No. 616,216. Patented Dec. 20, 1898.

H. WARTH.

CLOTH CUTTING MACHINE.

(Application filed Aug. 18, 1898.)

(No Model.) 2 Sheets—Sheet 1.

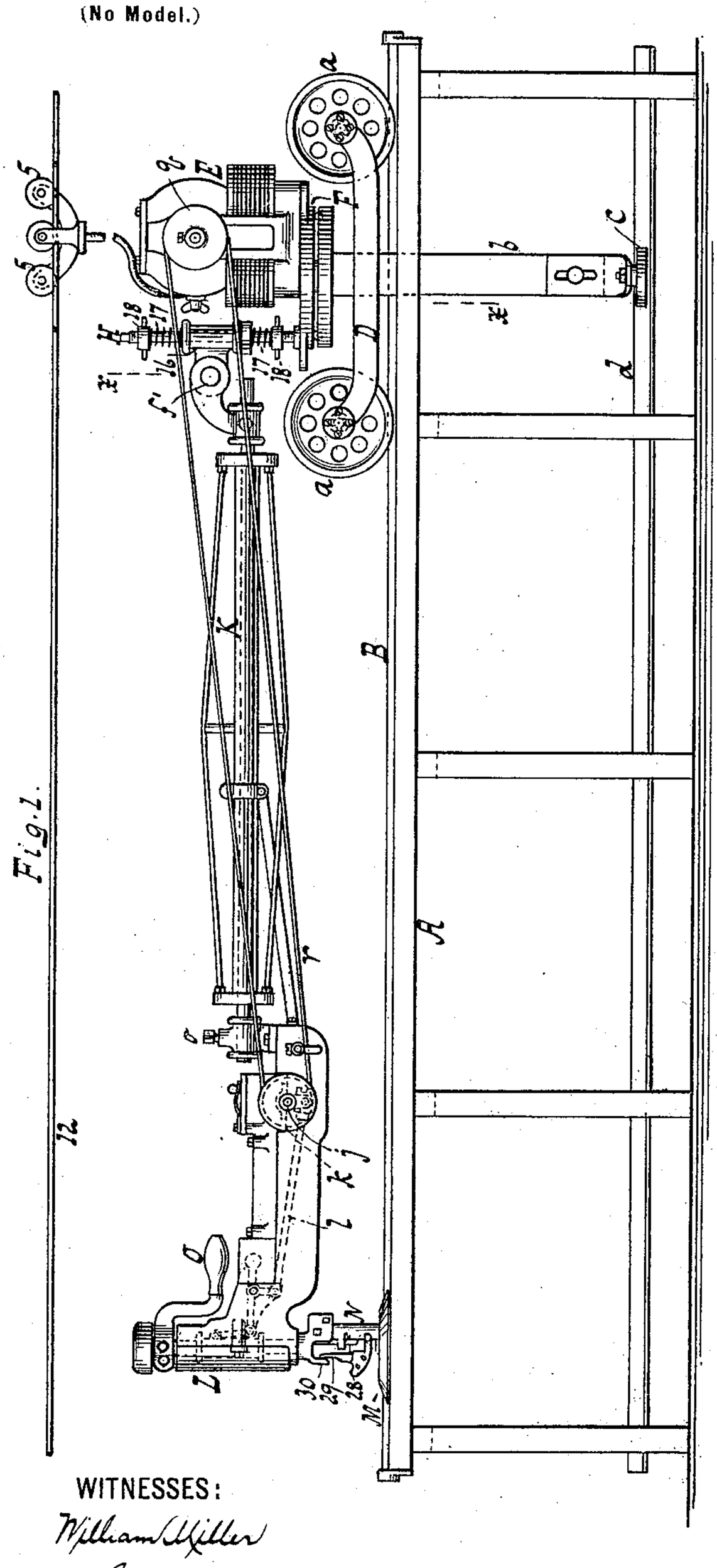

Fig. 1.

