

C. W. PETTIGROVE.

KEY.

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1,155,268.

Patented Sept. 28, 1915.

FIG. 1.

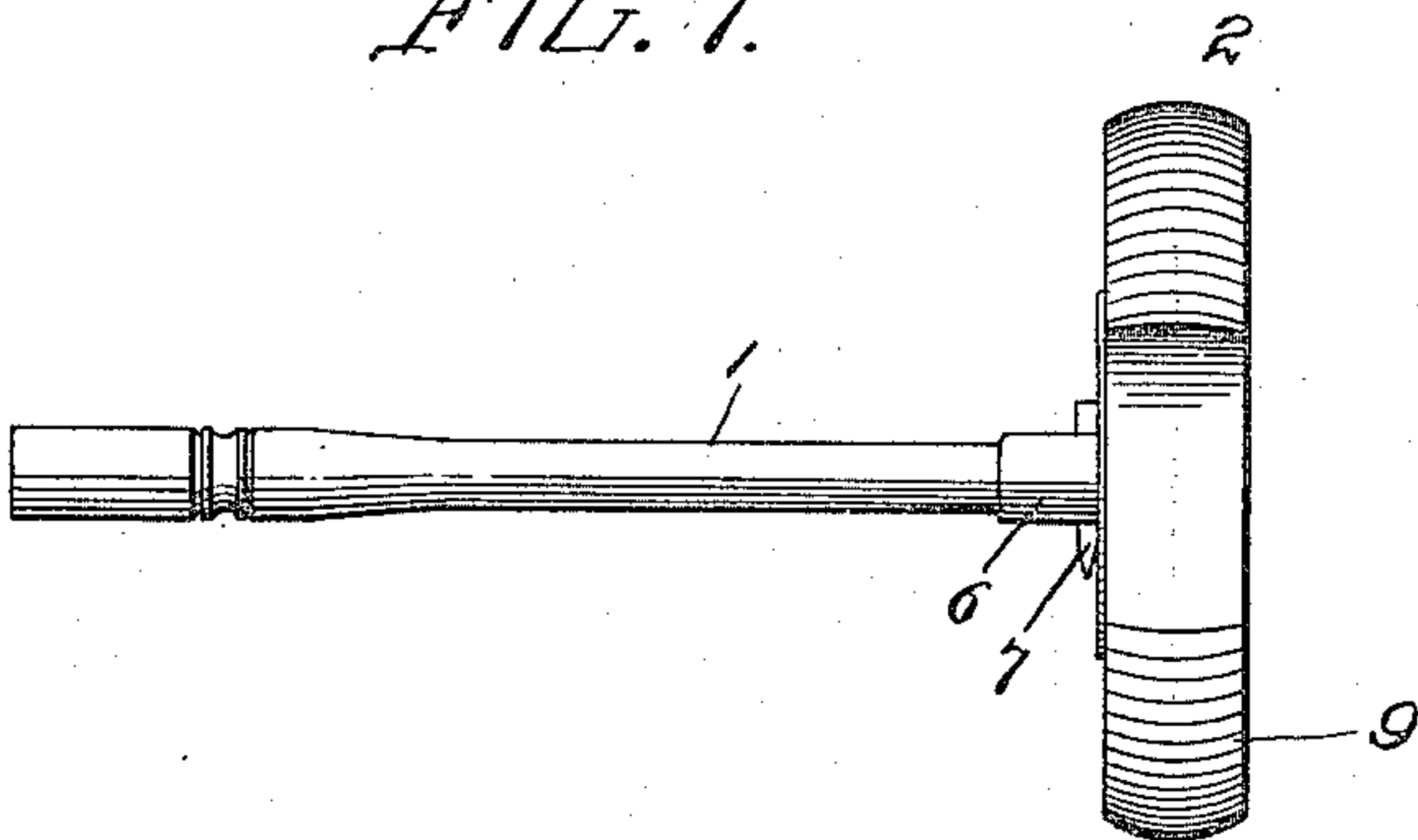


FIG. 2.

