

**No. 611,861.**

Patented Oct. 4, 1898.

N. KOMOW.  
CLOTH CUTTING MACHINE.

(Application filed Sept. 27, 1897.)

(No Model.)

**2 Sheets—Sheet 1.**

FIG. 2.

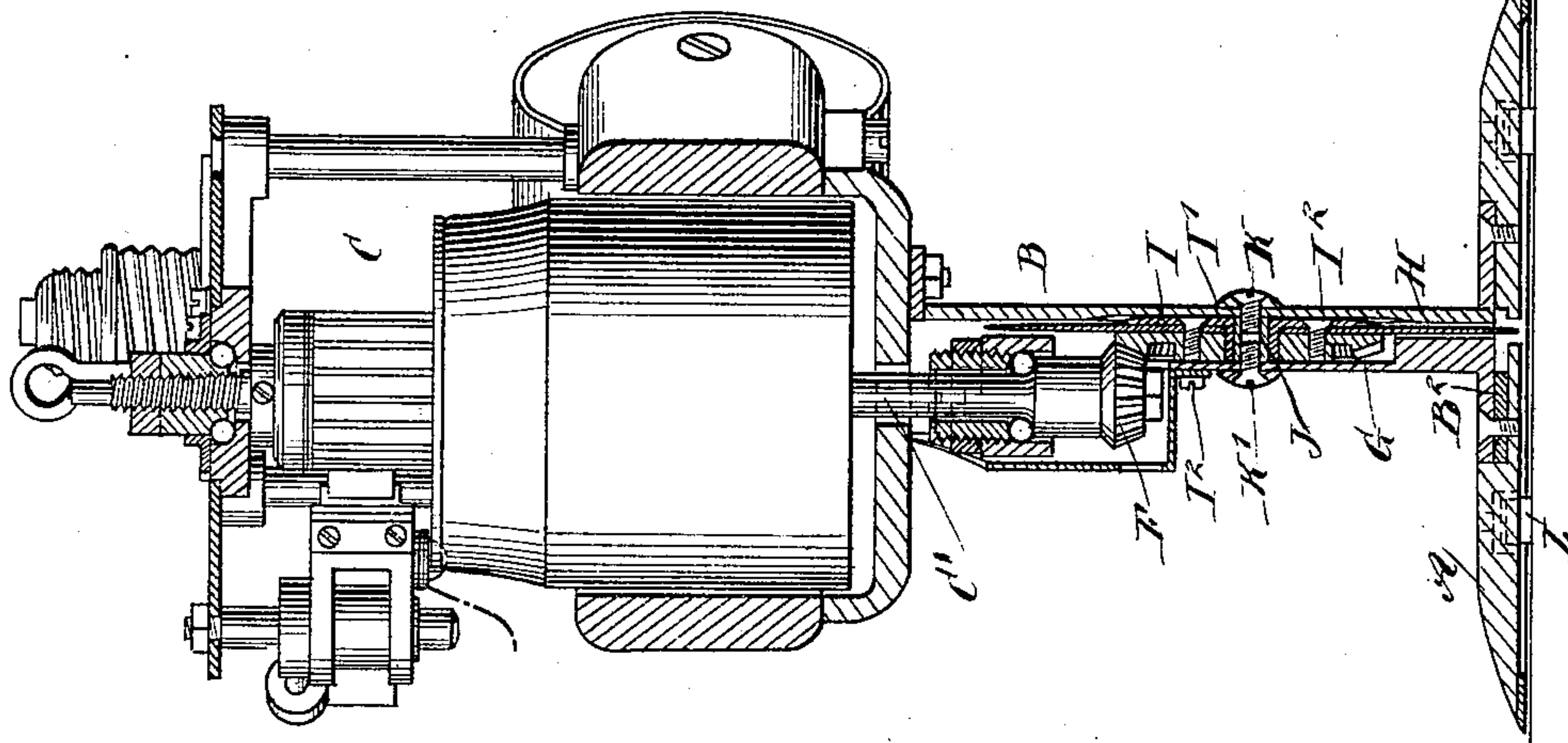
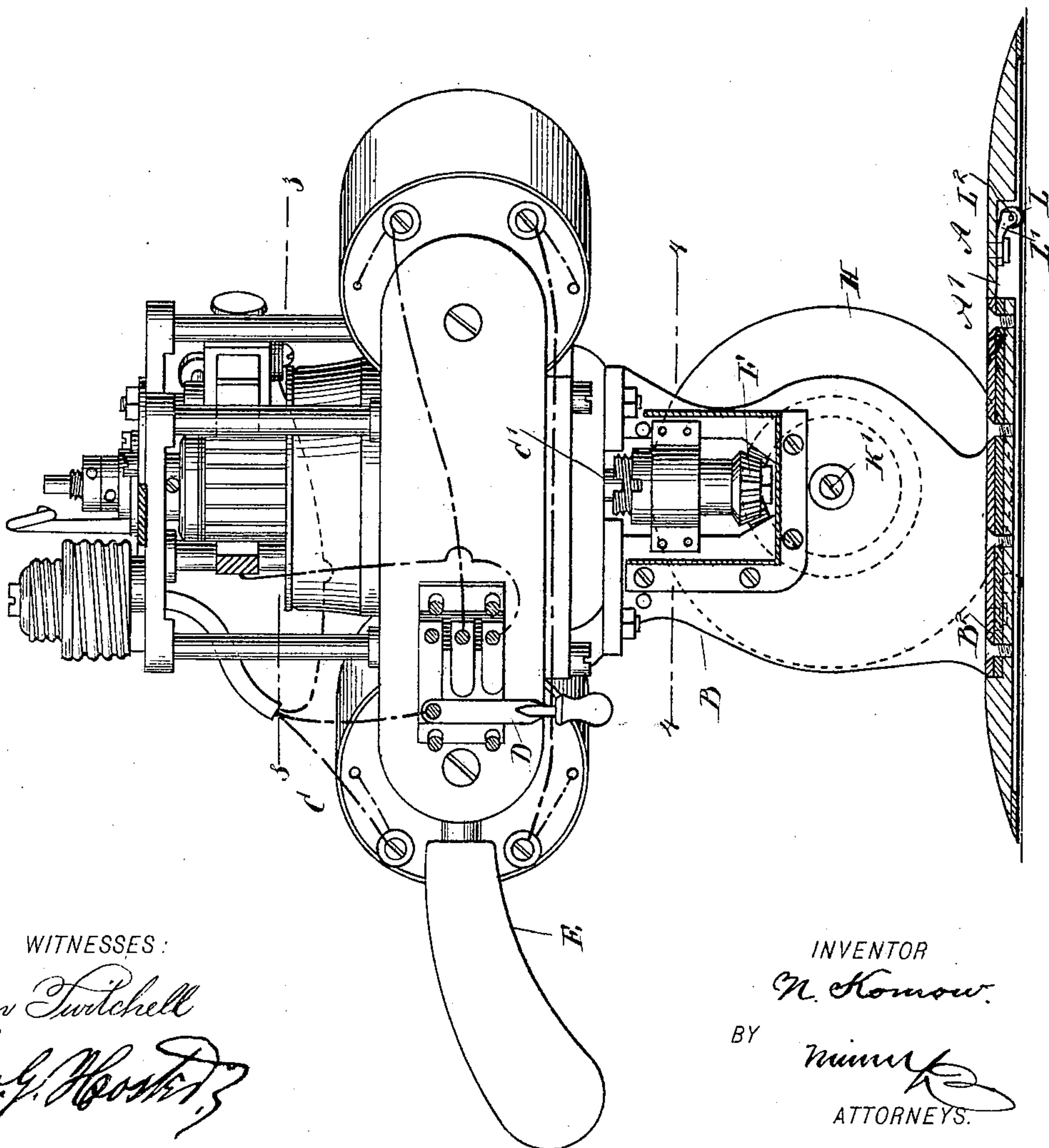