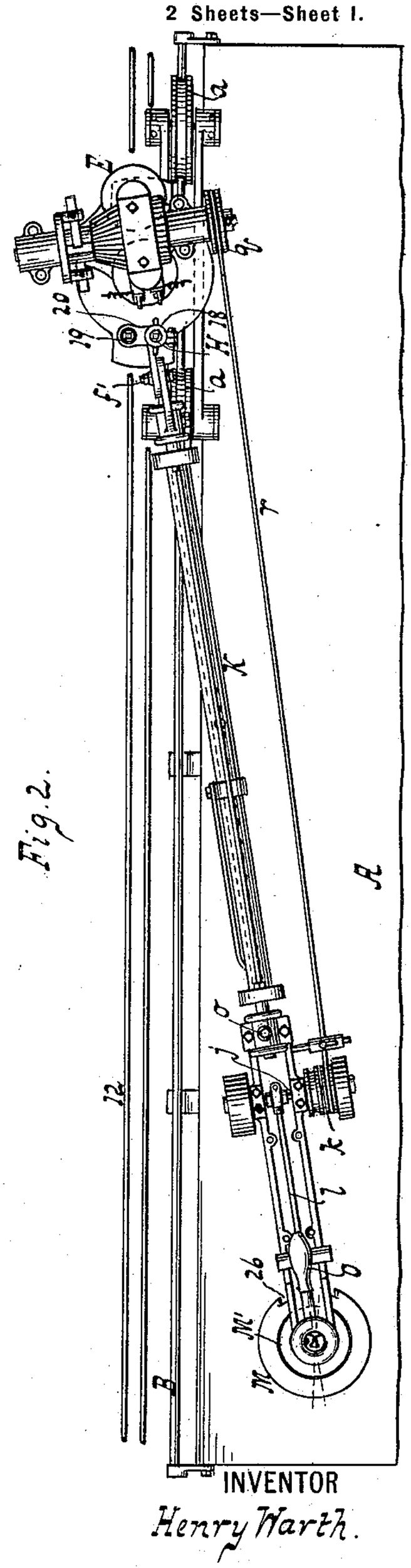

Fig. 2.

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Fig. 5.

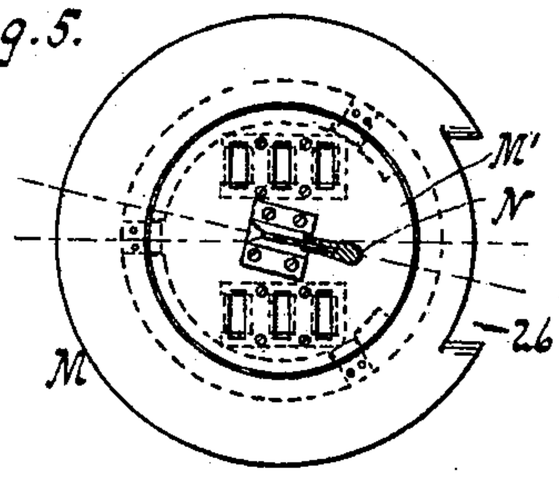


Fig. 6.

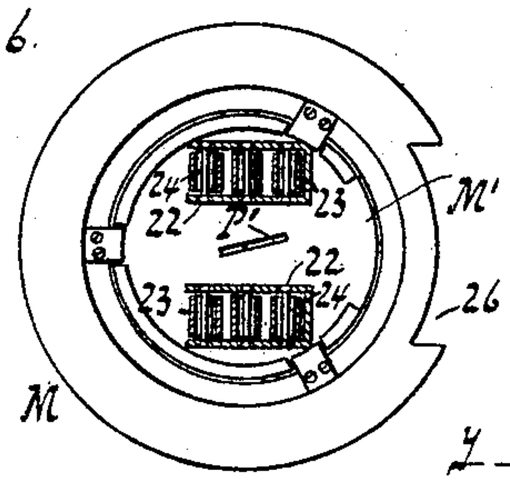


Fig. 3.

