

P. ROSE.
PAPER PULP ENGINE.

No. 94,843.

Fig. 1.

Patented Sept. 14, 1867.

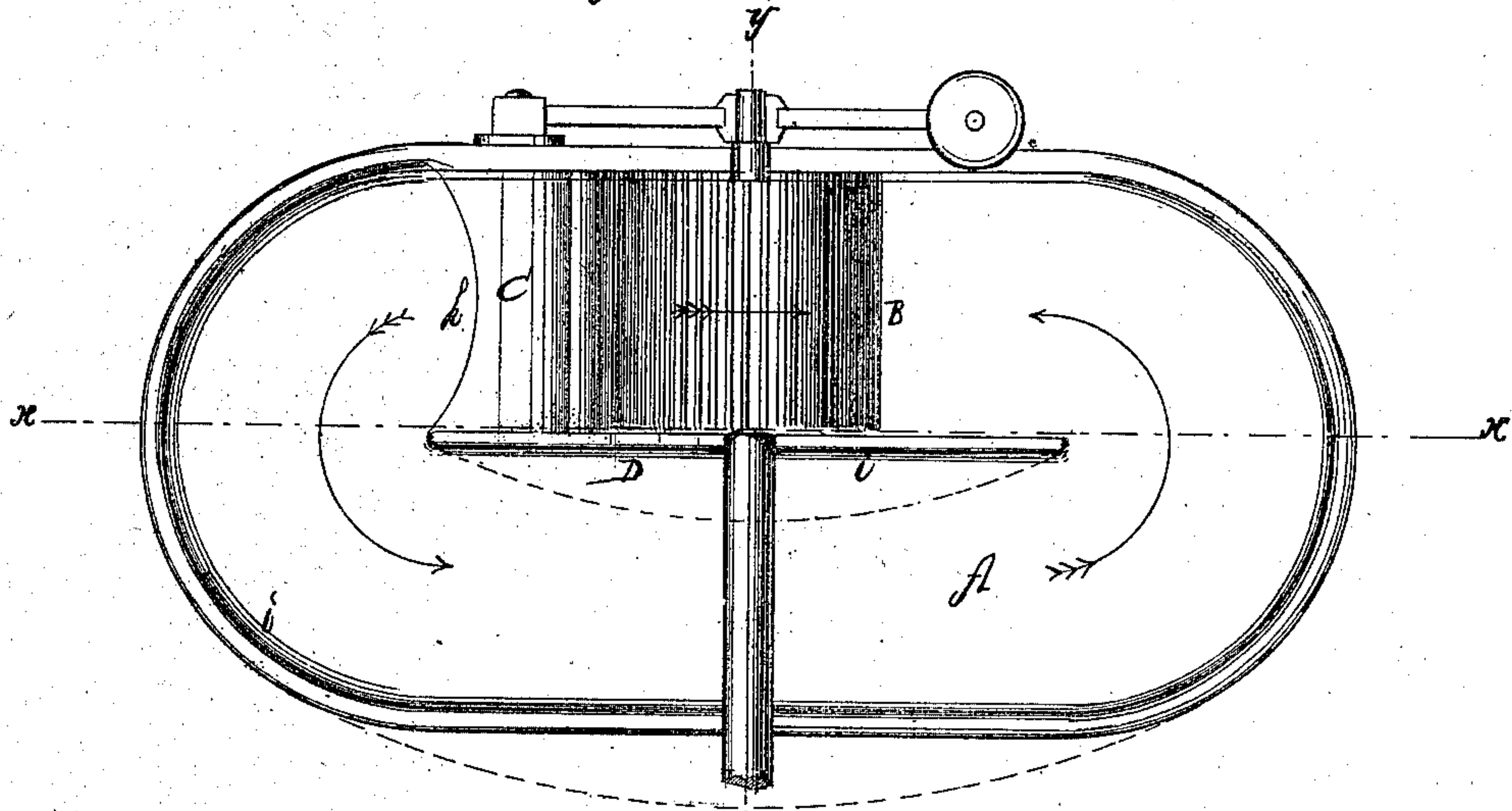


Fig. 2.