FIG. 1.



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FIG. 3.

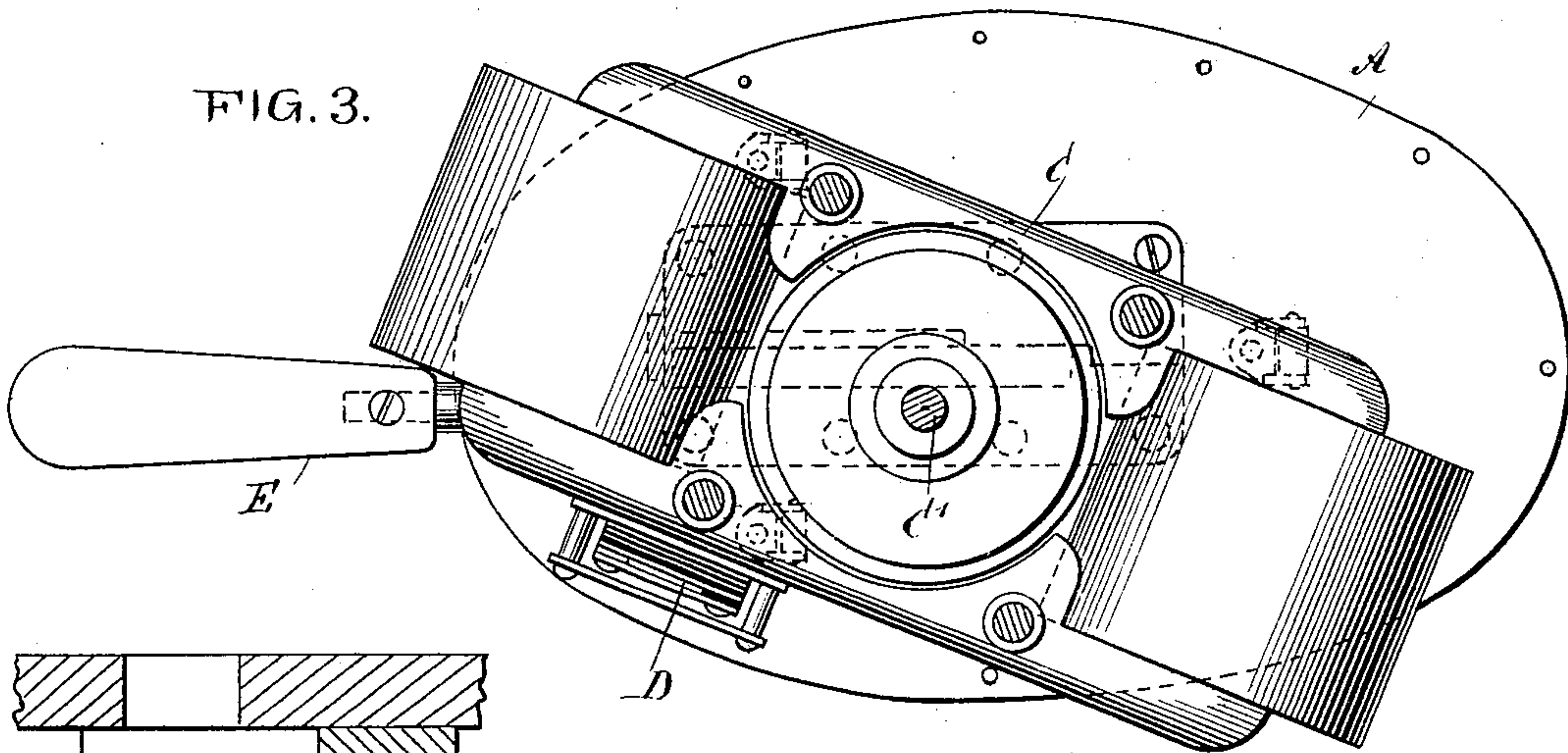


FIG. 4.

