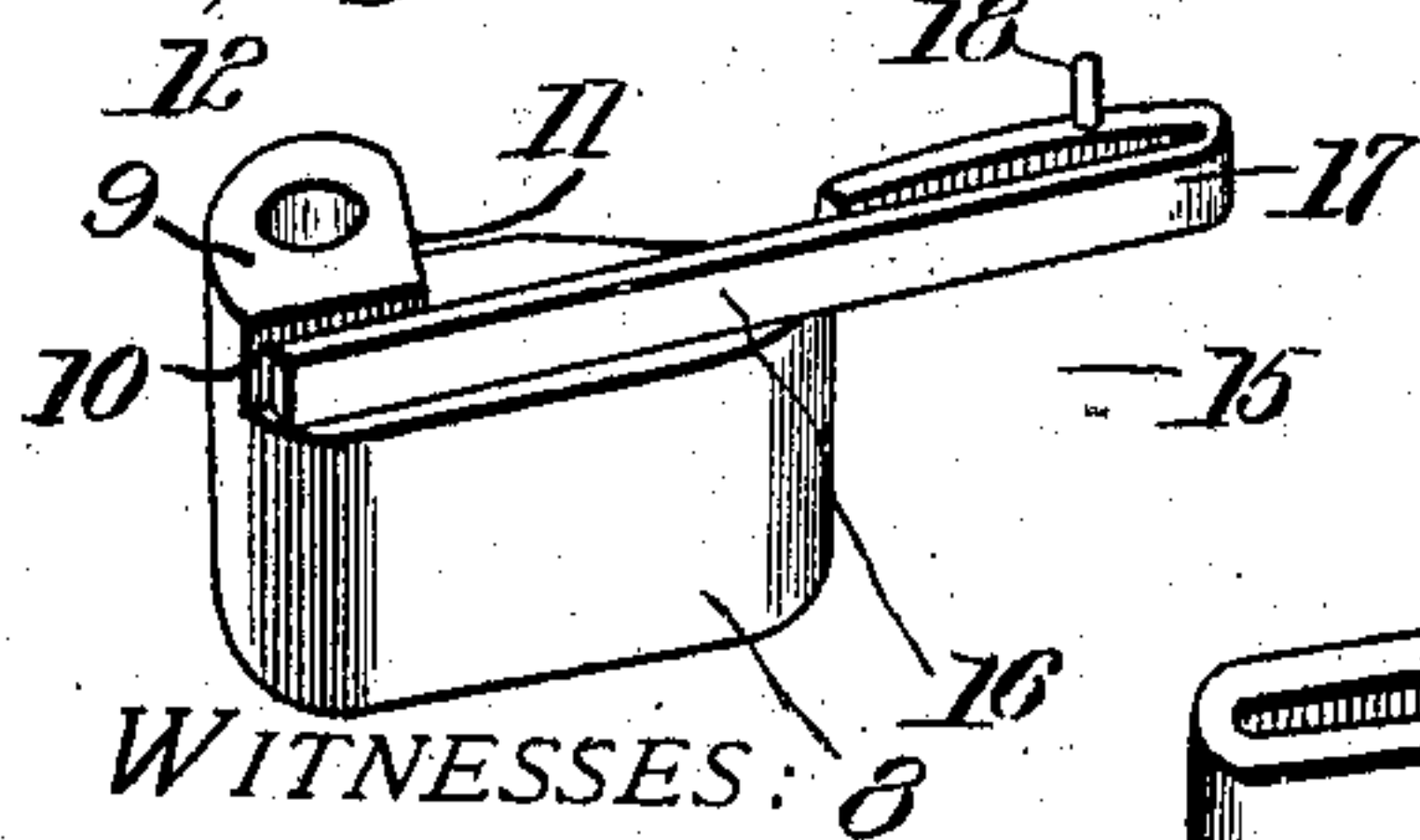


Fig. 3.



WITNESSES: 8

Fig. 4.