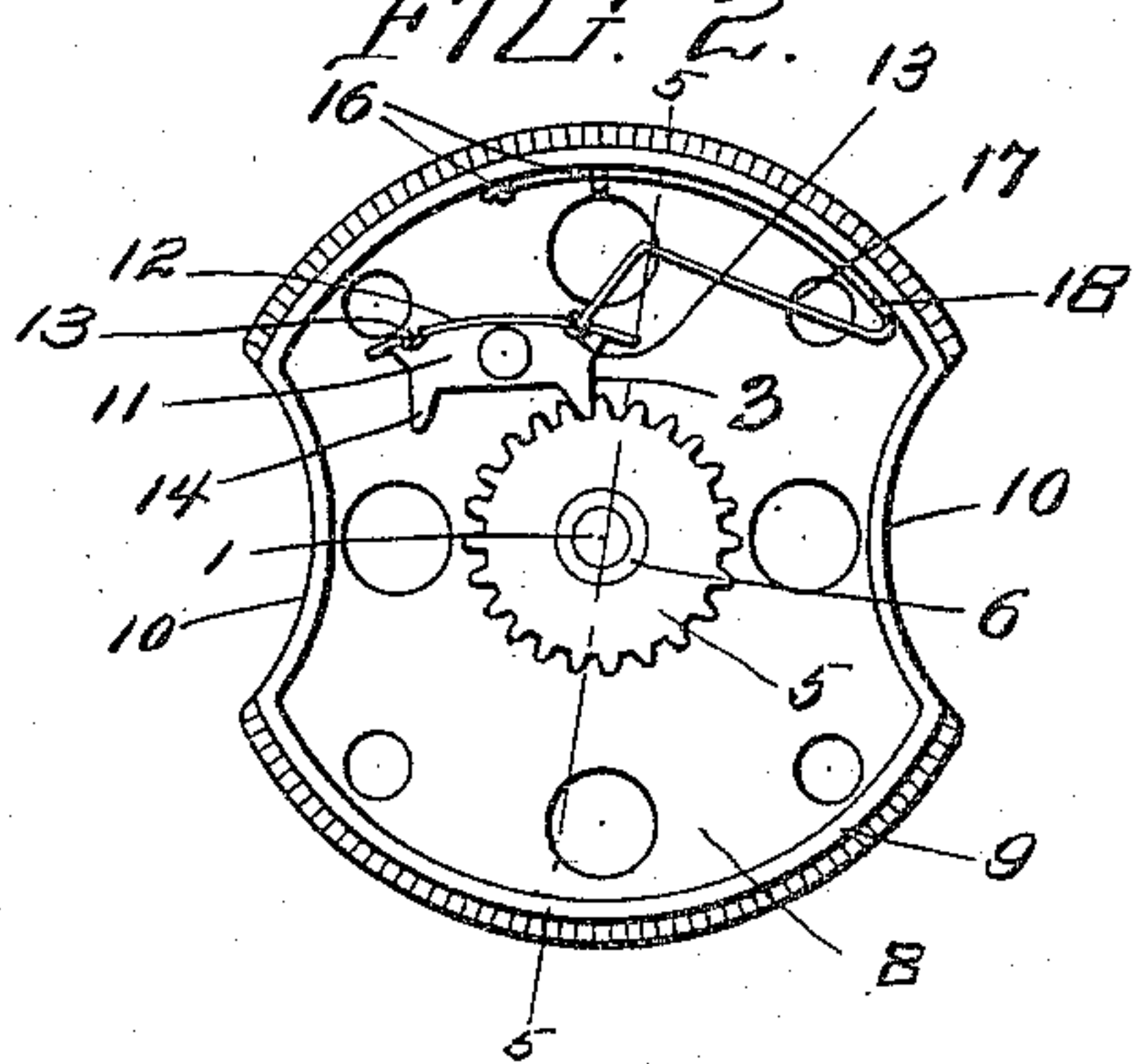


FIG. 3.

