(No Model.)

3 Sheets—Sheet 1.

C. WANDEL.

ROTARY STRAINER.

No. 472,089. Patented Apr. 5, 1892.

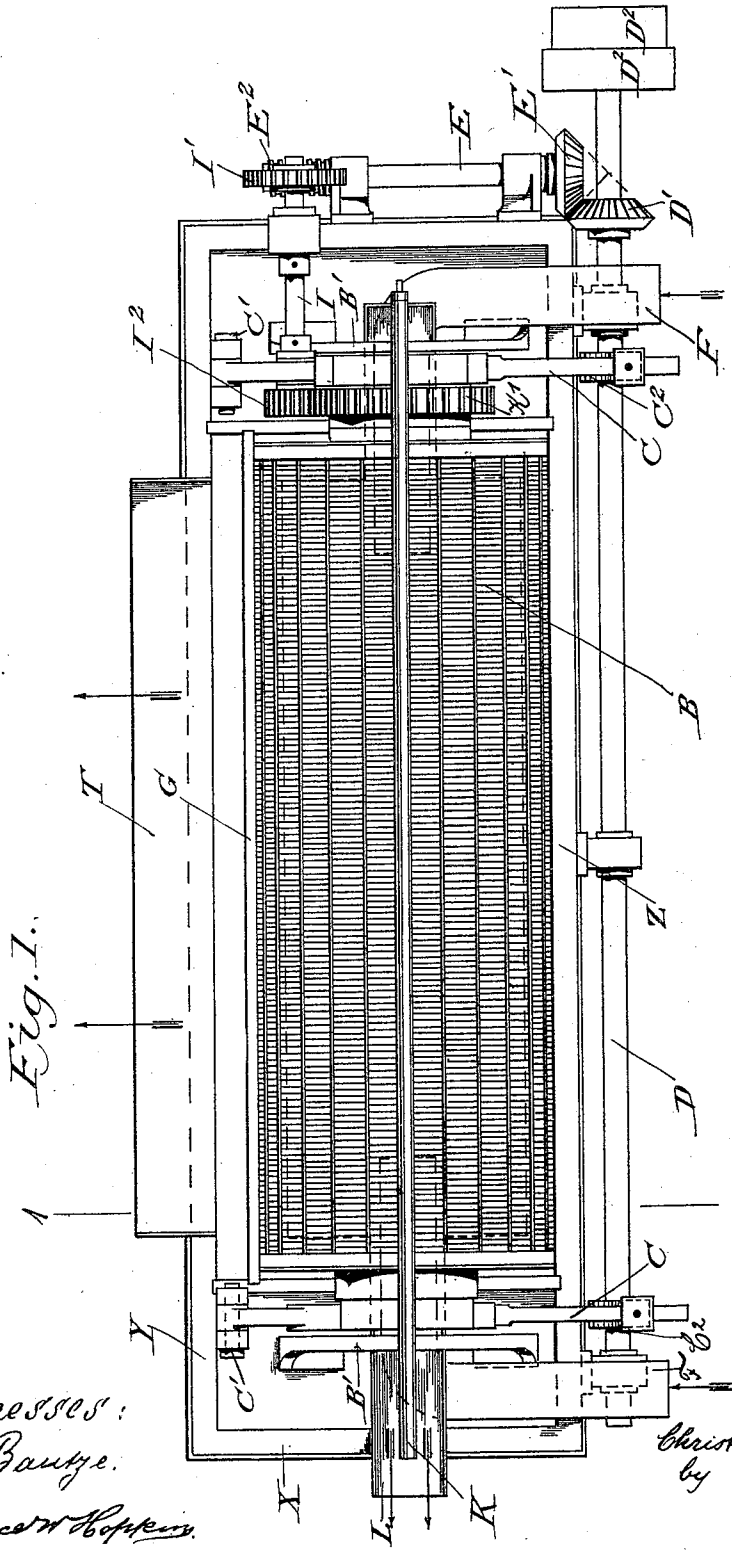

Fig. 1.

Witnesses:
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Eugene W. Hopkins.

Inventor:
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by W. Bautze
Attorney

(No Model.) 3 Sheets—Sheet 2.

C. WANDEL.

ROTARY STRAINER.

No. 472,089. Patented Apr. 5, 1892.

Fig. 2.

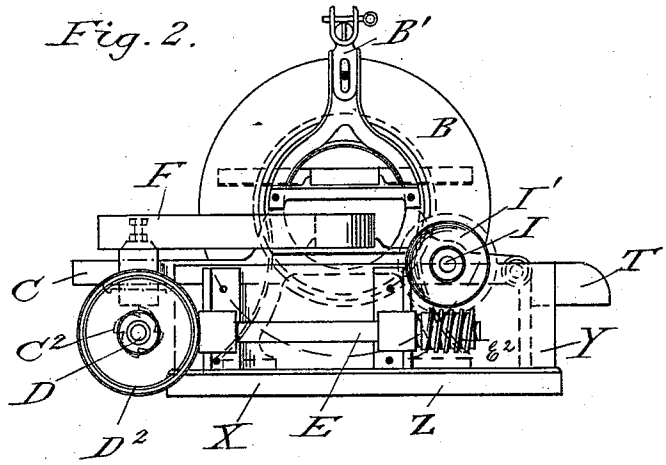
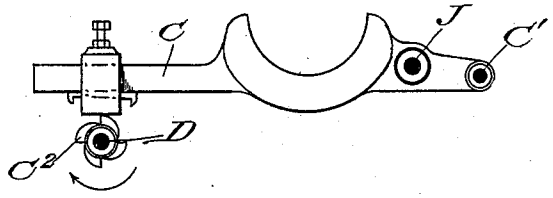


Fig. 4.



