

No. 710,343.

Patented Sept. 30, 1902.

E. STRATTON & F. A. COLE.

GUARD FOR HEEL TRIMMING AND EDGE TRIMMING MACHINES.

(Application filed Apr. 24, 1901.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

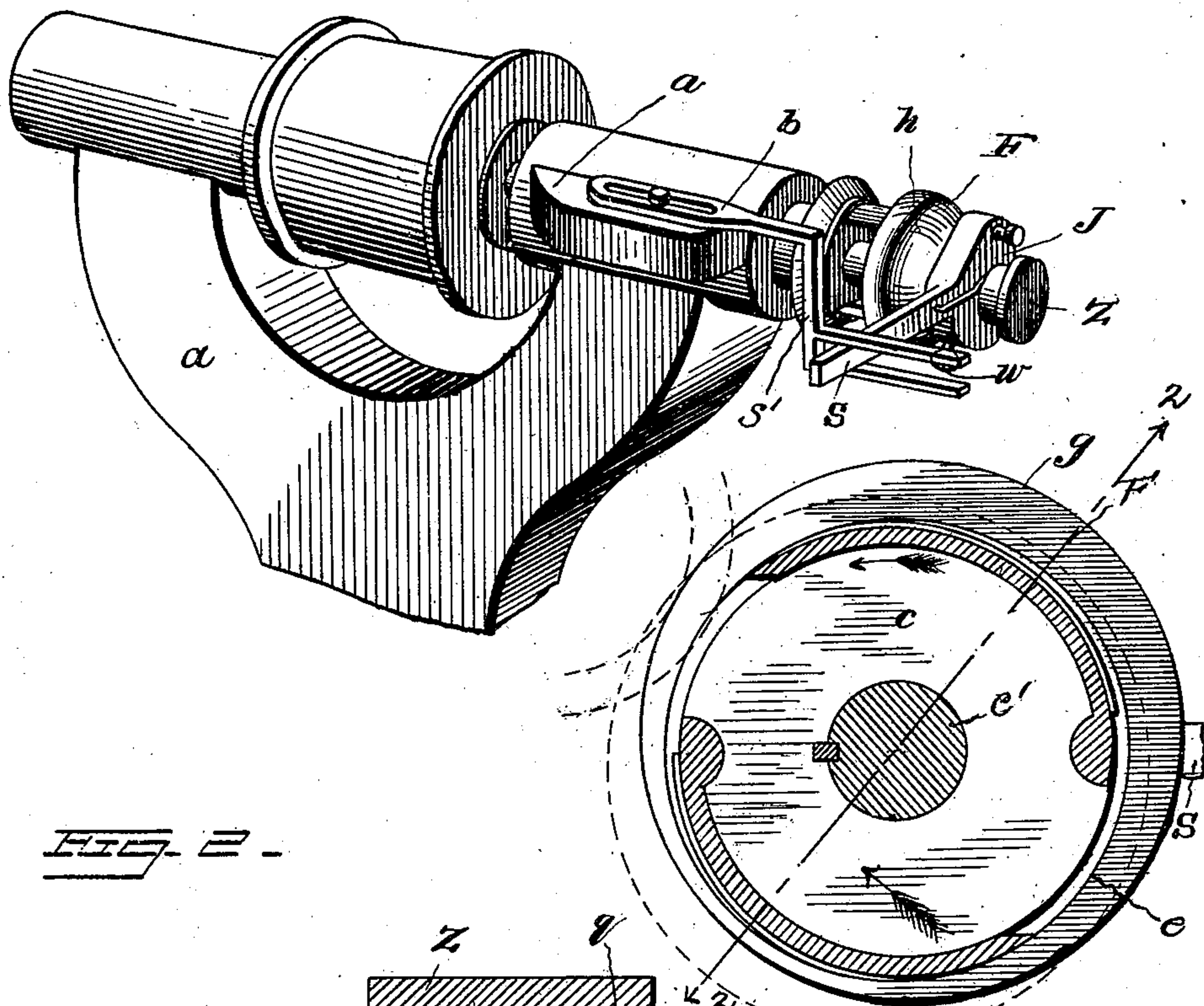


FIG. 2.

