(Model.)

R. O. MONDAY.

CLOTH CUTTING APPARATUS.

No. 324,404. Patented Aug. 18, 1885.

Fig. 1.

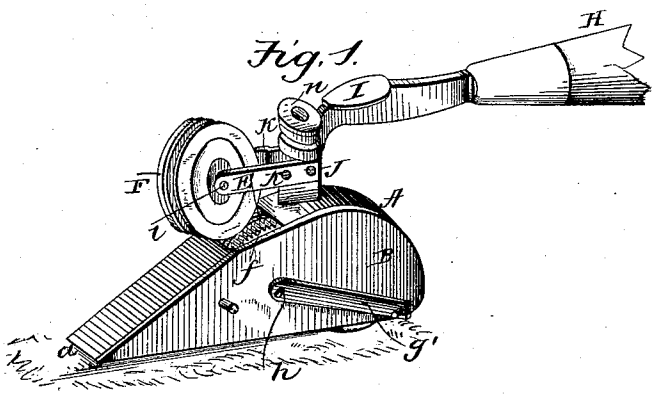


Fig. 2.

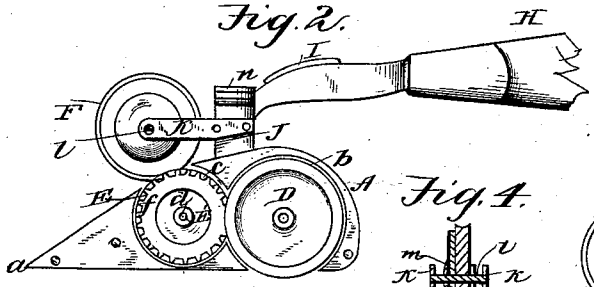


Fig. 4.

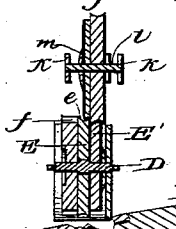


Fig. 5.

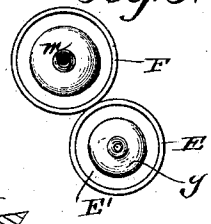
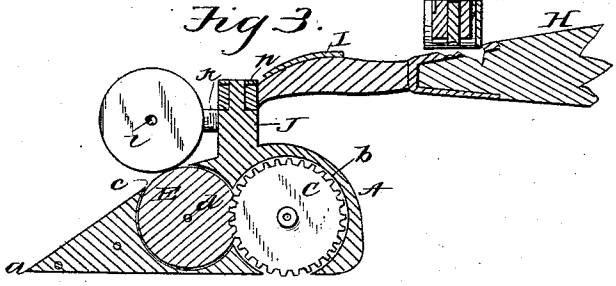


Fig. 3.



WITNESSES

C. M. Dashiell

E. G. Siggers.

INVENTOR

Robert O. Monday

By C. A. Snow & Co.

Attorneys

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ROBERT OWENS MONDAY, OF DALLAS, TEXAS, ASSIGNOR OF ONE-HALF TO GEORGE TYNG ATKINS, OF SAME PLACE.

CLOTH-CUTTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 324,404, dated August 18, 1885.

Application filed August 23, 1884. (Model.)

To all whom it may concern:

Be it known that I, ROBERT O. MONDAY, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented a new and useful Improvement in Cloth-Cutting Apparatus, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to cloth-cutting apparatus, and particularly to that class wherein the fabric or other material to be cut is operated upon by revolving cutters; and it has for its object to provide devices of this character which may be enabled to cut the goods by a continuous forward movement of the said cutters.

A further object of the invention provides means for feeding the material to the cutters.

A further object of the invention provides improved means for operating the cutters.

A still further object of the invention provides a spring for regulating the pressure of the cutters, and a still further object of the invention provides an adjustable handle.

With the above and other objects in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a side view with the outer casing removed. Fig. 3 is a longitudinal vertical section. Fig. 4 is a section, and Fig. 5 is a detail view of the revolving cutters.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A represents the frame or casing, which is largest at its rear end, its front end tapering to a point, as shown at *a*.

B represents a metal plate, which is of the same size and form as the casing A, and which fits over and closes the open side of the same.