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(No Model.) 3 Sheets—Sheet 3.

C. WANDEL.

ROTARY STRAINER.

No. 472,089. Patented Apr. 5, 1892.

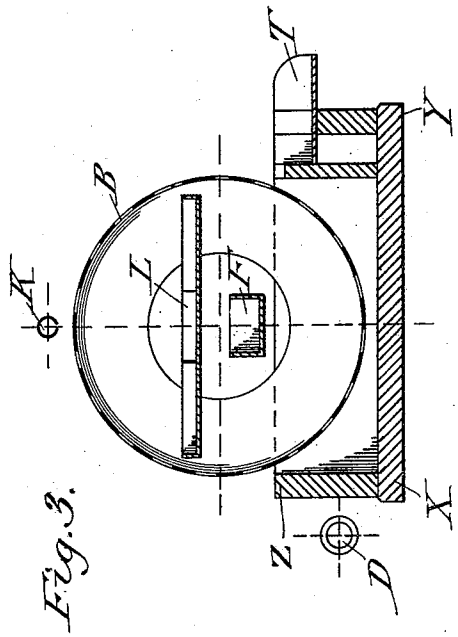

Fig. 3.

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Inventor:
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UNITED STATES PATENT OFFICE.

CHRISTIAN WANDEL, OF REUTLINGEN, GERMANY.

ROTARY STRAINER.

SPECIFICATION forming part of Letters Patent No. 472,089, dated April 5, 1892.

Application filed November 21, 1889. Serial No. 331,143. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN WANDEL, a subject of the King of Würtemburg, residing at Reutlingen, in the Kingdom of Würtemberg and Empire of Germany, have invented a new and useful Improvement in Rotary Strainers, of which the following is a specification.

The object of the invention is to produce a strainer by which paper-pulp may be freed from knots and impurities before entering the paper-machine.

The invention consists in the combination of parts, substantially as illustrated in the accompanying drawings, hereinafter described, and subsequently pointed out in the claim.

Figure 1 is a top plan view illustrating my newly-invented strainer. Fig. 2 is an end view of the same. Fig. 3 is a transverse section on line 1 1. Fig. 4 is a detail view of the lever C.

X Y Z designate the frame of the machine. Upon this is journaled a shaft D, upon which are mounted the pulleys D^2, the gear-wheel D′, and the eccentrics C^2. The shaft E, which is journaled upon said frame at right angles to said shaft D, carries at one end the gear-wheel E′ and at the other the worm E^2. This worm engages the wheel I′, which is mounted upon the shaft I. This shaft I is also journaled in the frame of the machine and carries the wheel I^2, which engages the wheel K′.

B designates a hollow cylinder, the periphery of which is perforated with slits, so that it will act as a strainer. This cylinder is mounted on the lever-arms C C, which are pivoted at C′ and are oscillated by the eccentrics C^2, so that they will impart a shaking motion to the cylinder. The teeth of the wheels I^2 and K′ are made long enough for that purpose, so that the oscillations of the cylinder will not throw them out of engagement.

F and F are entry-pipes, and T and L are exits.

K is a water-pipe mounted on the brackets B′ above the cylinder B. This pipe is perforated, so that jets of water flowing out of it will continually wash the surface of the cylinder. When water has been let onto the pipe K and the machine set in motion by a belt, which may connect the pulley D^2 with any convenient motive power, the paper material is fed into the cylinder through the entry-pipes F F. The cylinder is in the meantime being slowly revolved and shaken by the mechanism described. The finer and more available parts of the paper material passing through the perforations of the cylinder into the space G finally make their exit through the conduit T. In order that the cylinder B may not be clogged, water from the pipe K is continually poured upon it as it turns. Knots and impurities which may be in the pulp are retained in the cylinder, from which they may be let off through the outlet L by raising the end of the cylinder opposite to said outlet L.

This strainer may be used for many other materials, for all of which it will be found very available.

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

A strainer for freeing paper-pulp from the knots and impurities contained therein, consisting of the combination of a supporting-frame, a revolving shaft journaled upon said frame, two eccentrics and a bevel-wheel mounted upon said shaft, another shaft also journaled upon said frame at right angles to said shaft, a bevel-wheel and a worm carried by said last-named shaft, the bevel-wheel being engaged and driven by said first-named bevel-wheel, a third shaft also journaled in said frame parallel to said first-named shaft and at right angles to said second-named shaft, a gear-wheel on either end of said third-named shaft, one of which is engaged by the said worm, a perforated hollow cylinder revolving within a chamber in said frame, a gear-wheel carried by the said cylinder and engaged and driven by one of the wheels on said third-named shaft, levers pivoted to said frame, upon which levers said cylinder is mounted, and said lever extending to and oscillated by said eccentrics, and inlets and outlets for said cylinder, all substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CHRISTIAN WANDEL.

Witnesses:

EMIL REEG,

CHRS. GRÖSINGER.