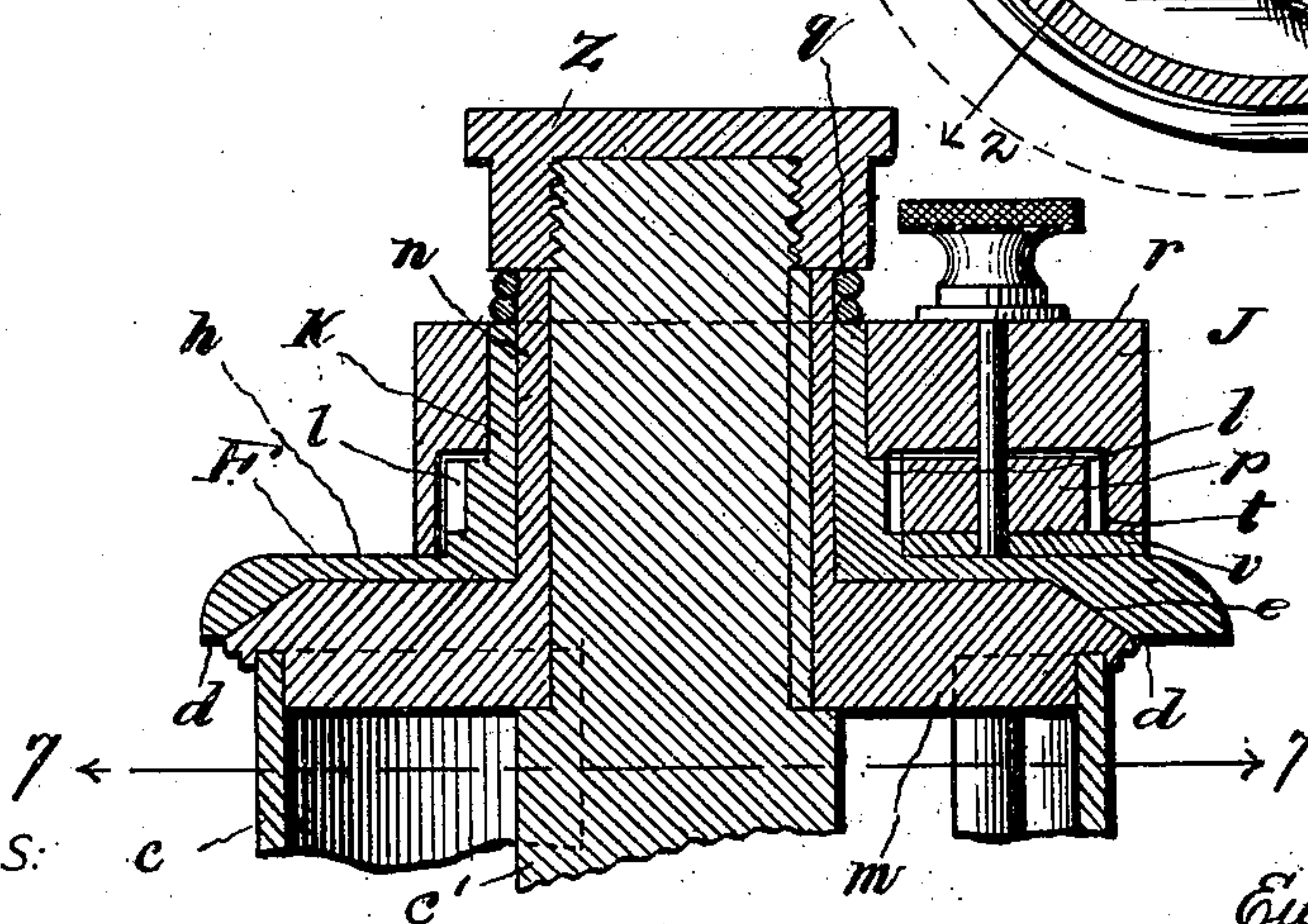


FIG. 7.

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2 Sheets—Sheet 2.

FIG. 3.