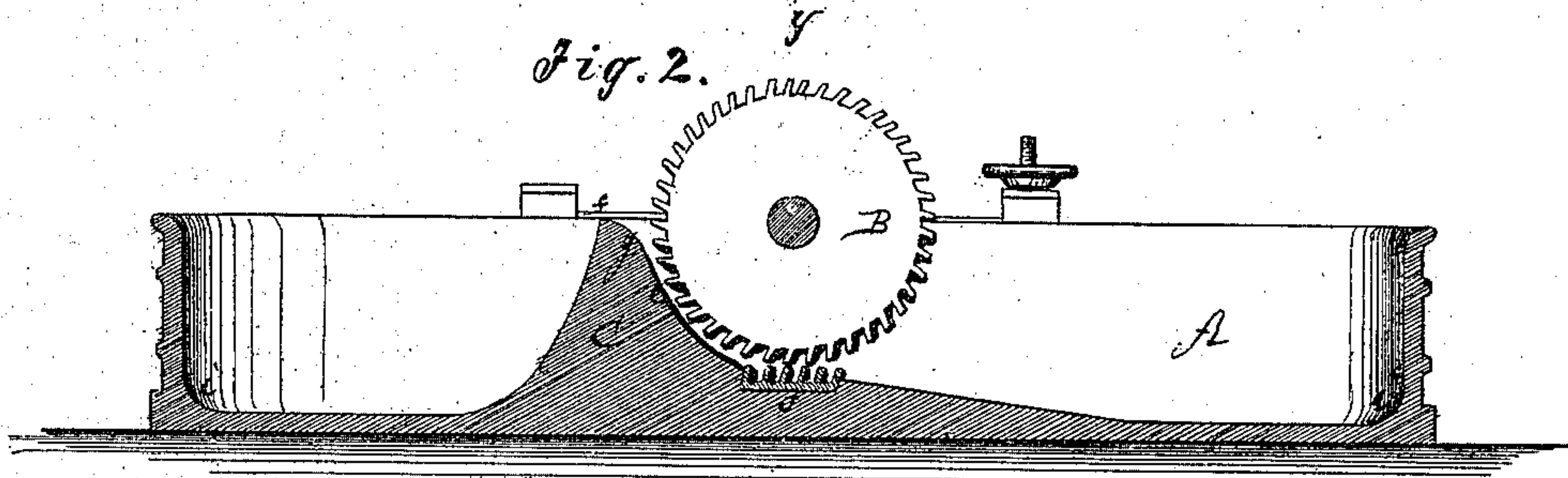
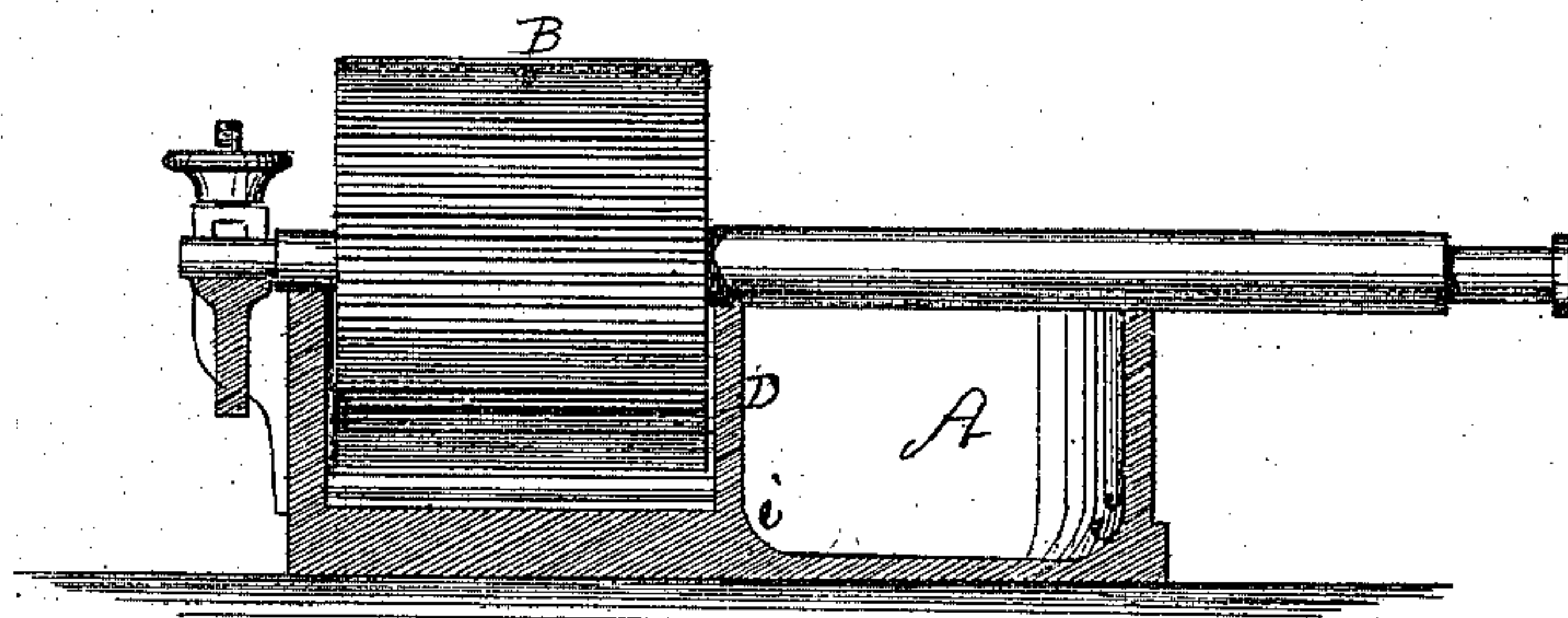