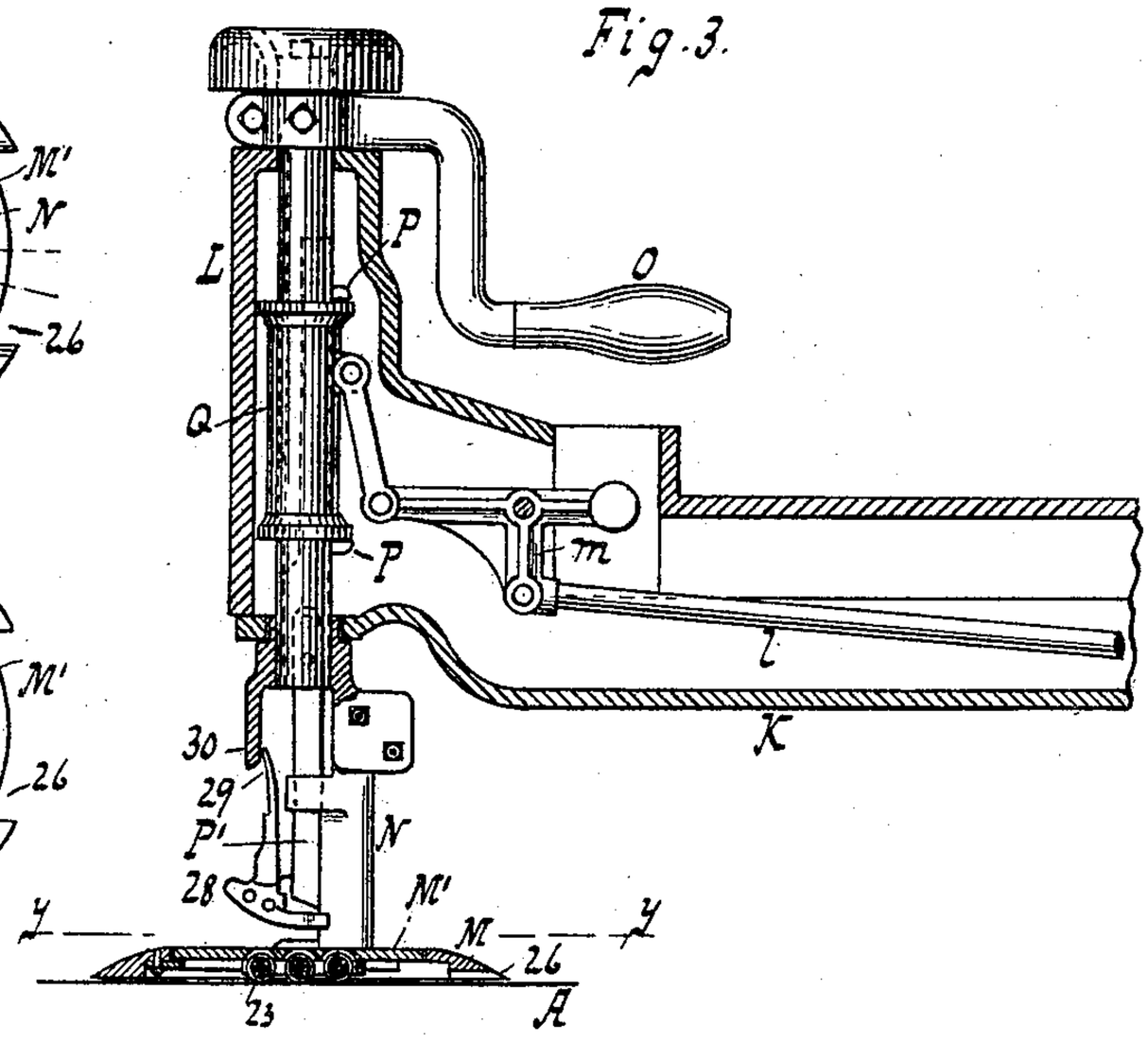


Fig. 7.

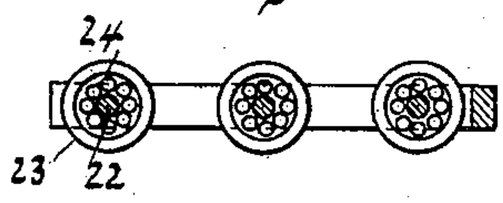


Fig. 8.