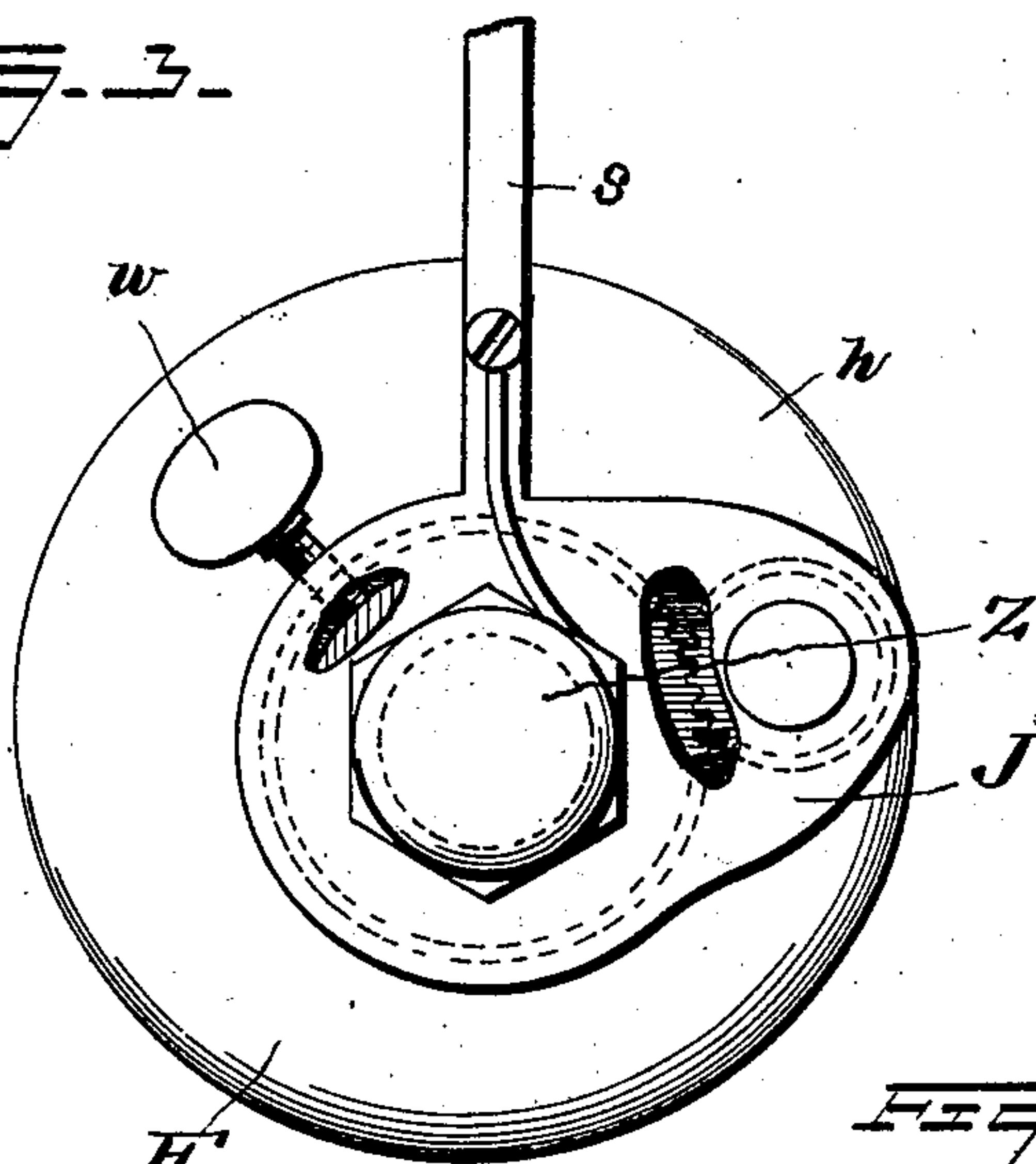


FIG. 4.

