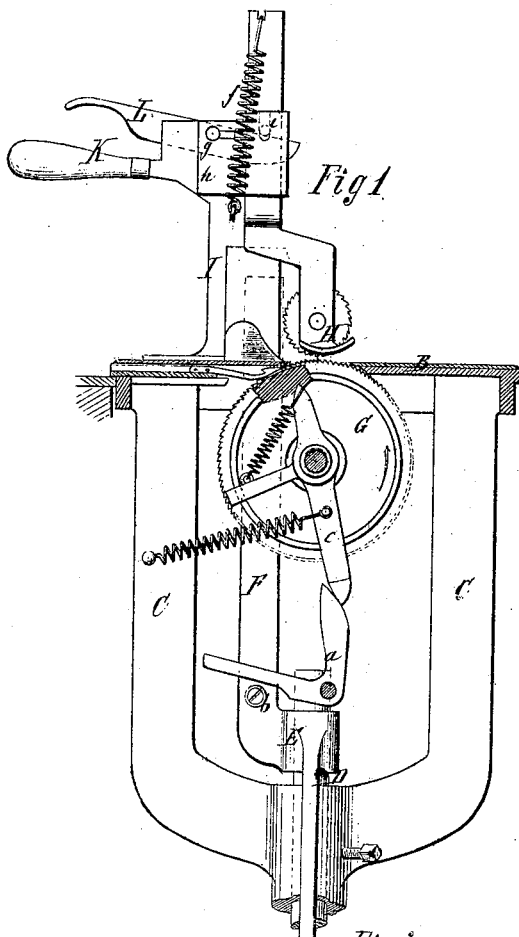


*A. Warth,*

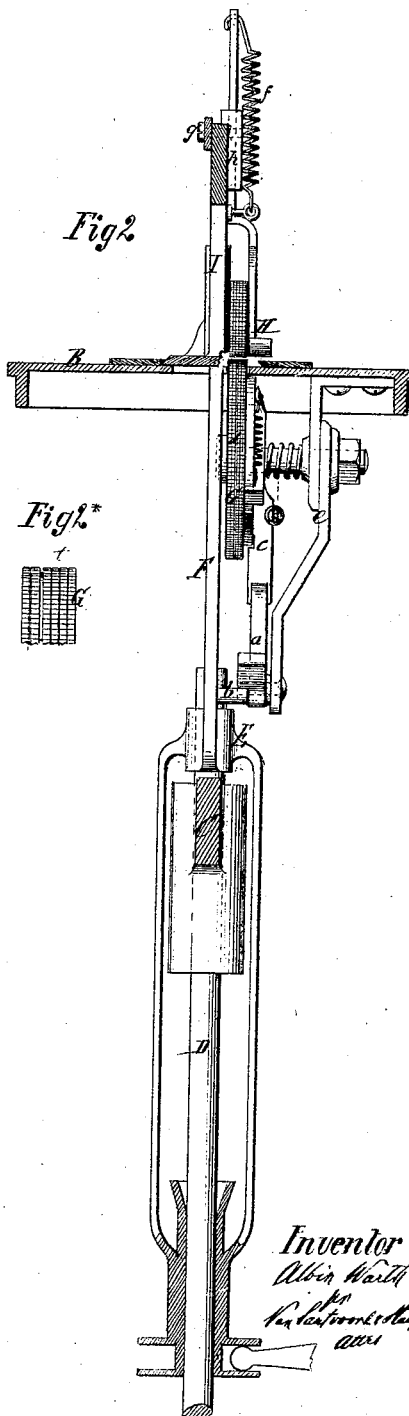
*Clath Cutter.*

*No. 112752,*

*Patented Mar. 14. 1871.*

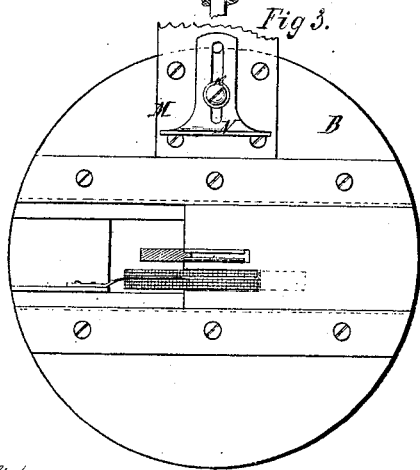


*Fig 1*



*Fig 2*

*Fig. 3*



*Fig 3.*

*Witnesses.*

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# UNITED STATES PATENT OFFICE

ALBIN WARTH, OF STAPLETON, NEW YORK.

