(No Model.)

H. LEAVITT.

MACHINE FOR GRINDING LEATHER SCRAPS.

No. 423,384. Patented Mar. 11, 1890.

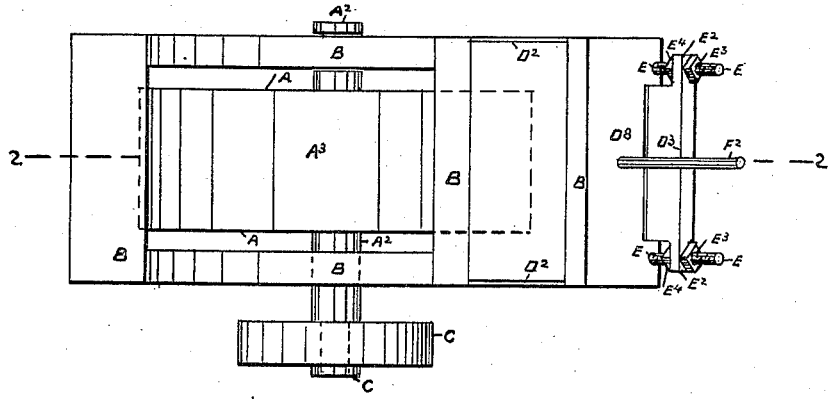

Fig. 1.

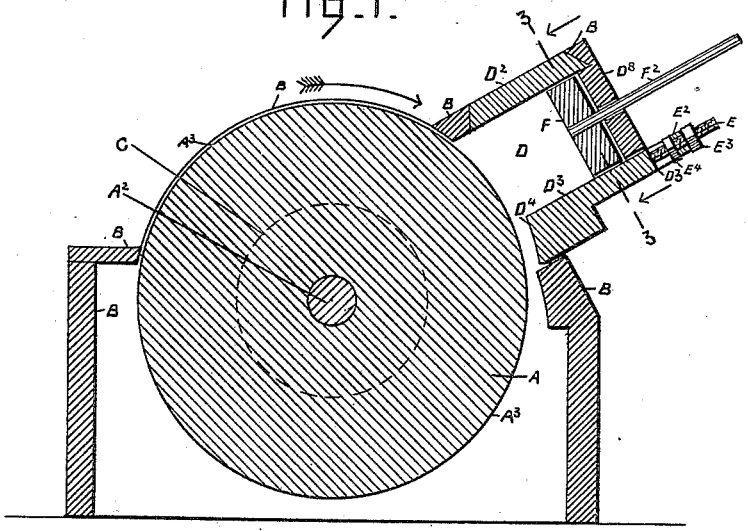

Fig. 2.

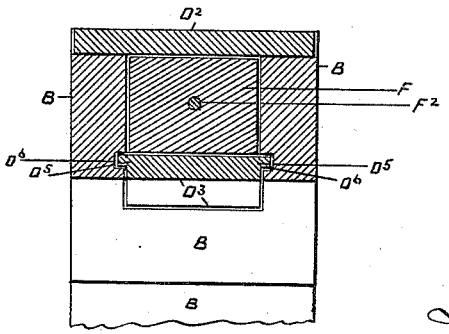

Fig. 3.

WITNESSES.
Marion & Brown
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UNITED STATES PATENT OFFICE.

HENRY LEAVITT, OF YARMOUTH, MAINE.

MACHINE FOR GRINDING LEATHER SCRAPS.

SPECIFICATION forming part of Letters Patent No. 423,384, dated March 11, 1890.

Application filed June 25, 1889. Serial No. 315,519. (No model.)

To all whom it may concern:

Be it known that I, HENRY LEAVITT, a citizen of the United States of America, and a resident of the town of Yarmouth, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Machines for Grinding Leather Scraps, of which the following is a full, clear, and exact description.

This invention relates to a machine more especially designed for reducing scraps of leather to minute particles, suitable for pulp; and the machine of this invention consists, in substance, in the combination, with a grinding stone or wheel having a circular grinding-edge and suitably arranged to rotate in a vertical plane, of a stationary hopper or receptacle located at one side of and open to the grinding-edge of the wheel, but otherwise inclosed; a plunger or head located and adapted to be moved in said hopper toward and away from the grinding-edge of the wheel; a grinding stone or block located below and making the floor of said hopper, and having a grinding-face extending across the edge of said wheel, and arranged to be moved toward and away from said wheel edge, and means applied to said block and its support for securing the block in its adjusted position and releasing it for adjustment, substantially as hereinafter described and claimed.