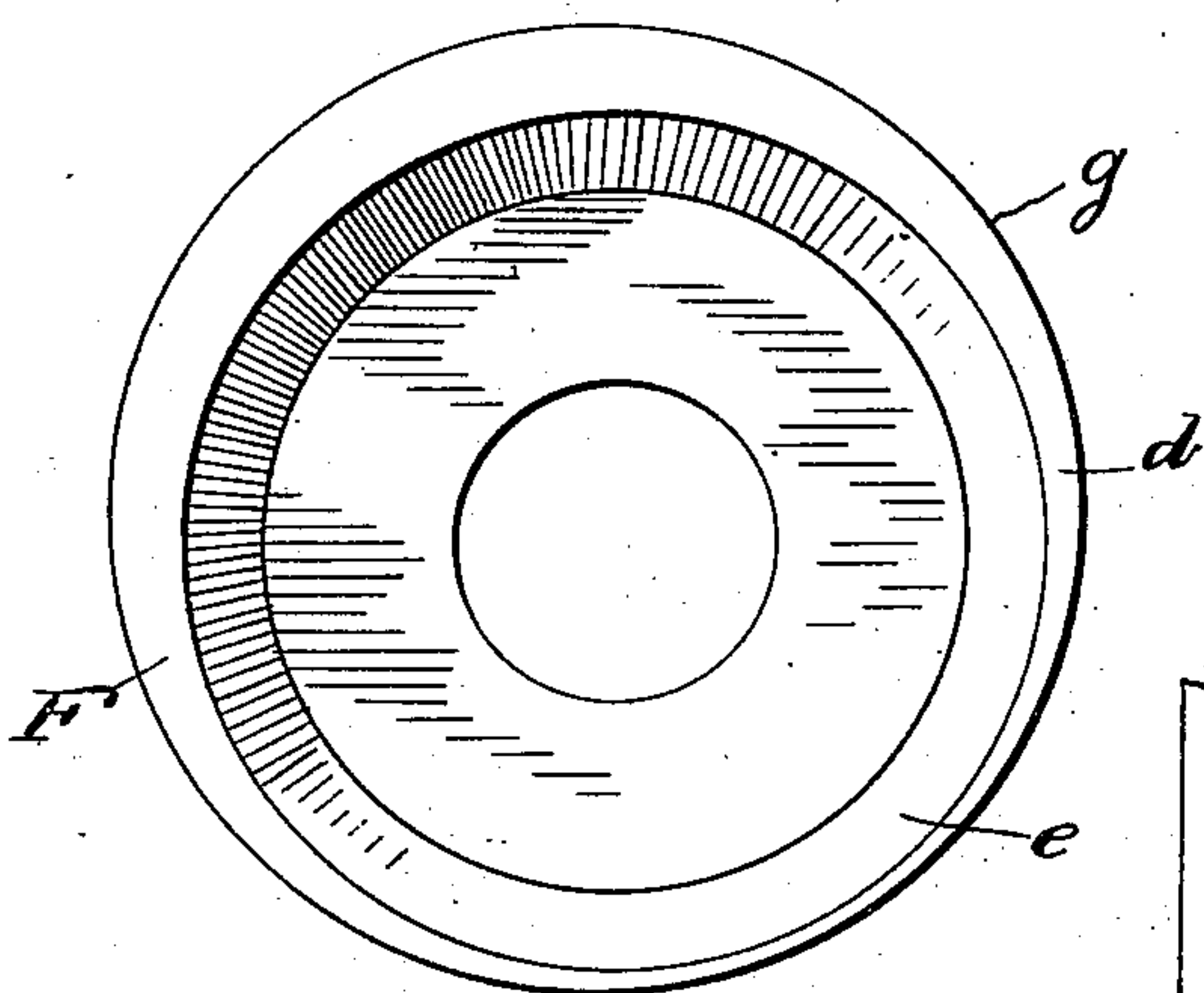


FIG. 5.