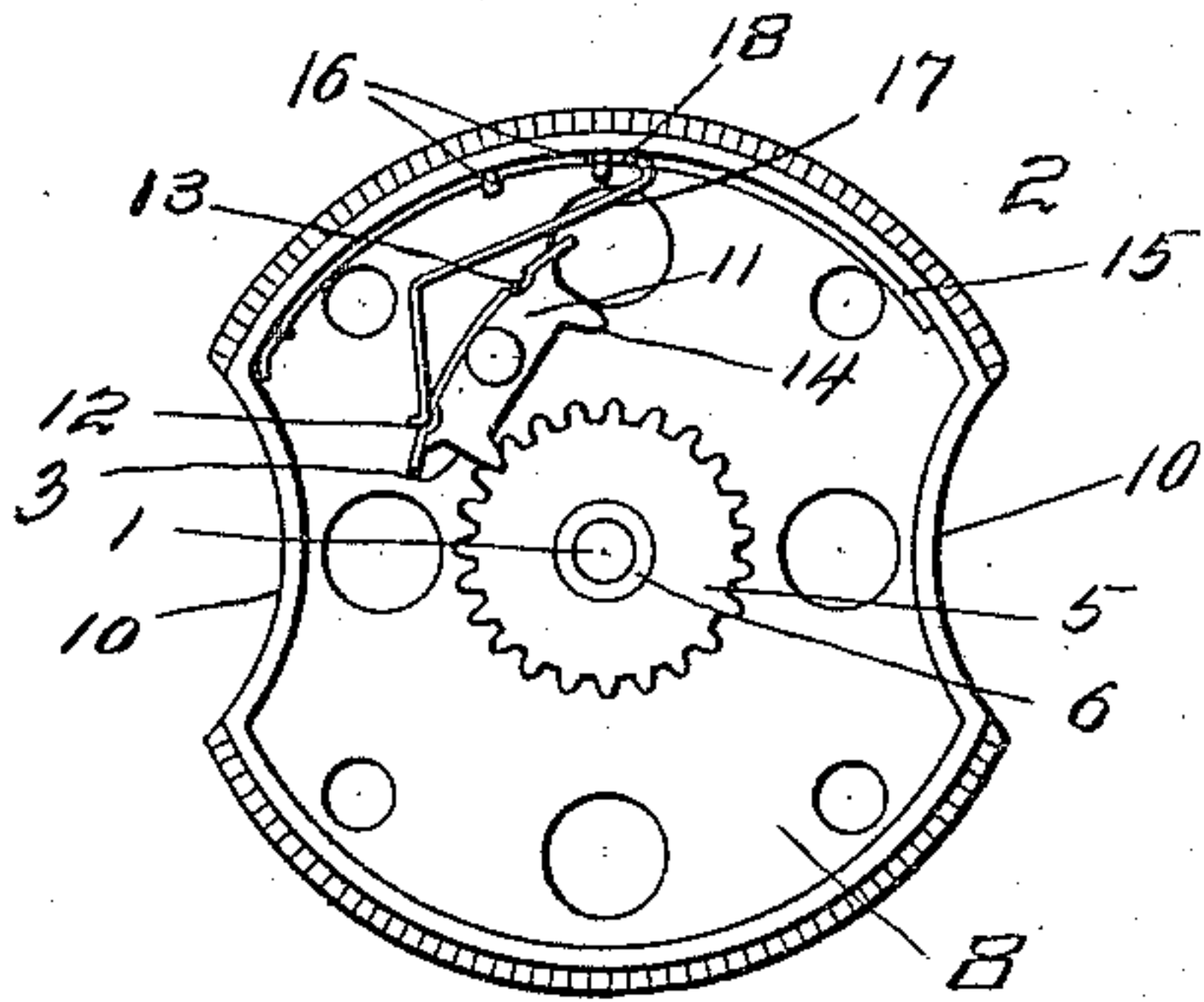


FIG. 4.