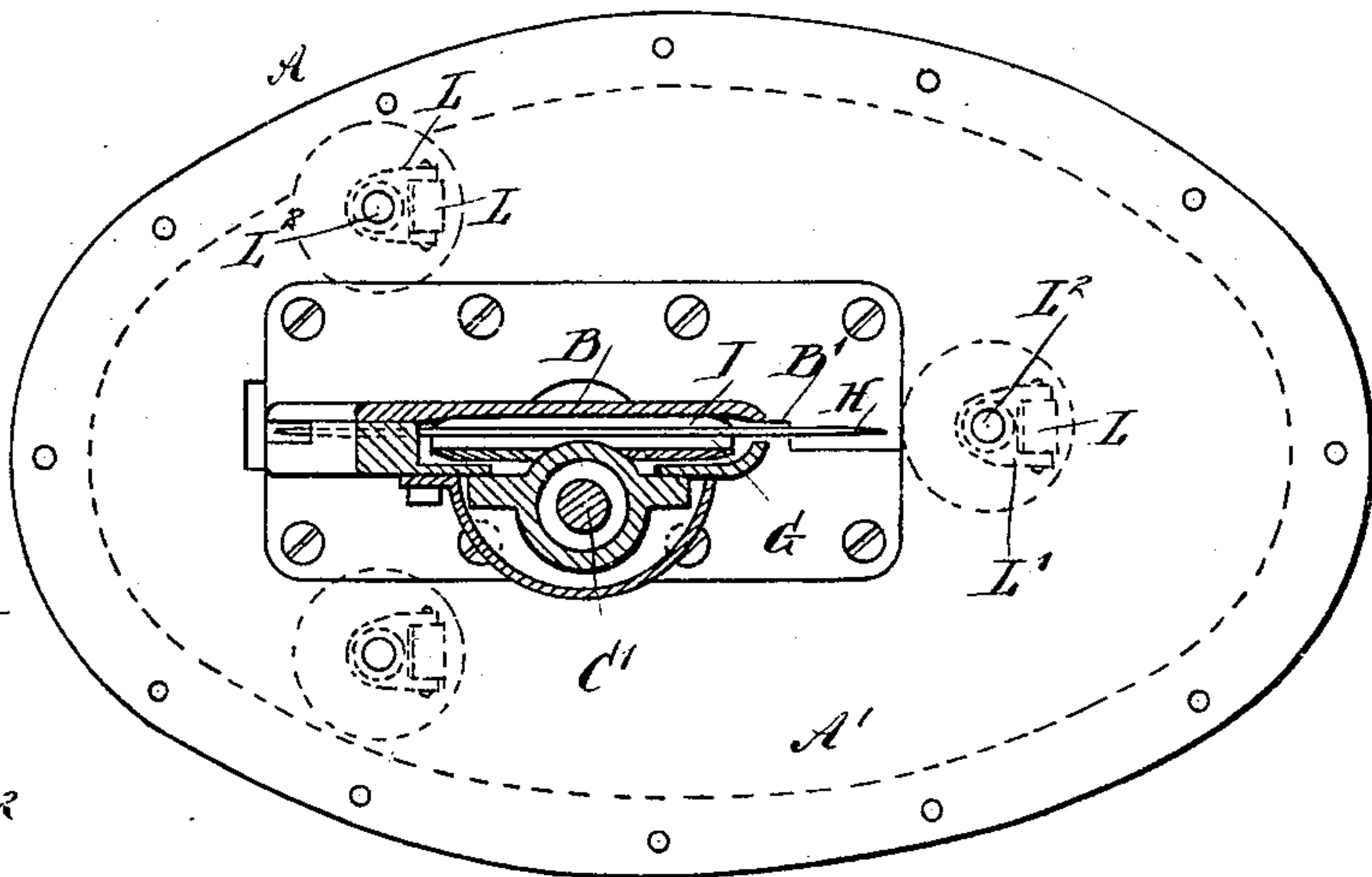
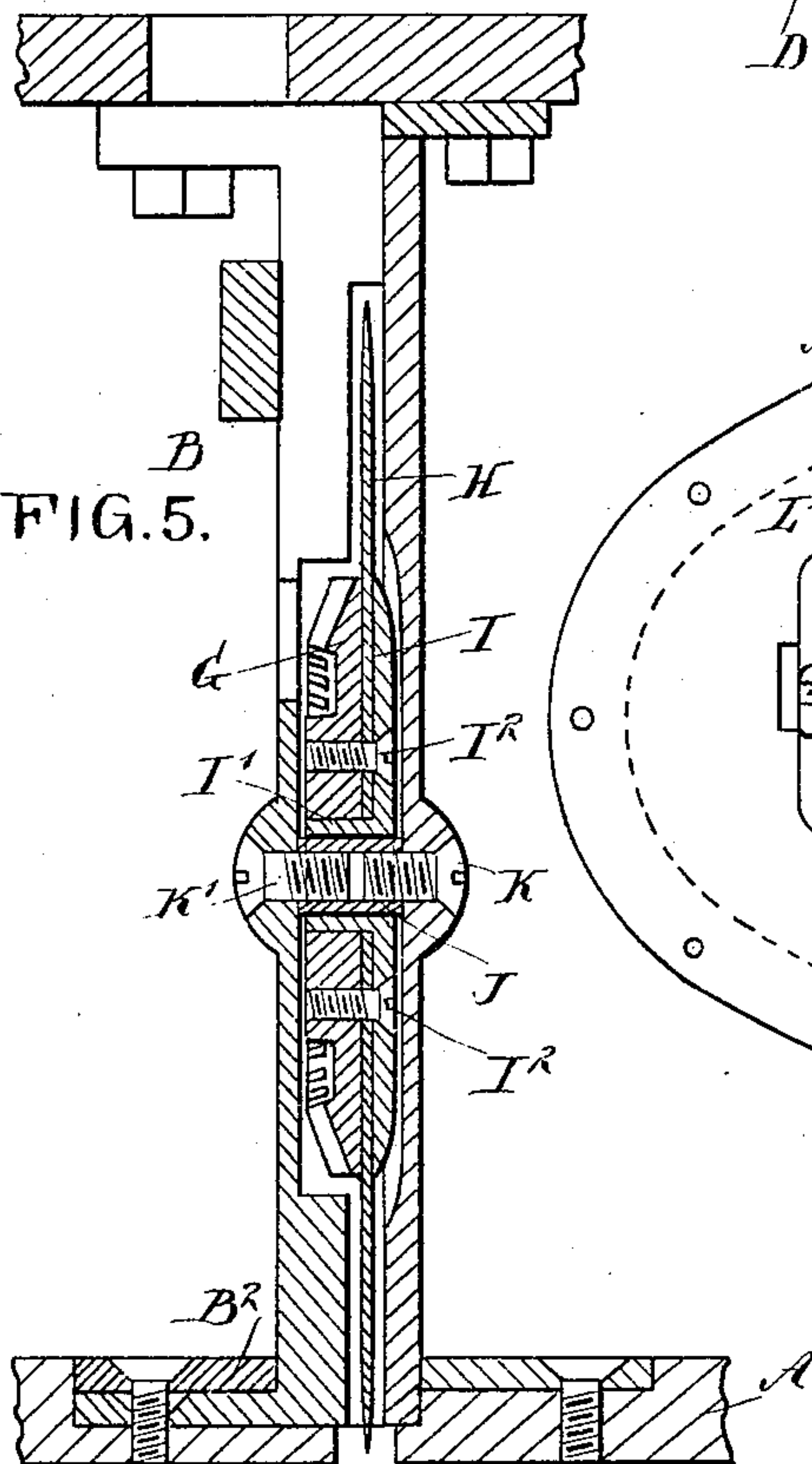


