

No. 736,215.

PATENTED AUG. 11, 1903.

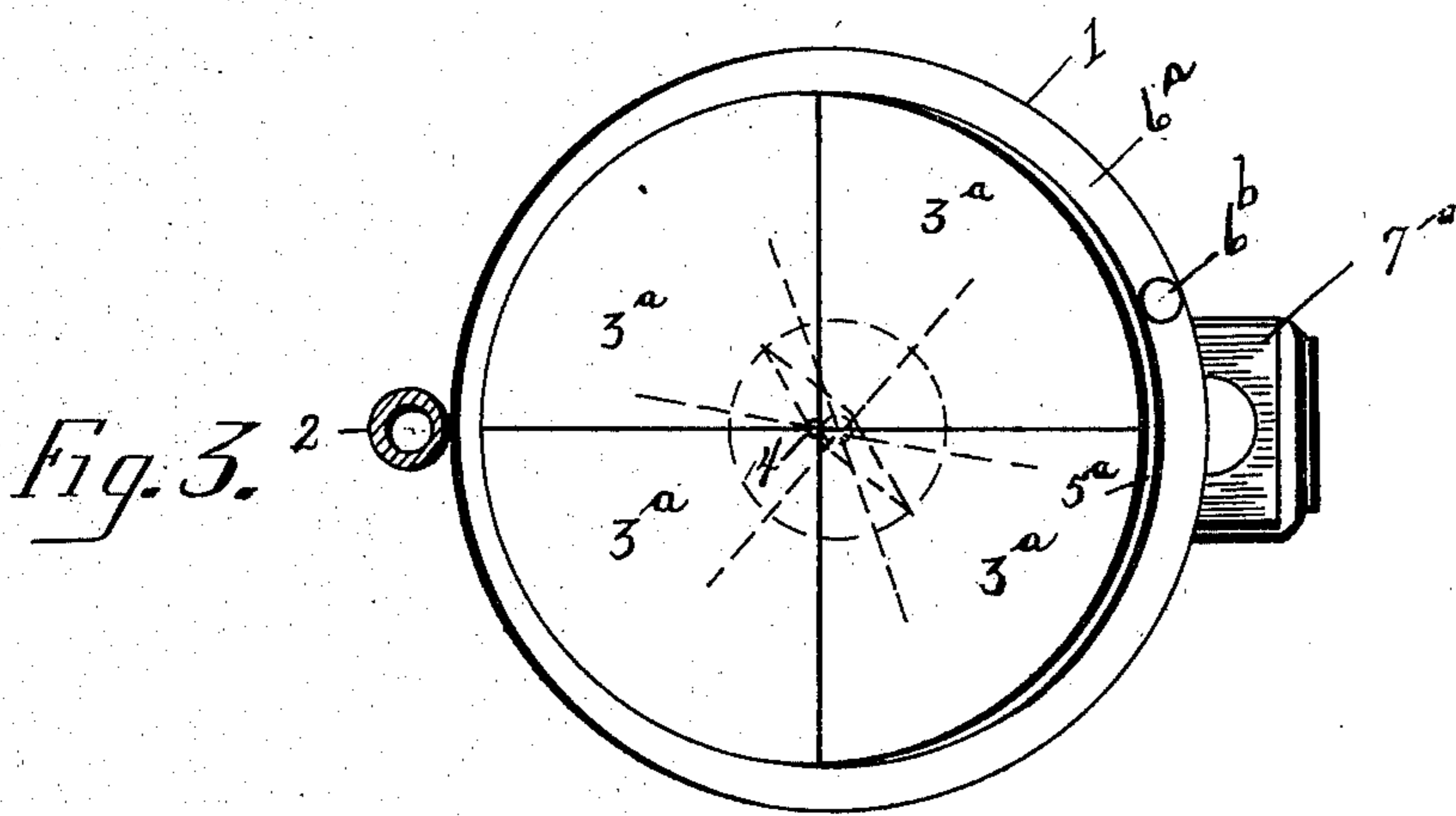