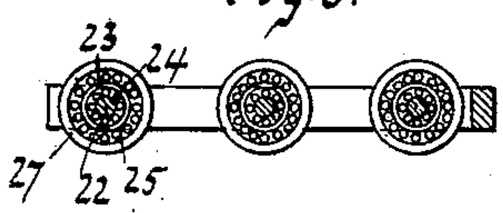
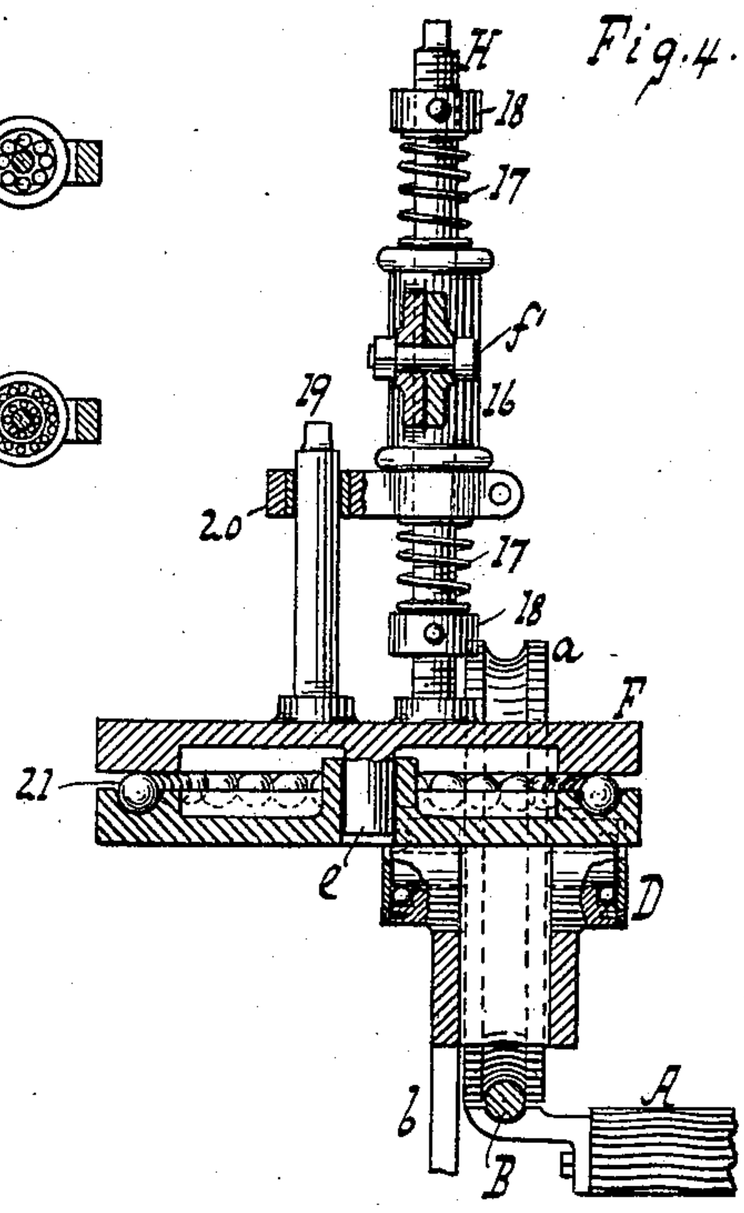


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY WARTH, OF NEW YORK, N. Y., ASSIGNOR TO APOLLONIA WARTH, OF SAME PLACE.

CLOTH-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,216, dated December 20, 1898.

Application filed August 18, 1898. Serial No. 688,888. (No model.)

To all whom it may concern:

Be it known that I, HENRY WARTH, a citizen of the United States, residing at New York, (Stapleton,) in the county of Richmond and State of New York, have invented new and useful Improvements in Cloth-Cutting Machines, of which the following is a specification.

