2 Sheets--Sheet 1.

J. M. BURGHARTT.

Paper-Stock Grinding-Machine.

No. 165,706. Patented July 20, 1875.

Fig. 1

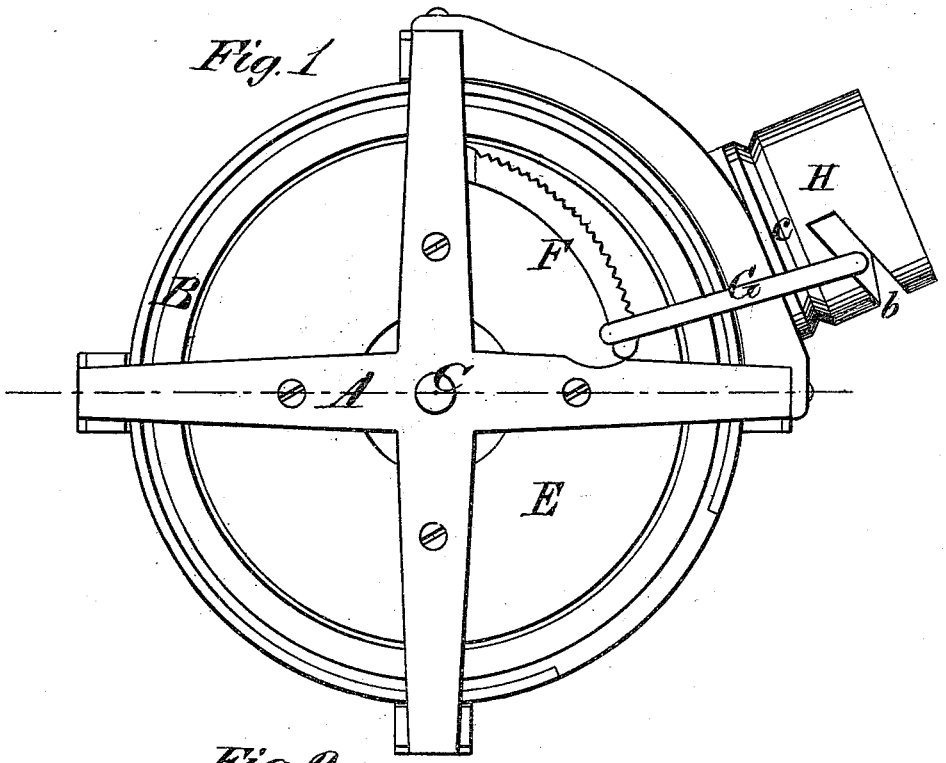


Fig. 2

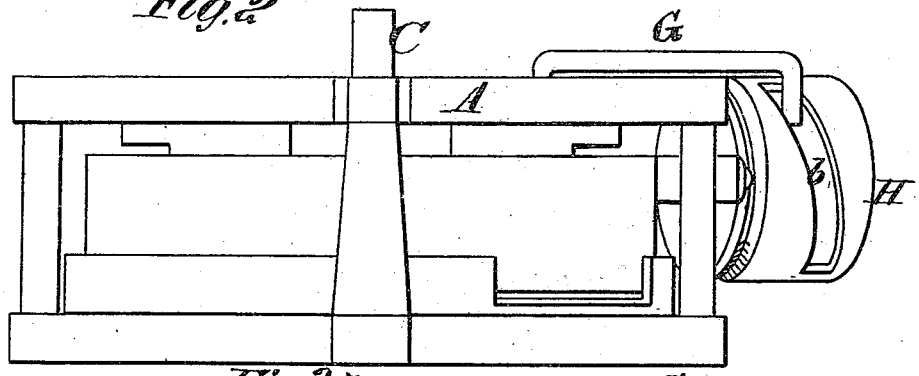
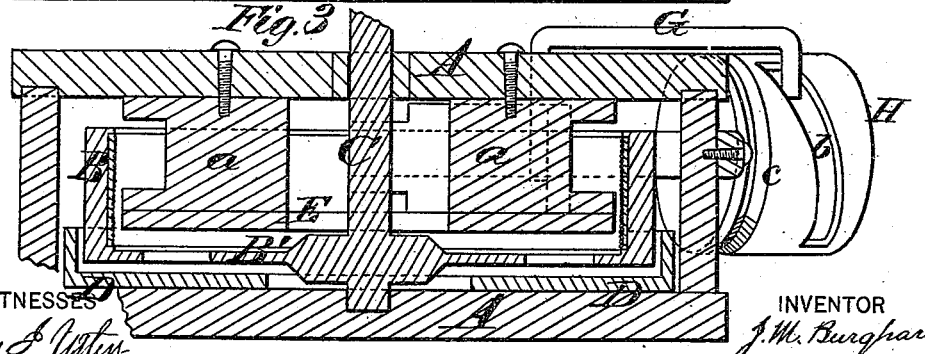


Fig. 3



WITNESSES

Mary E. Utley.