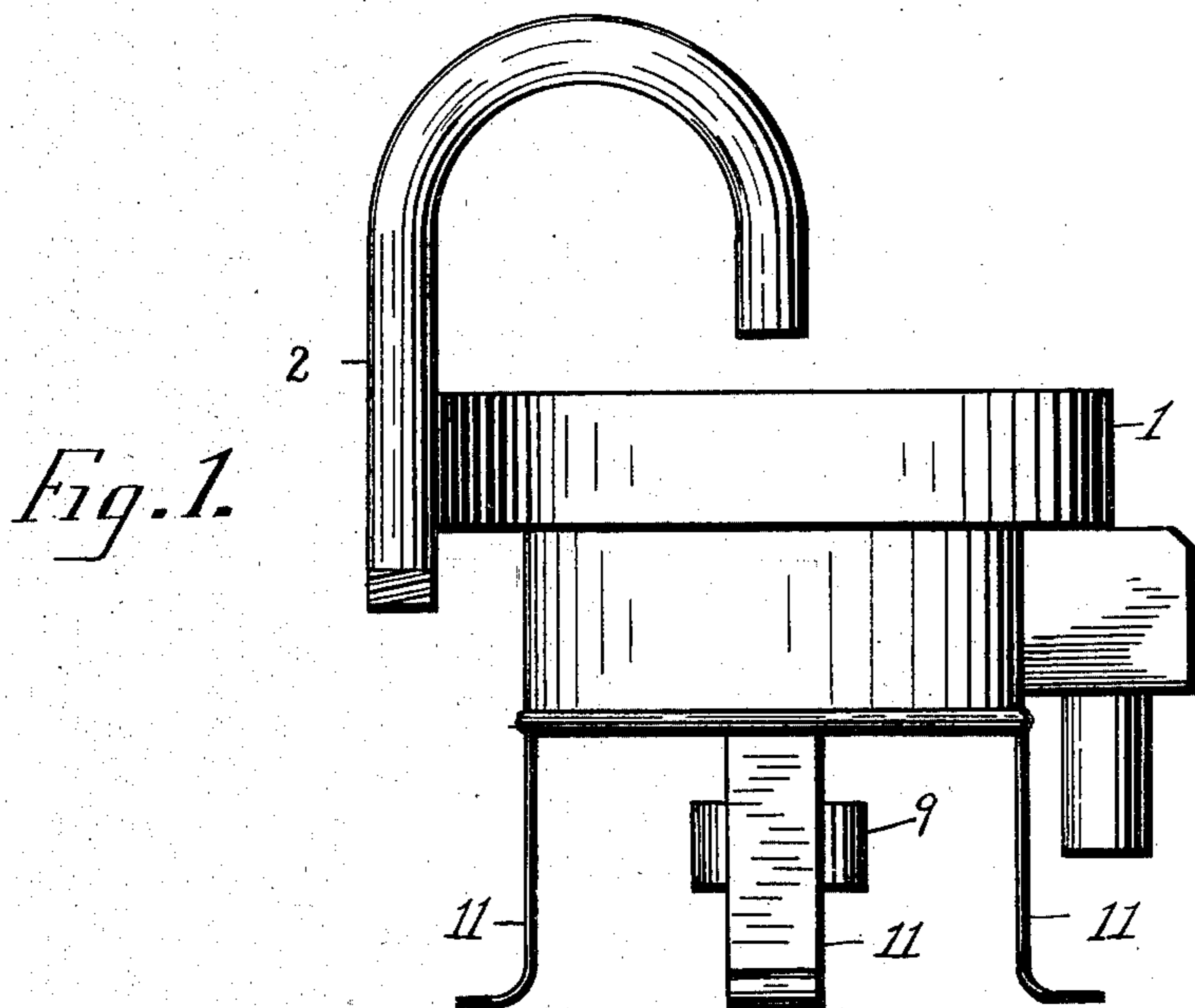
F. M. & C. E. CHAPMAN & F. McNAUGHTON.