This invention relates to certain improvements in devices of the kind described in United States Letters Patent No. 390,926, of October 9, 1888, for mechanical movements, and No. 391,285, of October 16, 1888, for cloth-cutting machines, granted to Albin Warth; and the invention resides in the novel features of construction set forth in the following specification and claims, and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of a cloth-cutting machine embodying the invention. Fig. 2 is a plan view of Fig. 1, partly broken away. Fig. 3 is a detail sectional view, on an enlarged scale, of a bracket. Fig. 4 is a section along line *x x*, Fig. 1, enlarged. Fig. 5 is a section along line *y y*, Fig. 3. Fig. 6 is an inverted plan view of a cloth-lifting plate. Fig. 7 is a detail view of the rollers on which the plate travels. Fig. 8 shows a modification.

The work-supporting table A, Fig. 1, with rail B for the travel of wheels *a* of carriage D, having the steadying-arm *b*, with rollers *c*, traveling along rail *d*, are set forth in said Patent No. 391,285 and need not be described in detail. The plate F, with motor E, having trolley connection 5 with conductors 12, is also known. The arm K, with adjustment *o*, is provided with the pulley *k* and crank *j*. The pitman *l* conveys motion to lever *m*, connected or linked to sleeve Q, actuating bar P, with the tool or cutter P′, carried or guided by the pillar or standard N. The arm K carries the bracket L, and the handle O serves for directing the tool. The motor E by its pulley *q* and belt *r* drives the pulley *k*.

The carriage or plate F carries a standard H, Figs. 1 and 4, about which is slipped or loosely sits sleeve or connection 16, against which are braced springs 17, held or adjusted by screws or nuts 18 on suitably-threaded parts of standard H. The arm H connects with sleeve 16 by pivot *f′*, and said sleeve being supported or yieldingly held by the springs 17 vibrations that would otherwise be transmitted between the swinging arm and carriage are taken up or eased by the springs. The base-plate F, having the pivot connection *e* with carriage D, and balls 21 being interposed between the plate and carriage, such plate, with motor E, can swivel, as required.

To prevent the sleeve 16 from swiveling on standard H, such sleeve has fixed thereto an arm 20, which engages or slips over the post 19 on plate F.

As seen in Fig. 3, the cloth-lifting plate is made in two parts or sections, the outer or annular section being shown at M and the inner section M′ being removably mounted or placed in the outer section. By having the two sections separable, cleaning or repairs can be easily effected at these parts.

The cloth-lifting plate is adapted to travel on table A, said plate having axles or shafts 22, a shell or sleeve 23 being placed about each shaft, and antifriction-rollers 24 being placed between the shaft and sleeve, as seen in Fig. 7. A second sleeve 27, Fig. 8, being placed about sleeve 23 and rollers 25 being interposed between the sleeves 23 and 27, easier travel is attained. The plate is shown with its rear lower portion or edge cut away at 26, Figs. 3 and 5, to allow the escape of fiber or waste arising during the cutting or operation.

The standard N, with tool P′, as seen in Figs. 5 and 6, is placed at an angle to or out of parallelism with the line of travel of the rollers 22. By placing the tool at the angle shown it has been found that during the cutting operation there is no tendency for the work being pushed away from the cutter.

The guard 28, Fig. 3, at the cutter or tool is shown with a finger 29 made to rest against a lip 30 on the standard. The guard is connected to the standard N, the knife playing loosely or freely past or through the guard.

The base-plate F, it is noted, could be formed as part of the motor E or of the motor-frame.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a table, a carriage, a motor, a base-plate, a swinging arm having

a spring connection with the base-plate, and a cutter or tool mounted on and moving with the arm and connected with the motor substantially as described.

2. The combination with a table, of a carriage, a swivel-plate secured to the carriage, a motor, a standard mounted on the plate and provided with springs, an arm having a sleeve or connection mounted on the standard between the springs, a cutter or tool, and means substantially as described for transmitting motion from the motor to the tool.

3. A cloth-cutting machine provided with a cloth-lifting plate, rollers for the plate, and a cutter-carrying standard placed at an angle to the line of travel of the rollers substantially as described.

4. A carriage and a swivel-plate on the carriage, combined with antifriction-rollers between the carriage and plate, a motor on the plate, an arm having a spring or yielding connection with the plate, and a cutter or tool substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY WARTH.

Witnesses:
W. C. HAUFF,
E. F. KASTENHUBER.