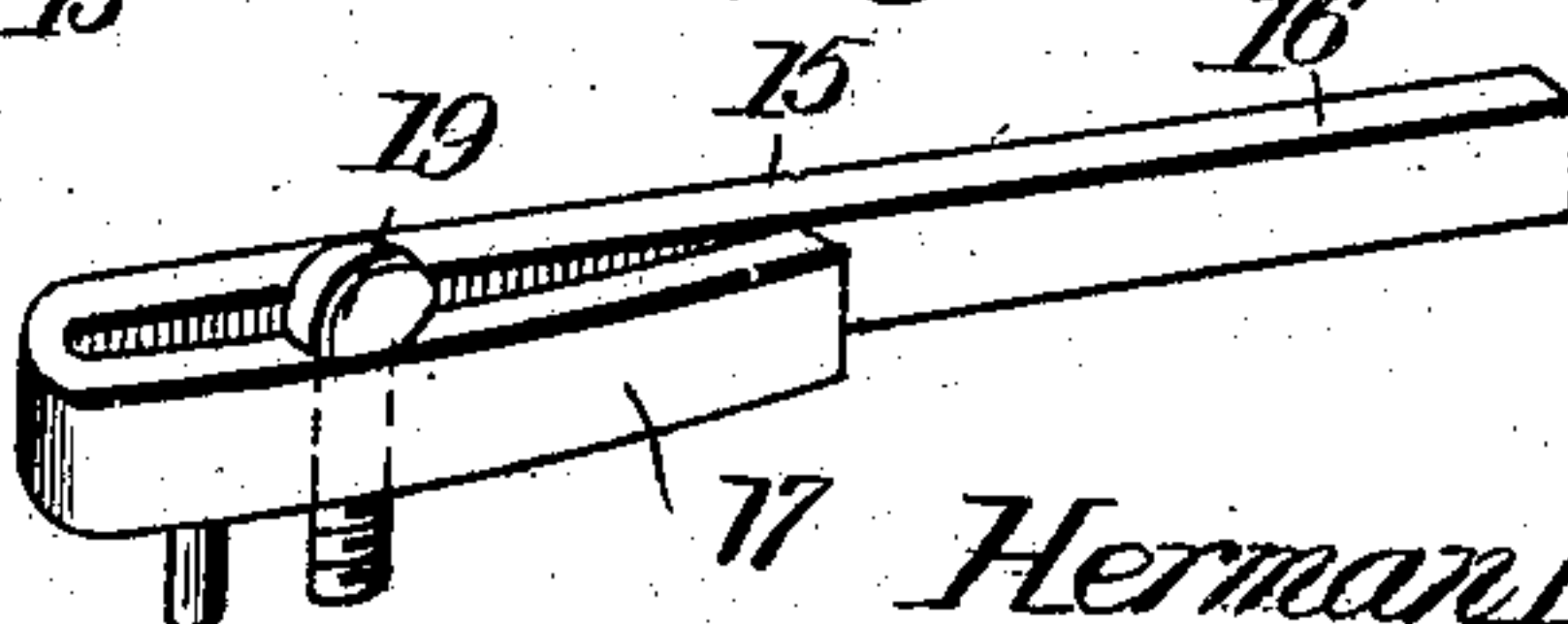
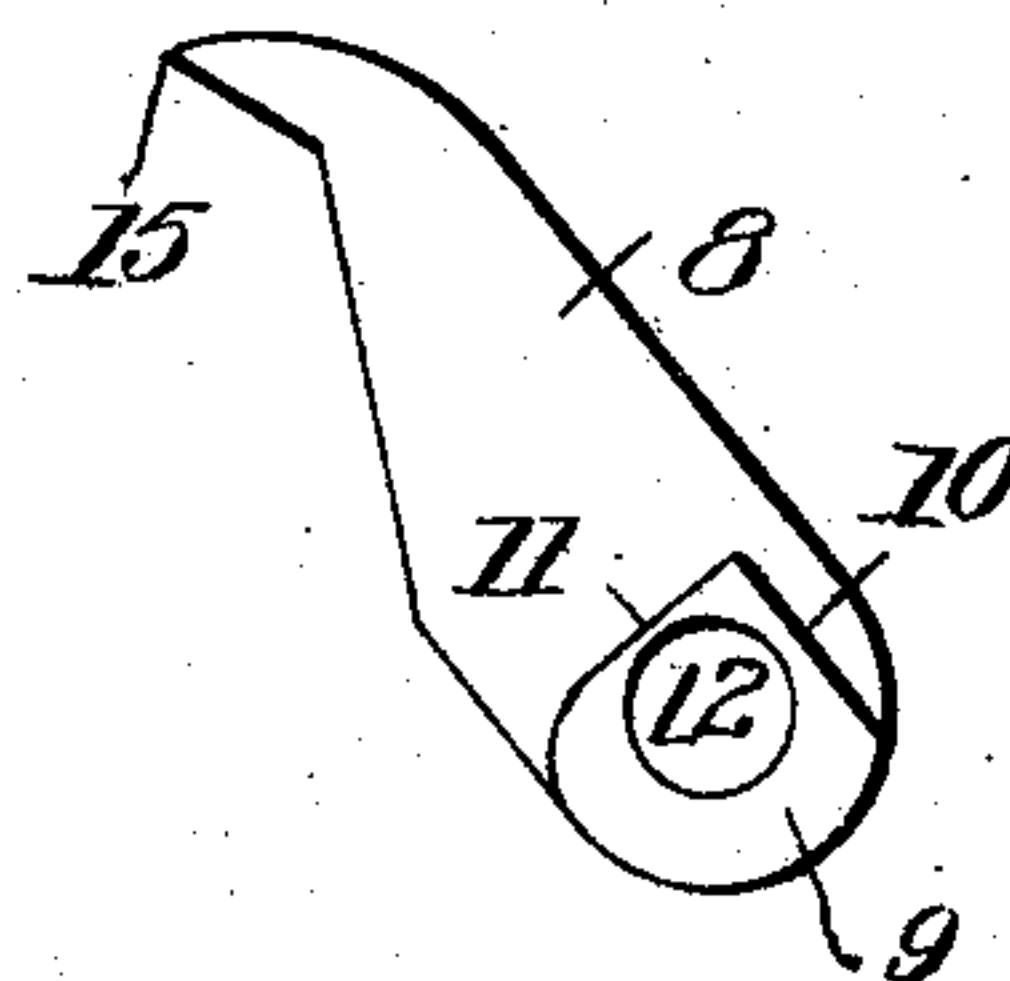


Fig. 5.