FIG. 5.



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# UNITED STATES PATENT OFFICE.

NICOLAS KOMOW, OF NEW YORK, N. Y.

## CLOTH-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 611,861, dated October 4, 1898.

Application filed September 27, 1897. Serial No. 653,204. (No model.)

*To all whom it may concern:*

Be it known that I, NICOLAS KOMOW, of New York city, in the county and State of New York, have invented a new and Improved Cloth-Cutting Machine, of which the following is a full, clear, and exact description.

The invention relates to cloth-cutting machines using an electric motor for imparting a rotary motion to a revoluble cutter; and the object of the invention is to provide a new and improved cloth-cutting machine which is simple and durable in construction, very effective in operation, arranged to directly and positively transmit the necessary motion from the motor to the revoluble cutter, so as to enable the operator to have a clear view of the cloth ahead, to insure accurate cutting along the desired line, and to cause the cut parts of the cloth to spread equally on both sides of the machine and reduce the friction to a minimum.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement with part in section. Fig. 2 is a transverse section of the same. Fig. 3 is a sectional plan view of the same on the line 3 3 of Fig. 1. Fig. 4 is a similar view of the same on the line 4 4 of Fig. 1; and Fig. 5 is an enlarged transverse section of part of the base, the standard, and the revoluble cutter.