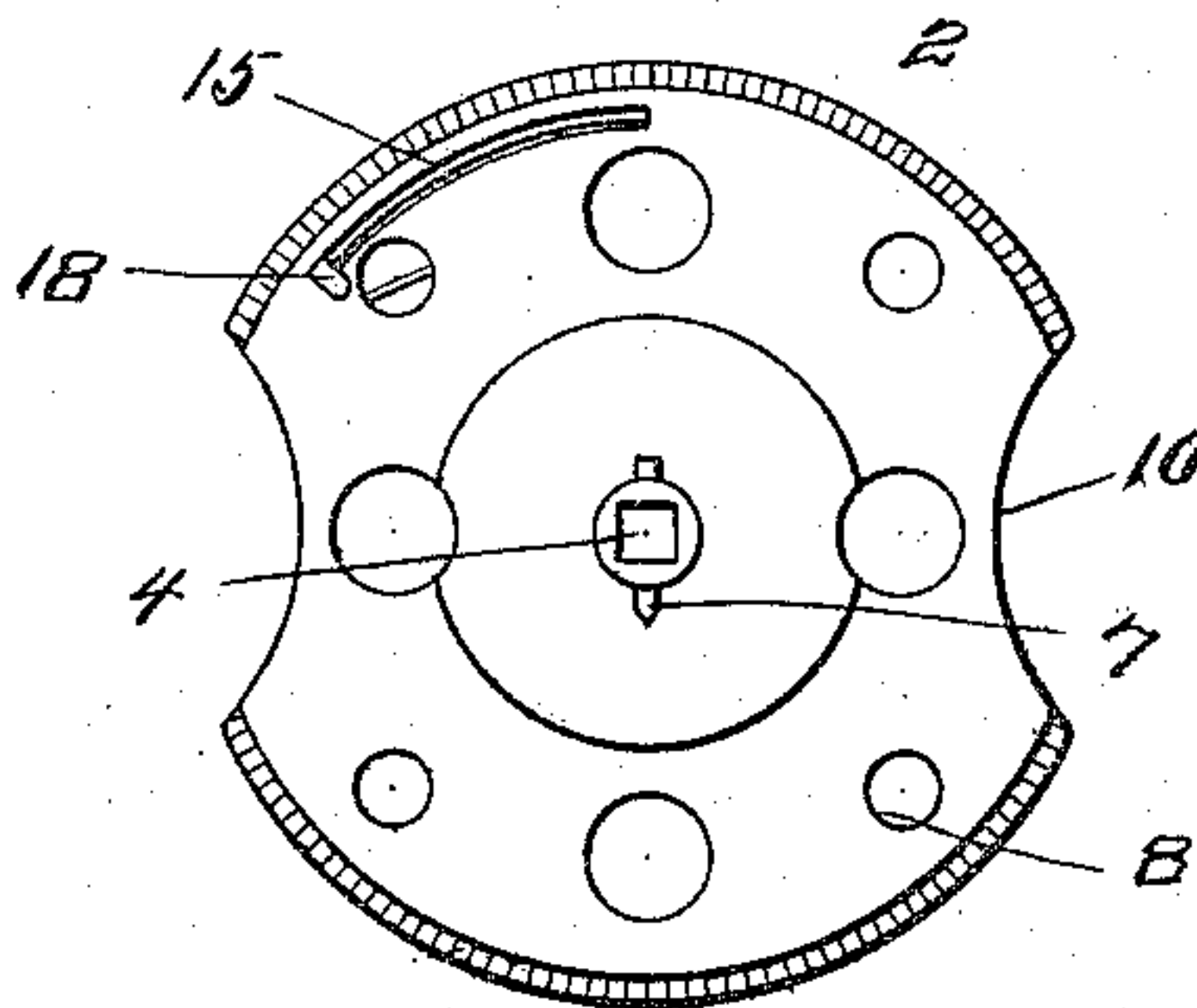