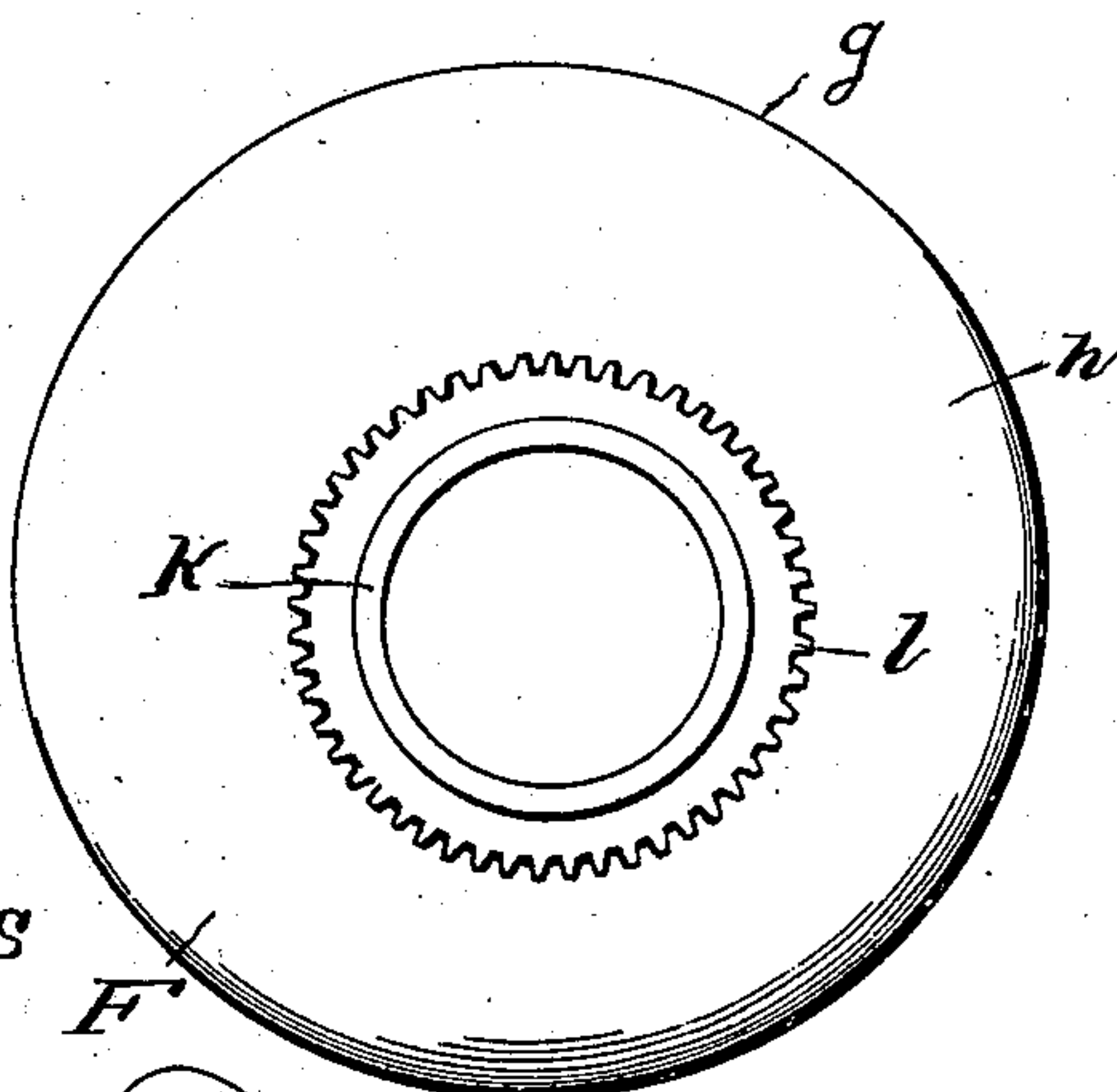