The improved cloth-cutting machine is provided with a suitably-constructed base A, mounted on casters traveling on the top of the table supporting the cloth or other material to be cut by the machine. The base A is preferably oval in form, with the sides beveled at the top, so that the cloth passes up the base and spreads on the sides thereof after cutting to reduce the friction to a minimum during the time the machine passes through the material.

On the top of the base A is erected a hollow standard B, adapted to support at its upper end a motor C of any approved construction, preferably, however, an electric

motor, having a switch D connected by a wire with a suitable source of electrical supply, the switch being under the control of the operator for regulating the action of the motor. A handle E is secured to one side of the frame for the motor C, and this handle stands in alinement with the longitudinal axis of the base A, but at an angle to the motor C, so that the operator is enabled to readily see ahead of the machine to insure proper cutting along the desired line.

The shaft C' of the motor C extends down into the hollow standard B and carries at its lower end a beveled pinion F, in mesh with a beveled gear-wheel G, secured to one face of a revoluble cutter H, made in the form of a thin steel disk with a peripheral cutting edge, as is plainly indicated in the drawings. The cutter H is mounted in the standard with its axis at right angles to the longitudinal axis of the base, and the forward portion of the said cutter extends through a slot B' in the front of the standard B, and the lower portion of the said cutter projects into a slot in the base A, so that the cloth passing up the base is readily engaged by the front portion of the revoluble cutter H to insure proper cutting of the cloth before it reaches the standard B.

On the rear side of the cutter H is arranged a disk I, formed with a hub I', passing through central apertures in the cutter H and the gear-wheel G, suitable screws I<sup>2</sup> being employed for fastening the said disk, the cutter, and the gear-wheel together, as plainly indicated in Figs. 2 and 5. The hub I' of the disk I is mounted to revolve on a short stud J, secured in place between the two sides of the standard B by screws K K', passing through the said sides and screwing in the said stud, as plainly indicated in Figs. 2 and 5.

Now by the arrangement described the rotary motion given by the motor to its shaft C' is directly transmitted by the pinion F and gear-wheel G to the cutter H, so that the friction is reduced to a minimum and no lost motion whatever is liable to occur and the parts are not liable to get out of order.

In order to compensate for a reduction of the diameter of the cutter H when grinding the same, I interpose between the bottom of the flanges of the standard B and the base A



strips B<sup>2</sup>, which are removed after the first grinding of the cutter H and placed on the top of the flanges, as indicated in Fig. 5, the standard B being thus lowered relatively to the base A, according to the amount ground off on the cutter H, so that the latter remains in its proper position relatively to the front end of the standard B and the base A, as previously described.

10 The casters for the base A are preferably in the form of rollers L, each journaled in an arm L', hung on a pivot L<sup>2</sup>, secured to the base A, the arm L' being free to swing in a recess A', formed in the under side of the said base, as plainly indicated in Figs. 1 and 4.

15 Now by the arrangement described the bottom of the base A is slightly raised above the table on which the cloth is located, and the entire machine can be readily moved over the table in any desired direction, as the arms L', carrying the rollers L, are readily swung around, according to the direction given to the machine by the operator pushing or pulling on the handle E.

25 Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A cloth-cutting machine, comprising a base, a standard thereon, a motor carried by the said standard, the said motor being at an angle to the longitudinal axis of the base, a revoluble cutter driven by the said motor, and journaled in the said standard, and a

handle on the frame of the said motor, and standing at an angle to the motor and in alinement with the longitudinal axis of the said base, substantially as shown and described.

2. A cloth-cutting machine, comprising a slotted base, a hollow slotted standard on the base, a motor on the upper end of the standard and having its drive-shaft extending down into the hollow standard and provided with a beveled pinion on its end, said motor being at an angle to the longitudinal axis of the base, a beveled gear mounted in the hollow standard and engaging the beveled pinion of the motor-shaft, and a cutter-disk secured to and revolving with the said gear-wheel, said cutter-disk having its forward portion extending through the slot of the standard and its lower portion projecting into the slot of the base, substantially as described.

3. In a cloth-cutting machine, the combination with a slotted base having its upper face recessed, of a standard having a flanged lower end, a revoluble cutter mounted in the standard and projecting into the slot of the base, and strips arranged in the recess of the base below the flanges of the standard, substantially as and for the purpose set forth.

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Witnesses:

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