2 Sheets--Sheet 1.

E. T. MARBLE.

Flock Grinders.

No. 124,903. Patented March 26, 1872.

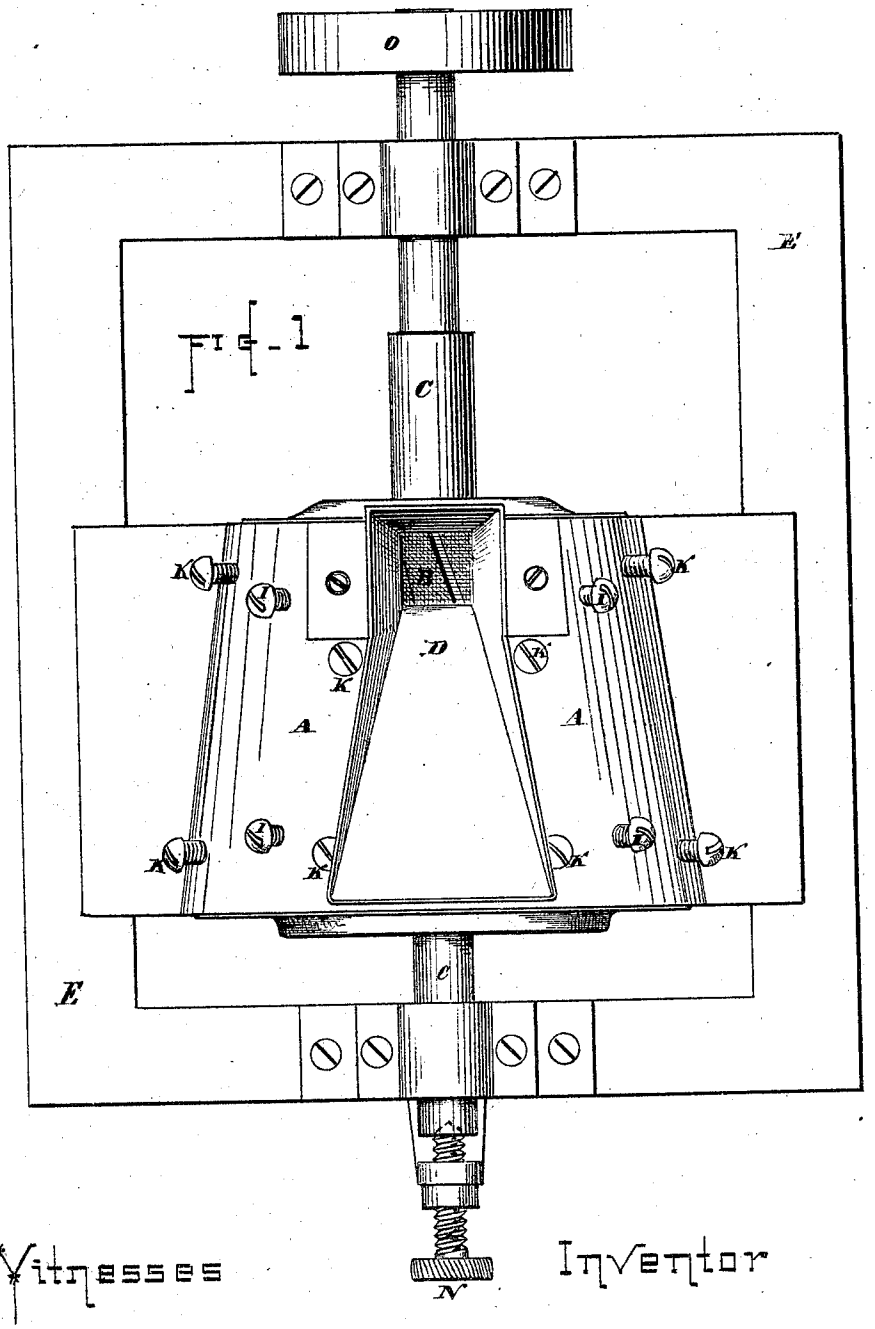


FIG. 1

Witnesses

Thos. H. Dodge

Chas. F. Burleigh

Inventor

Edwin T. Marble

2 Sheets--Sheet 2.

E. T. MARBLE.

Flock Grinders.