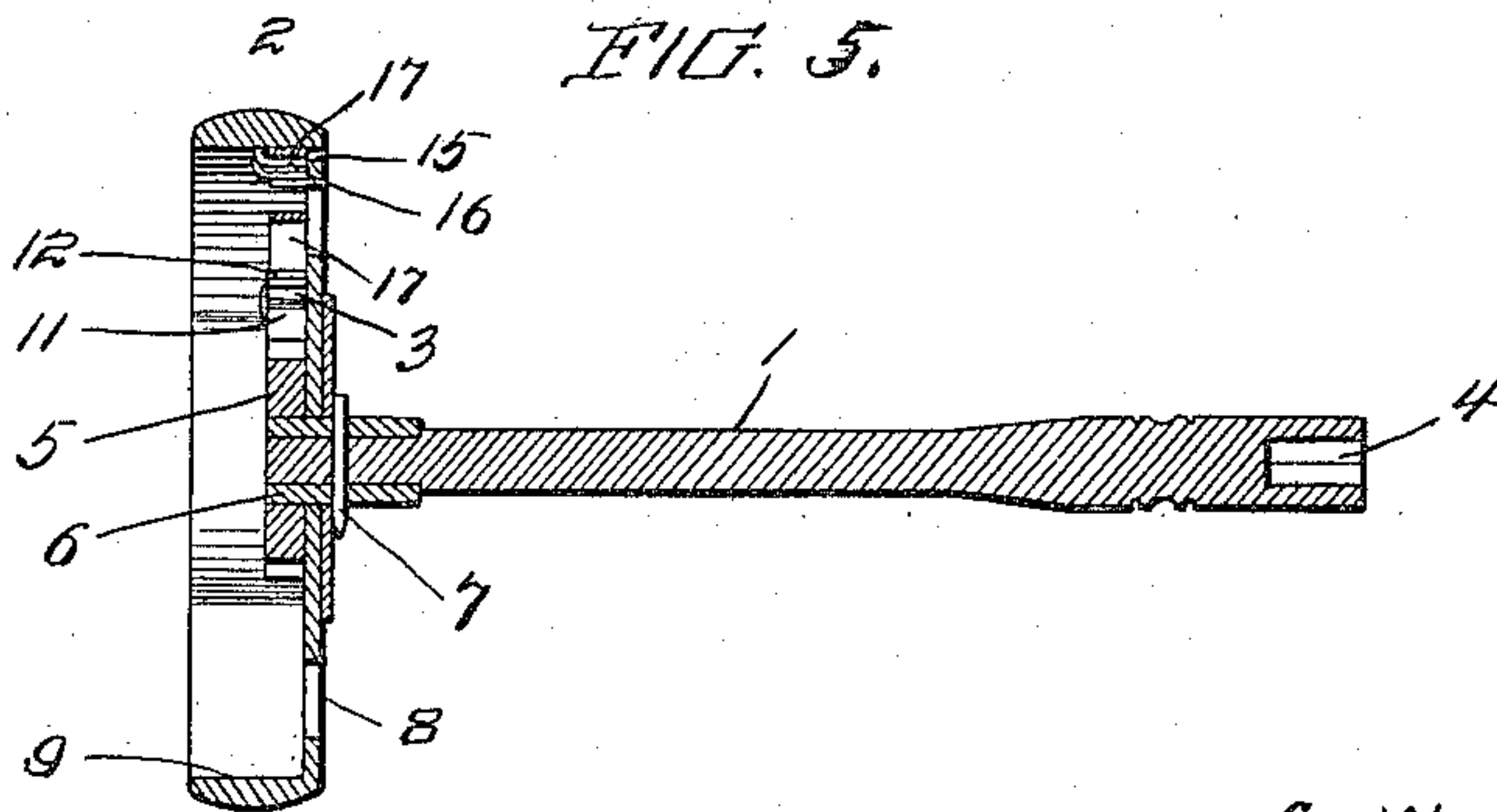