C. M. Walker,

J. T. Walker.

INVENTOR

Herman L. E. Peterson

BY

C. C. Vrooman,
his Attorney.

UNITED STATES PATENT OFFICE.

HERMAN L. E. PETERSON, OF ELGIN, ILLINOIS.

PIPE-THREADING MACHINE.

No. 885,175.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed June 17, 1907. Serial No. 379,460.

To all whom it may concern:

Be it known that I, HERMAN L. E. PETERSON, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Pipe-Threading Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to improvements in pipe threading machines, and particularly to an attachment for preventing the stock or die-head from rotating backward as the operator is operating the machine.

15 The object of the invention is the peculiar construction of a pawl or dog attachment for a pipe threading machine.

20 With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

25 In the drawings: Figure 1 is a bottom view of a pipe threading machine of any ordinary type, showing my improved attachment applied thereto. Fig. 2 is a view in side elevation of the structure depicted in Fig. 1. Fig. 3 is a perspective view of the elements or members of my improved attachment. Fig. 4 is a perspective view of the spring of my attachment, and Fig. 5 is a side view of the dog or pawl.

Referring to the accompanying drawings, 1 designates the frame of an ordinary machine for cutting tapering threads upon a pipe. The pins 2 are fixedly secured at their lower ends to the frame 1, and operably engage, at their upper ends, suitable dies or chasers 3. The work holder 4 is provided with a fixed gear wheel 5, and meshing with said gear wheel 5 is a pinion 6, which is actuated through the medium of the vertical shaft 7. When the gear wheel 5 is rotated, the work-holder 4 will be threaded upon the internal sleeve 7, thereby causing the pins 2 to be forced upward, and consequently permitting the dies or chasers 3 to recede from the pipe being threaded, and gradually diminish the depth of the thread being cut. I do not specifically describe the ordinary structure of a pipe-threading machine, to which my attachment is to be applied, because the structure is common in the prior art.

55 I wish it to be understood that my structure consists of a spring pawl 8, to be used in

connection with the gear wheel 5 and pinion 6, said pawl being provided with a boss or hub 9, having two flat bearing surfaces 10 and 11, formed at right-angles with each other so as to provide a cut-away corner as clearly seen in Figs. 3 and 5. The boss or hub is apertured, as at 12, and extending through the apertured portion 12 of the boss, is a bolt 13, by means of which the pawl 8 is detachably secured to the frame 1. It is to be noted that the boss or hub 9 is secured in engagement with the frame 1 by threading an ordinary nut 14, upon the upper threaded end of the bolt 13. The outer end 15 of the pawl 8 normally engages the teeth of gear wheel 5 for preventing said gear wheel from rotating in one direction.

A spring 15 is employed for holding the pawl 8 normally in engagement with the teeth of gear wheel 5, and said spring comprises a primary portion 16 and an auxiliary portion 17. The auxiliary portion 17 is formed by bending back a portion of the primary portion 16 substantially parallel therewith. On the auxiliary portion 17, and, preferably, near the meeting ends of portions 16 and 17, is a vertical, integral lug or spur 18, which normally extends into a suitable recess formed in the frame 1. A screw 19 is positioned between portions 16 and 17 of the spring 15, and is threaded into an aperture formed in frame 1. By means of the lug 18 and the screw 19, the spring 15 is detachably secured to the frame 1. The spring 15 is not permitted to pivot or move, thereby producing an efficient structure, because it will, at all times, exert sufficient pressure upon one of the flat faces of the boss or lug for holding the pawl either in engagement with the teeth of the gear wheel or away from the same. For instance, if the primary portion 16 of the spring is engaging the flat face 11 of the pawl 8, as in Fig. 3, the pawl will be held in engagement with the teeth of said gear wheel 5, whereas, if it is undesirable to have the pawl 8 engage said gear wheel, by swinging the pawl outward upon the bolt 13 and causing the primary portion 16 of the spring to engage the flat face 11, the pawl 8 will be held away from said gear wheel.

I have found from practical experience that my attachment is of great importance in preventing any lost motion when threading a pipe, as the gear wheel 5 can not rotate backward when a machine, provided with my attachment, is being operated by one person.

Furthermore, the peculiar structure of the pawl and spring produces a highly efficient device, for the purpose desired.

What I claim is:

- 5 A die-stock having a rotary die-carrier, gear teeth on said die-carrier, a pinion having teeth in engagement with the gear teeth on the carrier, means whereby the pinion may be rotated, and a locking device adapted to

lock the rotary carrier or unlock the same, 10 substantially as specified.

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

HERMAN L. E. PETERSON.

Witnesses:

LURA KINGSLEY,
FRANK W. JOSLYN.