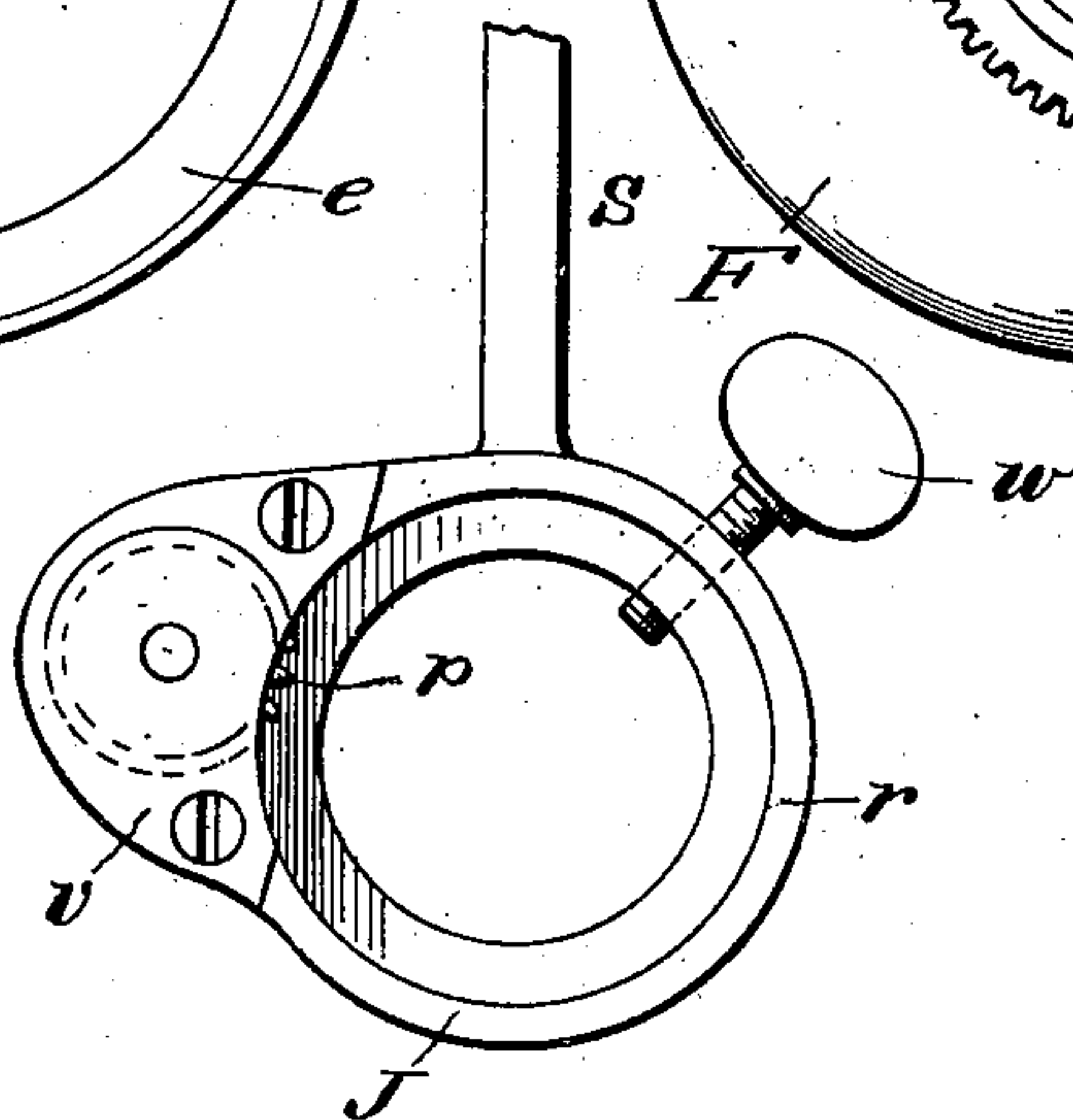