E. H. Bates

INVENTOR

J. M. Burghartt

Chipman & Hosmer

ATTORNEYS

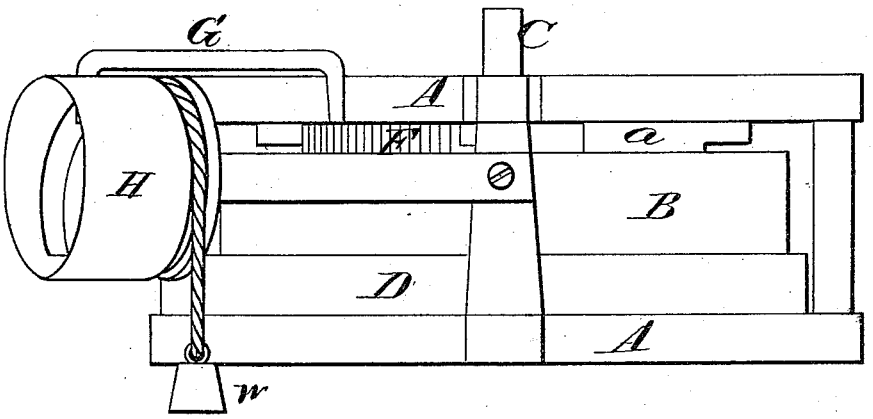
2 Sheets--Sheet 2.

J. M. BURGHART T.

Paper-Stock Grinding-Machine.

No. 165,706. Patented July 20, 1875.

Fig. 4



WITNESSES

Mary E. Utley.

Geo. E. Upshaw,

INVENTOR

J. M. Burghartt,

Chipman Fowler & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN M. BURGHARTT, OF GREAT BARRINGTON, MASSACHUSETTS.

IMPROVEMENT IN PAPER-STOCK-GRINDING MACHINES.

Specification forming part of Letters Patent No. **165,706**, dated July 20, 1875; application filed January 9, 1875.

To all whom it may concern:

Be it known that I, JOHN M. BURGHARTT, of Great Barrington, in the county of Berkshire and State of Massachusetts, have invented a new and valuable Improvement in Paper-Stock-Grinding Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my machine. Fig. 2 is a side view of the same, and Fig. 3 is a vertical sectional view. Fig. 4 is a side view.

This invention has relation to machinery for reducing woody fiber to pulp for the manufacture of paper; and it consists in combining, with a revolving ring, working in a pan, and having an interior grinding-surface, a corrugated pressure-wing, which is pivoted to the frame of the machine, and acted on by a weight in such manner as to hold the wood in contact with the grinding-surface of said ring, as will be fully understood from the following description.

In the annexed drawings, A designates the frame of the machine, in the center of which is a vertical shaft, C, which is secured to the perforated bottom B′ of a ring, B. Below this ring B is a shallow pan, D, a portion of the rim of which is cut away for allowing the prepared pulp to escape. Above the bottom of the ring B is a circular support, E, for the material which is being treated, which support is rigidly secured to pieces *a*, fastened to the upper bars of the frame A. To the outer end of one of the pieces *a* a wing, F, is pivoted, which wing has a convex corrugated outer surface, as shown in Fig. 1. The free end of this corrugated wing has a rod, G, secured to it, the outer end of which is turned down and received into a slot, *b*, made obliquely in a drum, H, which is free to turn about its axis. One end of this drum has a groove, *c*, in it, in which a rope or chain is applied, which is made fast to the drum, and also to a weight, *m*. When the woody fiber is fed into the machine and the ring B is rotated the material will be carried between the wing F and the inner surface of the said ring, and held against this surface by means of the weight *w* acting on the wing F through the medium of the drum H and rod G. The inner surface of the ring B should be covered with emery or other abrading substance.

The fine pulp passes through the support, and through the bottom B′ into the pan D, from which it is discharged into a suitable receiver.

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

In combination with the revolving grinding-ring B, the support E, and pan D, the pressure-wing F, actuated substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN M. BURGHARTT.

Witnesses:

R. N. COUCH,

H. C. JOYNER.