The frame or casing A is formed near its rear end, upon its inner side, with a circular recess or seat, *b*, and in this seat *b* is mounted a gear-wheel, C, a portion of which extends through an opening formed in the bottom of said casing.

Mounted upon the same shaft with the gear-wheel C, and adapted to turn therewith, is a friction-disk, D, which in circumference is somewhat larger than the gear-wheel C, and which is adapted to bear upon the table, and when the device is moved forward by its frictional contact with the table revolves, and thus turns said gear-wheel to impart motion to the cutters.

Just in front of the recess or seat *b*, and communicating therewith, is a somewhat smaller seat or recess, *c*. Bearing in the side of the frame or casing at one end is a shaft, *d*, the other end of which bears in the plate B. Upon this shaft is mounted a cutting-disk, E, which, as shown at *e*, is grooved. Upon the outer side of this grooved cutting-wheel is mounted upon the shaft *d* a cog-wheel, *f*, which is adapted to mesh with the gear-wheel C.

E′ represents a rubber disk, which is mounted upon the shaft *d* adjacent to the cutting-disk. This disk E′ is held in place upon the shaft by means of a metal washer, *g*, which clamps said disk E′ against the inner side of the cutting-disk E.

Upon one of the screws which secure the plate B to the frame or casing is mounted a tension plate or spring, *g′*. The rear end of this tension plate or spring is somewhat thicker than the front end, from which it will be seen that said front end may be depressed. The front end of the tension-plate bears against the end of the shaft *d*, and may be tightened to bear firmly against the same by means of a small screw, *h*, which works in a screw-threaded opening in the plate B.

Upon the upper side of the casing, near the rear end thereof, is an upright or post, *j*, the front side of which is cut away to form a point, in order that the fabric or other material, when cut, may readily pass the same.

Extending outwardly from the sides of the said upright or post are two plates, *k*, which form a bracket. The ends of these plates are each provided with a hole or opening, in which is seated a shaft, *l*. Upon the shaft *l* is mounted a cutting-disk, F, which, like the disk before mentioned, is grooved. Upon the shaft *l* is mounted a rubber disk, *m*, which acts in conjunction with the rubber disk E, and feeds the material to the cutters.

H represents the handle, the front end of

which is provided with a hole or opening, which is seated upon the post *j*. A washer is placed upon said post, which extends above the handle, and a tap-nut, *n*, is then placed upon said post to hold the handle in place. It will be seen that by this arrangement the handle may be turned in any direction and held in place at any desired adjustment.

I represents a finger-piece, which is secured to the upper side of the handle near the forward end thereof.

The operation is as follows: The material to be cut is placed between the revolving disks or cutters, the friction-disk D resting upon the table. The frame is then moved forward by means of the handle, and as the friction-disk D is in contact with the table it is revolved by such forward movement, and in turning imparts motion to the cog-wheel C, and to the cog-wheel *f*, the rubber disks turning with the cutting-disks, thus feeding the material operated upon to the cutters.

To increase the frictional contact of the cutters the tension-spring is tightened by means of the set-screw, thus causing said spring or plate to bear upon the shaft carrying the lower of said cutting-disks, and throwing the same into close contact with the upper cutting-disk.

From the above description it will be seen that my device is simple in its construction, may be manufactured and supplied at a comparatively slight cost, and that by its use the fabric or other material may be readily cut, and that the tiresome operation of moving the fingers, as in shears of the ordinary construction, is avoided.

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

1. The combination, with a suitable frame, of cutting-disks arranged to revolve therein, rubber disks arranged adjacent to said cutting-disks for feeding the material being operated upon to the cutters, and a gear-wheel for operating said cutting-disks, as set forth.

2. The combination, with the cutting-disks mounted upon suitable shafts, of a plate loosely mounted at one end, its other end being adapted to be tightened to regulate the friction of the disks, substantially as set forth.

3. The combination, with a suitable frame, of cutting-disks mounted upon shafts having bearing in said frame, rubber disks mounted upon said shafts, said cutting-disks being grooved as shown, and a wheel for operating the cutting-disks, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ROBERT OWENS MONDAY.

Witnesses:
JACK LIGHTFOOT ROSS,
JAS. HENRY RICE.