Fig. 3.



Witnesses:

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United States Patent Office.

PELEG ROSE, OF NORWICH, CONNECTICUT.

Letters Patent No. 94,843, dated September 14, 1869.

IMPROVED PAPER-PULP ENGINE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, PELEG ROSE, of Norwich, in the county of New London, and State of Connecticut, have invented a new and useful Improvement in Paper-Pulp Engine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a machine called a "paper-pulp engine," for reducing rags and other paper-stock to a pulp in the manufacture of paper; and

The invention consists in so constructing the tub, in which the cylinder revolves, and the "back-fall" of the cylinder, that the current produced by the revolution of the cylinder around what is called the mid-fellow shall not be obstructed by the fibres catching in sharp angles, and so that a more even or uniform pulp will be produced, as will be hereinafter more fully described.

In the accompanying drawings—

Figure 1 represents a top or plan view of the engine.

Figure 2 is a vertical cross-section of fig. 1, through the line *x x*.

Figure 3 is a vertical longitudinal section of fig. 1, through the line *y y*.

Similar letters of reference indicate corresponding parts.

A represents the tub;

B is the cylinder;

C, the back-fall; and

D, the mid-fellow.

As these engines have heretofore been made, the back-fall C has been carried up to an angle at its top by continuing the curve *e*, and then dropping back directly, as at *f*. From the point *f* the back-fall sloped down to the bottom of the tub, leaving sharp angles on each side. These sharp or right angles were continued around the mid-fellow and around the tub, allowing the fibre of the half ground pulp to catch and hang in the angles or corners, thereby obstructing the current, while the fibre which thus caught in the cor-

ners would not receive its proper share of grinding, but being mixed with the rest of the pulp, the result was pulp of uneven fineness, very detrimental to good paper.

To remedy these evils, I curve or round off the top of the back-fall, as seen at *g*, and curve the back slope transversely, as seen at *h*, and I round the corner or angle of the tub and that of the mid-fellow, as seen at *i i*.

I do not claim the general arrangement of the engine, nor anything relating to the construction of the cylinder or the method of supporting or driving the same; nor to the bed or concave J.

My object is, by constructing the back-fall, as shown, and filling the angles to prevent the lodging of the fibre, and thereby allow of a more rapid and unobstructed current around the mid-fellow, while preventing the formation of pulp of uneven fineness, thus greatly improving the operation of the paper-engine.

I propose, also, to curve one side of the mid-fellow, and also the corresponding side of the tub, as indicated by dotted lines in the drawing, should I deem it important to do so.

The direction of the revolving cylinder and of the current pulp is indicated by arrows.

Having thus described my invention,

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

1. Constructing the back-fall of a paper-engine, with a top curving back from the cylinder, as seen at *g*, and with a curved back slope, as seen at *h*, substantially as described.

2. Constructing the corners of the tub and mid-fellow of a paper-engine, curved instead of angular, substantially as and for the purposes described.

The above specification of my invention signed by me, this 24th day of July, 1869.

PELEG ROSE.

Witnesses:

GEO. W. MABEE,

EDWARD MARTIN.