PULP STRAINER.

APPLICATION FILED NOV. 28, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

Ger. A. Hutchinson

Ella L. Corbett

Inventors:

Frank M. Chapman

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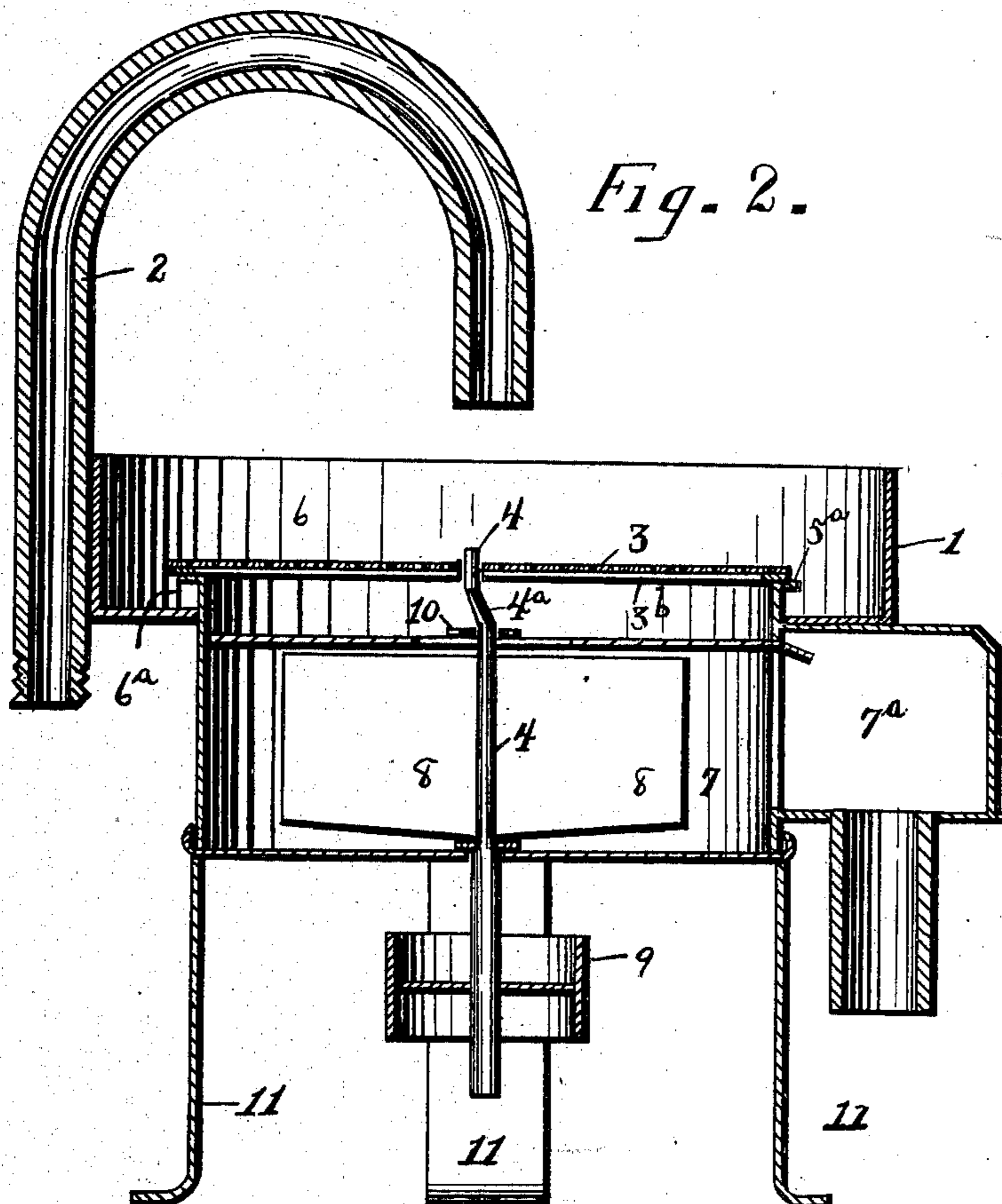
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2 SHEETS—SHEET 2.



