(No Model.)

A. KREIDER.

Wood Pulp Machine.

No. 240,427. **Patented April 19, 1881.**

Fig. 1.

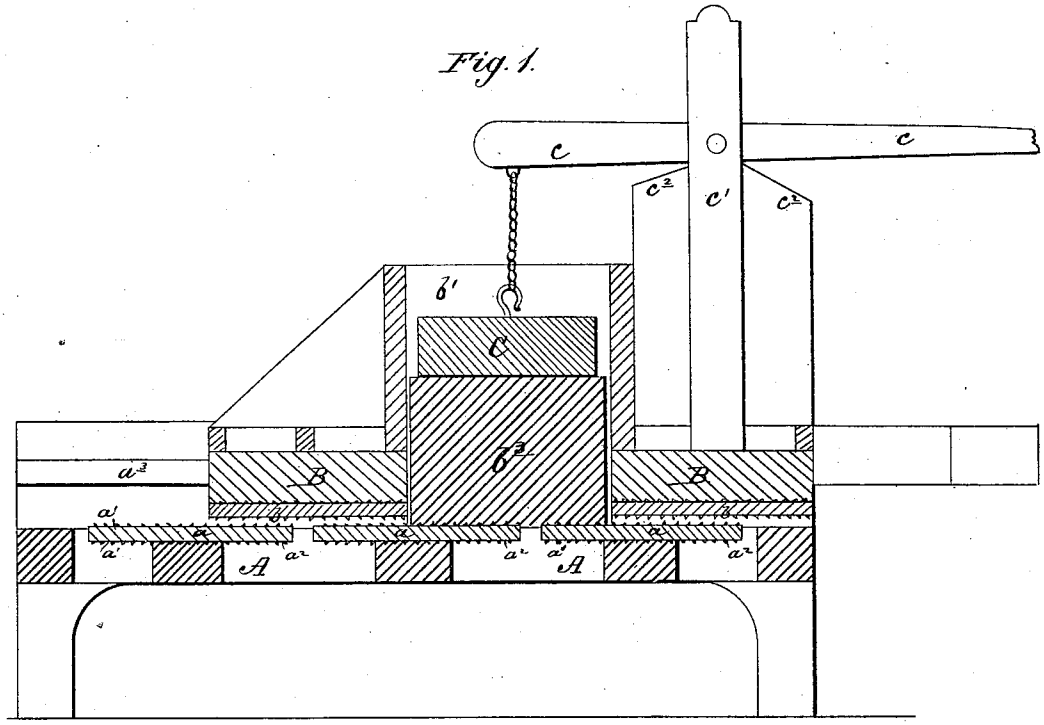
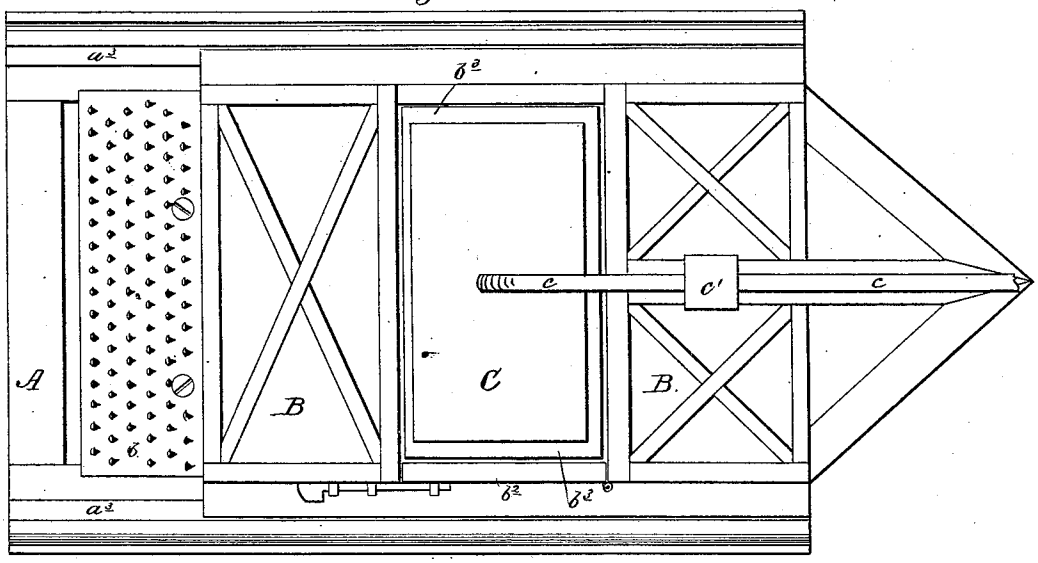