In the drawings forming part of this specification, Figure 1 is a plan view. Fig. 2 is a central vertical section, line 2 2, Fig. 1. Fig. 3 is a transverse vertical section, line 3 3, Fig. 1, of the hopper and the stationary but adjustable grinding-block.

In the drawings, A is a circular grinding stone or wheel of any character suitable to grind scraps of leather. This wheel A is supported and turns by center journals A^2, projecting from each side, in suitable bearings of a stationary boxing or casing B, which closes the vertical sides and lower half of the circular and grinding edge A^3 of the wheel A, and leaving the upper half thereof exposed.

C is a vertical pulley-wheel held on one of the journals A^2 of the grinding-wheel A, and through which by a suitable belt-connection (not shown) to rotate the grinding-wheel in the direction of the arrow, Fig. 2.

D is a hopper or receptacle held on the boxing B and at one side of the grinding-edge A^3 of the grinding-wheel. This hopper D is open to the grinding-edge of the wheel, but otherwise it is closed, and its top or cover D^2 is removable, and it is at a more or less angle of inclination to and above the horizontal plane of the axis of rotation of the grinding-wheel. The bottom D^3 of the hopper, as particularly shown, constitutes a grinding stone or block, and it presents to and across the grinding-edge of the wheel an opposed stationary grinding edge or face D^4. This grinding-block is supported at its opposite sides D^5 in grooves D^6 of a stationary support, and so as to be moved forward and away from, and thereby to adjust its grinding-edge in relation to, the grinding-edge of the wheel, and so adjusted the grinding-block is then secured against accidental movement in relation to the grinding-edge of the wheel in any suitable manner—as, for instance, as particularly shown—that is, by screw-threaded bolts E E, held on the side D^8 of the casing B and projecting loosely through ear-pieces F^2 of the block D^3, and by screw-threaded nuts E^3 E^4, screwed on said bolts and adapted to be brought to bear, respectively, against the outer and inner faces of said rail. The screw-nuts set up against the inner and outer faces of the rail fasten the grinding-block against accidental movement, as has been stated, and by properly turning them the block can be adjusted, and after adjustment fixed as desired.

This invention is not to be limited to the means explained for adjusting and fastening the grinding-block.

F is a plunger or head located in and fitting the hopper or receptacle D, and all so as to be moved forward and backward therein—that is, toward and away from the grinding-edge of the grinding-wheel.

F^2 is a stem or rod held on the plunger F and projected loosely through the wall D^8 of the hopper opposite to its open side, and which is at the grinding-edge of the wheel. This rod F^2 serves as a handle to the plunger for moving it forward toward the grinding-edge of the wheel.

The leather scraps to be ground into a pulp are placed in the hopper D, between its plunger and the grinding-edge of the wheel, on which the hopper is closed and the grinding-wheel

rotated, and the leather scraps in the hopper then being, by suitably moving the plunger F, forced forward and held at the grinding-edge of the wheel are thereby more or less disintegrated and under the rotation of the wheel carried forward into and through the space between the grinding-edge of the wheel and the grinding-face of the stationary grinding-block, to be then, under the conjoined operation of the grinding-wheel and said grinding-block, ground and reduced, as described, to a pulp, and finally discharged and delivered at the under side of the grinding-block.

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

A grinding-machine composed of a vertical rotating grinding-wheel A, suitably supported and having a circular grinding-edge A^3, in combination with a stationary hopper or receptacle D, located at one side of and open to the grinding-edge of said wheel, a movable plunger or head F, located in said hopper, a grinding block or stone D^3, located below and making the floor of said hopper, and having a grinding edge or face D^4 presented and opposed to the grinding-edge of said wheel, and arranged to be moved toward and away from the wheel edge, and means applied to said block and its support for fastening the block in its adjusted position and releasing it for adjustment, substantially as described, for the purpose specified.

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

HENRY LEAVITT.

Witnesses:

HENRY W. CASWELL,

EUGENE LEAVITT.