No. 124,903. Patented March 26, 1872

FIG. 2

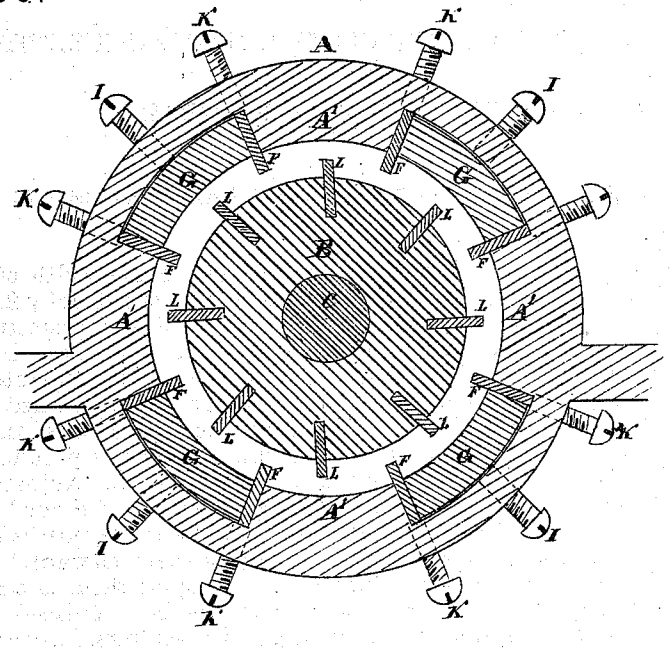
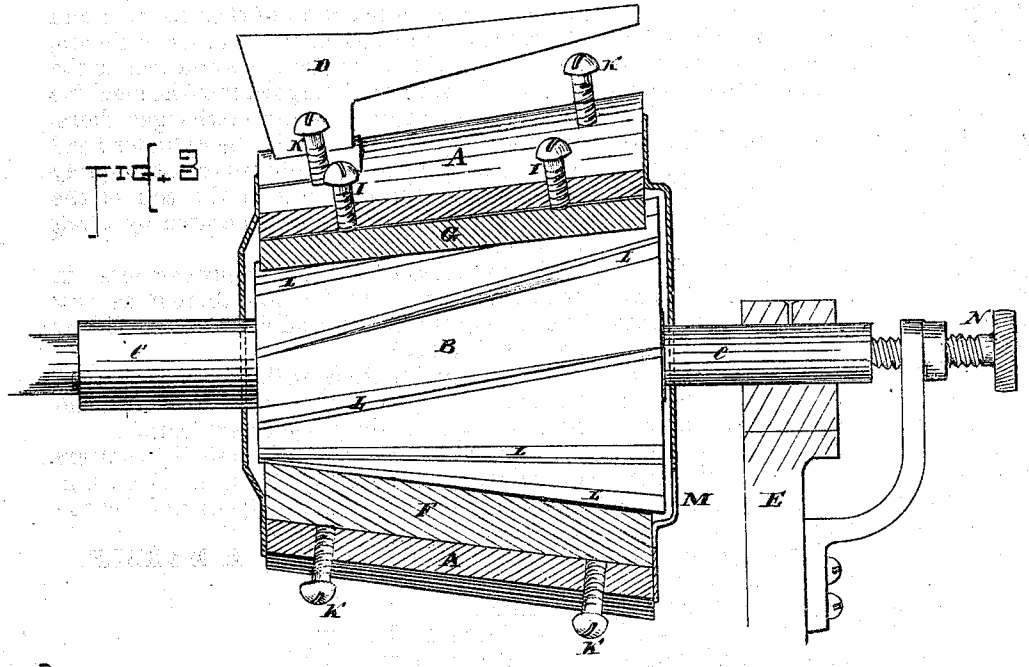


FIG. 3



Witnesses

Thos. G. Dodge

Inventor

Edwin T. Marble

124,903

UNITED STATES PATENT OFFICE.

EDWIN T. MARBLE, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN FLOCK-GRINDERS.

Specification forming part of Letters Patent No. 124,903, dated March 26, 1872.

To all whom it may concern:

Be it known that I, EDWIN T. MARBLE, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Flock-Grinders; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents a plan view of my improved flock-grinder. Fig. 2 represents a transverse section of the grinding-cylinder and core, and Fig. 3 represents a view of the cylinder with one side removed to show longitudinal sections of lags and cutters.

The nature of my invention consists in certain devices for adjusting the grinding-cutters and their holding-lags within their conical shell or cylinder.

In the drawing, the parts marked A represent the conical shell or grinding-cylinder. B indicates the core or grinder; C, the driving-shaft; D, the hopper; and E, the supporting-frame; which parts are constructed and arranged substantially as shown in the drawing. Within the interior of the shell A I arrange a series of grinding-cutters, F, set into longitudinal grooves so as to stand radially in the shell. Each alternate space between the cutters F is filled with a wedge-shaped lag, G, and the other spaces with similar formed projecting portions A′ of the shell A. The lags G serve to hold the cutters in position, and they are adjusted to press with greater or less force against the cutters by means of adjusting-screws I, which are arranged for that purpose through the shell A, with their ends against the backs of the lags G. By turning in the screws the lags are forced inward toward the center of the cylindrical shell, and, owing to the decrease in the width of the angular space, the cutters are thereby firmly clamped between the lags G and projections A′, as indicated in Fig. 2. The lags G are made of such size that they will slip into place freely when the screws I are turned out, without binding at the side against the cutter, and the clamping pressure is produced wholly by means of the screws I. Adjusting-screws K are arranged through the shell A, which set against the backs of the cutters F, for the purpose of setting them forward, to compensate for wear or to adjust them to any desired position. The core B is finished with a series of radial grinding-cutters, L, arranged spirally, as indicated. The action of the cutters F and L against each other in the manner of shears, as the core B is revolved, cuts and grinds the flocks; the material being fed into the machine through the hopper D, and discharged therefrom through an opening in the cylinder-head at M. The core can be adjusted to cut properly by means of the screw N at the end of the shaft C, and the machine is operated by a belt running on the pulley O.

Having described my improvements in flock-grinders, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the shell A and cutters F, of the adjusting-screws K, substantially as and for the purpose set forth.

2. The combination, with the shell A, cutters F, and wedge shaped-lags G, of the adjusting-screws I and K, substantially as and for the purposes set forth.

EDWIN T. MARBLE.

Witnesses:

THOS. H. DODGE,

CHAS. BURLEIGH.