FIG. 6.



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GUARD FOR HEEL-TRIMMING AND EDGE-TRIMMING MACHINES.

SPECIFICATION forming part of Letters Patent No. 710,343, dated September 30, 1902.

Application filed April 24, 1901. Serial No. 57,191. (No model.)

To all whom it may concern:

Be it known that we, EUGENE STRATTON and FREDRICK A. COLE, citizens of the United States, and residents of New York, in the county of New York and State of New York, have made a certain new and useful Invention in Guards for Heel-Trimming and Edge-Trimming Machines; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to guards for the cutters or knives of heel-trimming and edge-trimming machines; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a heel-trimming machine with the invention shown as applied thereto. Fig. 2 is a longitudinal section of the end portion of the cutter-shaft having the guard thereon. Fig. 3 is a side elevation from the outside of the guard with the part J, &c. Fig. 4 is a detail side elevation from the the inside of the guard. Fig. 5 is a similar view from the outside. Fig. 6 is a detail side elevation from the inside of the part J; and Fig. 7 is a section on the line 7-7, Fig. 2, the opposite adjustment of the guard and position of work being shown in dotted lines.

The letter *a* designates the framework of the machine, and *c* is the cutter, having the shaft *c'*.

The object of the invention is to provide an adjustable guard or fending attachment of practical construction adapted to be set by the operator to suit the size of the cutter or so that the cutter will trim close or full.

The letter *d* represents the inner side of the guard F, having the circular recess or bearing *e* therein. The periphery of the guard (indicated at *g*) is eccentric with reference to this circular bearing. The outside or face of the guard is shown at *h*, having the hub portion *k*, on which is the gear-collar or circular toothed portion *l*. Through the hub *k* extends the pivot or stem portion *n* of the

cutter-head *m* and on which the guard turns when being adjusted.

J represents a casing consisting of an annular bearing *r* and having an arm *s* and carrying a pinion *p*, inclosed therein, which is designed to work in a slot or recess *t* in the side of the holder to engage the gear-toothed portion of the hub of the guard, which toothed hub is also inclosed by said casing. The recess *t* is covered in by a plate *v* in the usual construction, such plate being secured, by means of small screws, in any suitable manner to the annular portion of the holder. The arm *s* of the part J engages a slot in the head of a bracket *s'*, carried by the main frame *a*, whereby such part J is held stationary.

A nut upon the cutter-shaft *z* serves to secure the guard on the stem portion *n* of the cutter-head. Adjustment of the eccentric guard is effected by turning the pinion *p*, which is provided with an extension of its journal for such purpose. After the adjustment of the guard is made according to the character of the cutter and of the work such adjustment is secured by turning the set-screw *w*, which passes through the ring of the casing J, setting it tightly against the hub of the guard. In readjusting the guard set-screw *w* must be loosened.

A pressure-spring *q*, attached to the casing J, extends behind the head of the nut *z* and between said head and the end of the hub of the guard, this spring serving to keep the guard against the cutter.

In the operation of this device the work is held away from the cutter by the periphery of the guard, and as said guard is adjusted to increase or diminish the eccentricity of such periphery at the point where the work is held the work is accordingly maintained at a greater or less distance from the cutter, with the result of full or close trimming.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

1. In a guard attachment for edge-trimming machines, the revoluble eccentric guard carried by the cutter-head, and having a spur-gear upon the hub thereof, the casing carried by said guard, and carrying a pinion in mesh with said spur-gear, means for turning said

pinion, and the bracket carried by the main frame of the machine, said casing having an arm engaging a slot of such bracket, and means for securing said guard in adjusted position, substantially as specified.

2. In a guard attachment for edge-trimming machines, the revoluble guard eccentrically mounted upon a laterally-projecting hub portion of the cutter-head, and having also a laterally-projecting hub portion carrying a spur-gear, the casing mounted upon the hub of the guard, and carrying a pinion in mesh with said gear, and provided with means for turning the same, said casing having a laterally-projecting arm, and the bracket carried by the main frame of the machine, and having a slotted head for engagement with such arm, and a set-screw carried by said holder and engaging the hub of said guard to hold it stationary as adjusted, substantially as specified.

3. In a guard attachment for edge-trimming machines, the revoluble eccentric guard carried by the cutter-head, and having a spur-gear upon the hub thereof, the casing carried

by said guard, and having a pinion in mesh with said gear, means for turning said pinion, the bracket carried by the main frame of the machine, said casing having an arm engaging said bracket, means for securing the guard as adjusted, a nut upon the cutter-shaft, and a spring located between said nut and the hub of the guard, substantially as specified.

4. In a guard attachment for edge-trimming machines, the revoluble eccentric guard carried by the cutter-head, and having a spur-gear upon the hub thereof, the casing carried by said guard, and carrying a pinion in mesh with said spur-gear, means for turning said pinion, means for securing the casing against rotation, and means for securing the guard as adjusted, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:

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