FIG. 5.



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To all whom it may concern:

Be it known that I, CARL W. PETTIGROVE, a citizen of the United States, residing at Tremont, in the county of Hancock and State of Maine, have invented new and useful Improvements in Keys, of which the following is a specification.

This invention relates to a key designed for use in winding a clock or the like, and to a key which is provided with a ratchet mechanism.

The primary object of the invention is to provide a key of this character with a housing containing a ratchet mechanism, said housing being rotatable about the shank of the key and serving as a finger hold when the key is used to wind a clock or the like.

A further object of the invention is to provide the housing containing the ratchet mechanism with a manually operable means for preventing the rotation of the housing upon the stem or shank of the key, thereby causing said shank and housing to rotate in unison when the key is operated to wind a clock.

A further object of the invention is to provide the ratchet mechanism within the rotatable housing with a spring the free end of which is slidably engaged with a pivoted dog of the ratchet mechanism, said spring being manually slidable within the housing to limit rotation of the housing upon the stem or shank of the key to one direction when desired.

With these and other objects in view the invention consists in the improved construction and novel combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the claim.

The preferred embodiment of the invention has been illustrated in the accompanying drawing, but no restriction is necessarily made to the precise details of construction therein shown, as changes, alterations and modifications within the scope of the claim may be resorted to when so desired.

In the drawing:—Figure 1 is a side elevation of an improved clock key constructed in accordance with the invention. Fig. 2 is a front elevation of the key, the ratchet mechanism being such as to permit the housing being rotated toward the left upon the shank of the key. Fig. 3 is a view similar to Fig. 2 showing the ratchet mechanism in a different position. Fig. 4 is a rear eleva-

tion of the key, the sliding spring being shown in a position similar to that in Fig. 2. Fig. 5 is a transverse vertical sectional view on the line 5—5 of Fig. 2.

Like characters of reference denote corresponding parts throughout the several views in the drawing.

The improved clock key comprises a shank 1, a rotatable housing 2, which is mounted upon the shank 1, and a ratchet mechanism 3, which is disposed within the rotatable housing 2.

The shank 1 of the key has a longitudinally extending channel 4 in one end thereof adapted to receive the winding stem of the clock while the remaining end of the shank is provided with a ratchet wheel 5 secured to the shank by means of a bushing 6.

Mounted for rotation upon the bushing 6 and positioned against the ratchet wheel 5 thereon by means of a pin 7 which extends through the bushing and shank, is a housing 8. The housing 8 is provided with a peripheral flange 9 which is recessed at diametrically opposite points to form finger and thumb engaging recesses 10 which cooperate with the knurled circumference of the flange 9 to form a finger hold by means of which the key may be rotated when winding a clock.

Pivoted upon the front wall of the housing 2 above the ratchet wheel 5 is a dog 11 having an arcuate face 12, and spaced wheel engaging teeth 14. The rear wall of the housing 2 at its juncture with the flange 9 is provided with a circumferentially extending slot 15 while the flange 9 adjacent one end of the slot is provided with spaced spring receiving loops 16. Disposed within the loops 16 is one end of a leaf spring 17, said end being adapted to closely conform to the contour of the flange 9 and provided with laterally extending arms 18 one of which extends through the slot 15 in the rear wall of the housing 2 for a purpose which will be hereinafter described. The remaining end of the spring 17 is disposed beneath the end of the spring which is mounted for sliding movement within the loops 16 with the free end thereof slidably engaged with the arcuate face 12 on the dog 11, which through the action of the spring is maintained in engagement with the ratchet wheel 5.

When it is desired to wind the clock by means of the key the shank 1 is engaged with

the winding stem of the clock and the free end of the spring 17 is slid by means of the arm 18 which projects through the slot in the housing to engage the end of the dog 11 nearest the direction in which it is desired the housing and shank be rotated in unison.

With reference to Fig. 2 in the drawing it will be seen that with the spring in the position shown, the housing 2 and shank 1 may be turned in unison toward the left, but that upon retrograde movement of the housing the same is freely rotatable upon the shank toward the right. From the above statements it is clearly apparent that the key is adapted to wind a clock in which the winding stem of the clock can turn either toward the right or to the left and that the clock may be wound by the key without the operator releasing his grasp from the key while rotating the same in either direction.

The arcuate face 12 of the dog is provided adjacent each end thereof, with a recess 13, in which is disposed the end of a spring 17, to prevent said end of the spring from becoming disengaged from the arcuate face of the dog during the sliding movement of the teeth 14 over the teeth in the ratchet wheel 5.

From the above description taken in connection with the accompanying drawing it will be seen that a key has been provided which is simple in construction, inexpensive of manufacture and highly efficient in use.

Having thus described the invention, what is claimed as new is:—

In a clock key, a stem, a slotted housing mounted for rotation upon the stem, a recessed flange formed on said housing, means for preventing the rotation of the housing upon the stem including a pivoted pawl, a spring disposed beneath said flange and having one end thereof slidably engaged with the pawl, and an arm upon said spring extending in the housing whereby the free end of the spring may be slid upon the pawl to cause the above mentioned means to prevent the rotation of the housing upon the stem in one direction.

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

CARL W. PETTIGROVE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."