## IMPROVEMENT IN MACHINES FOR CUTTING TEXTILE AND OTHER MATERIALS.

*Specification forming part of Letters Patent No. 112,752, dated March 14, 1871.*

*To all whom it may concern:*

Be it known that I, ALBIN WARTH, of Stapleton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Machines for Cutting Textile and other Material; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention. Fig. 2 is a transverse section of the same. Fig. 3 is a sectional plan or top view of the same.

Similar letters indicate corresponding parts.

This invention relates to an improvement in that class of machines for which Letters Patent have been granted to me August 2, 1870, No. 106,101.

In the machine described in said patent I had used a four-motion feed, and I have found since that a wheel-feed is preferable; but in using the wheel-feed, in combination with the cutting mechanism, I met a serious difficulty—viz., the small hairs and fibers disengaged from the material to be cut during the cutting operation are liable to fill up the teeth of the feed-wheel, and to render the same inoperative.

This difficulty I have overcome by providing the feed-wheel with annular grooves between its teeth, in combination with scrapers working in said grooves, in such a manner that all the hairs or fibers which would be liable to lodge in the teeth of the feed-wheel are disengaged therefrom by the action of the scraper, and the correct operation of the feed-wheel remains unimpaired.

The motion of the feed-wheel is produced by the rising-and-falling motion of the cutter-bar.

The presser-foot is fitted to a standard, which rises from the revolving platform, and is detached from the cutter-bar.

On the rotating platform is secured a plate, to which a gage is attached, said plate being intended to extend beyond the platform to allow for moving the gage to a considerable distance from the cutter-bar.

In the drawing, the letter B designates the

platform or cloth-plate, which is fitted in a suitable table or frame, so that it can be freely revolved in either direction.

From the under surface of this rotary platform extends a hanger, C, in which is firmly secured the rod D, that forms the guide for the sleeve E, from the top part of which extends the cutter-bar F, and to which a rising-and-falling motion is imparted by any suitable mechanism.

From the platform B also extends a bracket, e, to which is pivoted a bell-crank lever, a, which is actuated by a stud, b, projecting from the rising-and-falling cutter bar, being connected to the platform B in such a manner that by rotating the platform the hanger is also compelled to rotate, and thereby the bell-crank lever a preserves the proper relation in regard to the stud b.

Said bell-crank lever actuates the dog c, which propels the feed-wheel G, said dog and feed-wheel being of the ordinary construction, with the exception that the feed-wheel has annular grooves l, Fig. 2\*, turned in its face.

The axle of said feed-wheel has its bearing in the bracket e, secured to the under surface of the revolving platform B, as above stated, so that when the platform is revolved the feed-wheel is compelled to move with it, thereby preserving its proper relation toward the cutter-bar.

The feed-wheel is provided with one or more annular grooves, l, and to the under surface of the platform B are secured scrapers m, which engage with the grooves l, so that by their action all the fibers or hairs which become detached from the fabrics by the action of the cutter, and which are liable to lodge in the teeth of the wheel, are thrown out, and the correct operation of the feed-wheel is preserved.

H is the presser-foot, which is fitted on a standard, I, that rises from the revolving platform, and is disconnected from the cutter-bar.

From this standard extends a handle, K, which serves to manipulate the platform; and a trigger, L, extending above the handle K, serves to raise the presser-foot against the action of its spring f, Fig. 1.

This trigger has its fulcrum on a pivot, g,

secured in the box *h*, which forms the guide for the rising-and falling presser-foot, and said trigger bears against a stud, *i*, secured in the presser-bar, the pivot *g* being made adjustable toward and from the stud *i*, so that the height to which the presser-foot is lifted can be accommodated to the greater or lesser thickness of material to be operated upon.

On the platform B is secured a plate, M, provided with several holes, which are tapped to receive the screw *k*, by which the gage N is secured in position, said plate being made to extend beyond the edge of the platform, so that the range of the gage is not confined to the radius of the platform B, but can be increased to any desired extent.

The operation of this machine is the same as described in my Patent No. 106,101, above referred to, and I do not therefore repeat the description of the same here.

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

1. The face of the feed-wheel G, provided with two, more or less, annular grooves, *l*, combined and operating in connection with the scrapers *m*, as and for the purpose herein shown and described.

2. The combination of a feed-wheel, G, and rotary platform B with a rising-and-falling cutter-bar, F, substantially as set forth.

3. The standard I, rising from the rotary platform B, and forming the guide for the presser-foot H, in combination with the rising-and-falling cutter-bar F, substantially as described.

4. The trigger L, with its adjustable fulcrum, in combination with the standard I, handle K, and presser-foot H, substantially as set forth.

This specification signed by me this 12th day of December, 1870.

Witnesses:

ALBIN WARTH.

W. HAUFF,

E. F. KASTENHUBER.