Witnesses

Wm. H. Hutchinson

Ella L. Corbett

Inventors:

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UNITED STATES PATENT OFFICE.

FRANK M. CHAPMAN, CHARLES E. CHAPMAN, AND FRED McNAUGHTON, OF
FORT EDWARD, NEW YORK.

PULP-STRAINER.

SPECIFICATION forming part of Letters Patent No. 736,215, dated August 11, 1903.

Application filed November 28, 1902. Serial No. 133,109. (No model.)

To all whom it may concern:

Be it known that we, FRANK M. CHAPMAN, CHARLES EDWARD CHAPMAN, and FRED McNAUGHTON, citizens of the United States, residing at Fort Edward, in the county of Washington and State of New York, have invented certain new and useful Improvements in Pulp-Strainers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in pulp-strainers for paper-making machines.

It consists, essentially, in imparting an eccentric motion to the strainer-plates of a class of strainers in which the plates are placed in a horizontal position.

It also consists in creating suction by means of a fan placed in a compartment immediately below the strainer-plates whereby the pulp is drawn through said strainer or screen.

The invention also consists in the details of construction, arrangement, and combination of parts hereinafter described, and more particularly pointed out in the claims.

In the accompanying drawings, showing the embodiment of our invention, in which like reference characters indicate similar and corresponding parts, Figure 1 is an elevation of our improvement. Fig. 2 is a vertical longitudinal section, and Fig. 3 is a plane of our invention.

Referring more particularly to the drawings, 1 is a frame having secured to one side thereof a bent or goosenecked pipe 2, the outlet of which is located directly above the center of the strainer 3 and adapted to feed the raw material thereon. Said strainer is preferably circular, and the strainer-plates 3^a are fixed upon a frame 3^b, which is seated on top of the shaft 4 and rests firmly upon the guard 5^a of the upper chamber 6. Said shaft projects down into the lower chamber 7, where the fan 8 is mounted thereon out below said lower chamber, whereon is mounted a pulley 9. The shaft has a slight offset 4^a near its upper extremity just above the supporting-

brace 10 at the bottom of the upper chamber to give the screen or strainer an eccentric motion. The upper chamber has a trough or gutter 6^a, adapted to receive the refuse which is thrown or jarred into it by the eccentric motion of the screen. Said trough or gutter is separated from the lower receiver of the chamber by the above-mentioned guard and has a suitable outlet 6^b. The lower chamber also has a suitable outlet 7^a on one side through which the strained material is conveyed. The screen as a whole rests upon supporters or legs 11.

In operating our invention the raw material is fed through the bent pipe 2 from the strainer 3, where it is distributed over its surface by the eccentric motion of said strainer, the refuse being thrown out into the trough 6^a and carried off through the outlet 6^b, while the pulp is drawn down by the suction of the fan below into the lower chamber 7, where it is forced by the centrifugal motion of the fan to its proper outlet 7^a on the side.

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

1. In a pulp-strainer of the character described, the combination with a receiving-chamber of a shaft rotating therein, a screen mounted on said shaft, said shaft having an offset to give an eccentric motion to said screen whereby the raw material is distributed over said screen and the refuse is jarred or thrown therefrom.

2. In a pulp-strainer of the character described, the combination of a fan mounted upon a shaft in a receiving-chamber immediately below the strainer, said shaft extending above into an upper chamber for connection with said strainer and through the bottom of said receiving-chamber for connection with a means for actuation.

3. In a pulp-strainer of the character described, the combination of a screen seated upon an offset of the shaft, the edge of said screen resting upon a guard, said guard separating the trough or gutter from the lower receiving-chamber.

4. In a pulp-strainer of the character de-
scribed, the combination with a receiving-
tank of a shaft rotating therein, a screen
mounted on a shaft, said shaft having an off-
5 set to give an eccentric motion to said screen,
and a fan mounted immediately below said
screen, the edge of said screen resting upon
a guard.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

FRANK M. CHAPMAN.
CHARLES E. CHAPMAN.
FRED McNAUGHTON.

Witnesses:

S. M. GRACE,
CAROLINE E. CHAPMAN.