Fig. 2.



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UNITED STATES PATENT OFFICE.

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WOOD-PULP MACHINE.

SPECIFICATION forming part of Letters Patent No. 240,427, dated April 19, 1881.

Application filed March 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, ANDREW KREIDER, a citizen of the United States, residing at Annville, in the county of Lebanon and State of Pennsylvania, have invented a new and useful Improvement in Wood-Pulp Machines, of which the following is a full, clear, and exact description, reference being had to the drawings hereto annexed.

My invention relates to wood-pulp machines for preparing half-stuff of all kinds of pulp-wood, whether wet or dry; and it consists in a stationary frame having a series of reversible double-cutting rasp or file plates arranged at intervals on a plane, and a sliding frame moving thereon, provided with similar plates, and a central chamber for holding the block of wood, which is held down by a lever-regulated weight, as will be hereinafter more fully described.

In the accompanying drawings, Figure 1 represents a longitudinal section of my invention, and Fig. 2 a plan view.

A represents a square or rectangular frame supported in any suitable manner, and provided with sills upon which steel rasp or file plates *a* are secured. Suitable recesses are provided in the sides of the frame for embedding the ends of the plates and holding them more firmly in position. These plates, which are constructed with one-half of their cutting-edges a' inclined forward and the other half a^2 inclined backward, are arranged upon the same plane and at suitable intervals apart, so as to allow the fibers of the wood, which is cut across the grain, to fall through at both the back and forward movement of the sliding frame. These plates have teeth cut upon both sides, so as to be reversible, and are designed in their action to be self-sharpening.

The frame A is provided with ways or ledges a^3 at the sides, upon which the grooved sides of sliding frame B are made to move by suitable mechanism attached at one end. Frame B is constructed with two end plates, *b*, similar to those of frame A, and provided with a central chamber, b', for receiving the block of wood b^3, which is inserted at the door b^2 and held down upon the plates *a* by weight C, which is attached to a chain and lever, *c*, pivoted in a slotted post, c'. This post is provided with inclined stops or rests c^2, for the lever for regulating the movement of the weight, which is confined within the chamber. By this means the weight is kept from falling on the rasp or file plates below when the wood is ground up or withdrawn. The end plates, *b*, in the sliding frame are designed for grinding the fibers still smaller, and for brushing them through the openings below.

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

1. A wood-pulp machine consisting in a stationary frame having a number of rasp-plates arranged thereon at intervals, and a sliding frame having similar plates, and a chamber for receiving the block of wood, and a lever-regulated weight, substantially as shown and described.

2. In a wood-pulp machine, a series of plates, *a*, made reversible and with forward and backward inclined cutting-edges, and arranged at intervals upon a stationary frame, in combination with a sliding frame having plates *b* and wood-chamber b', substantially as and for the purpose set forth.

3. In a wood-pulp machine, a sliding frame, B, having end plates, *b*, central chamber, b', slotted post c', stops c^2, lever *c*, and adjustable weight C, in combination with stationary frame A, substantially as shown and described, whereby wood may be cut across the fiber, as set forth.

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Witnesses:
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A. C. RYLER.