

No. 654,961.

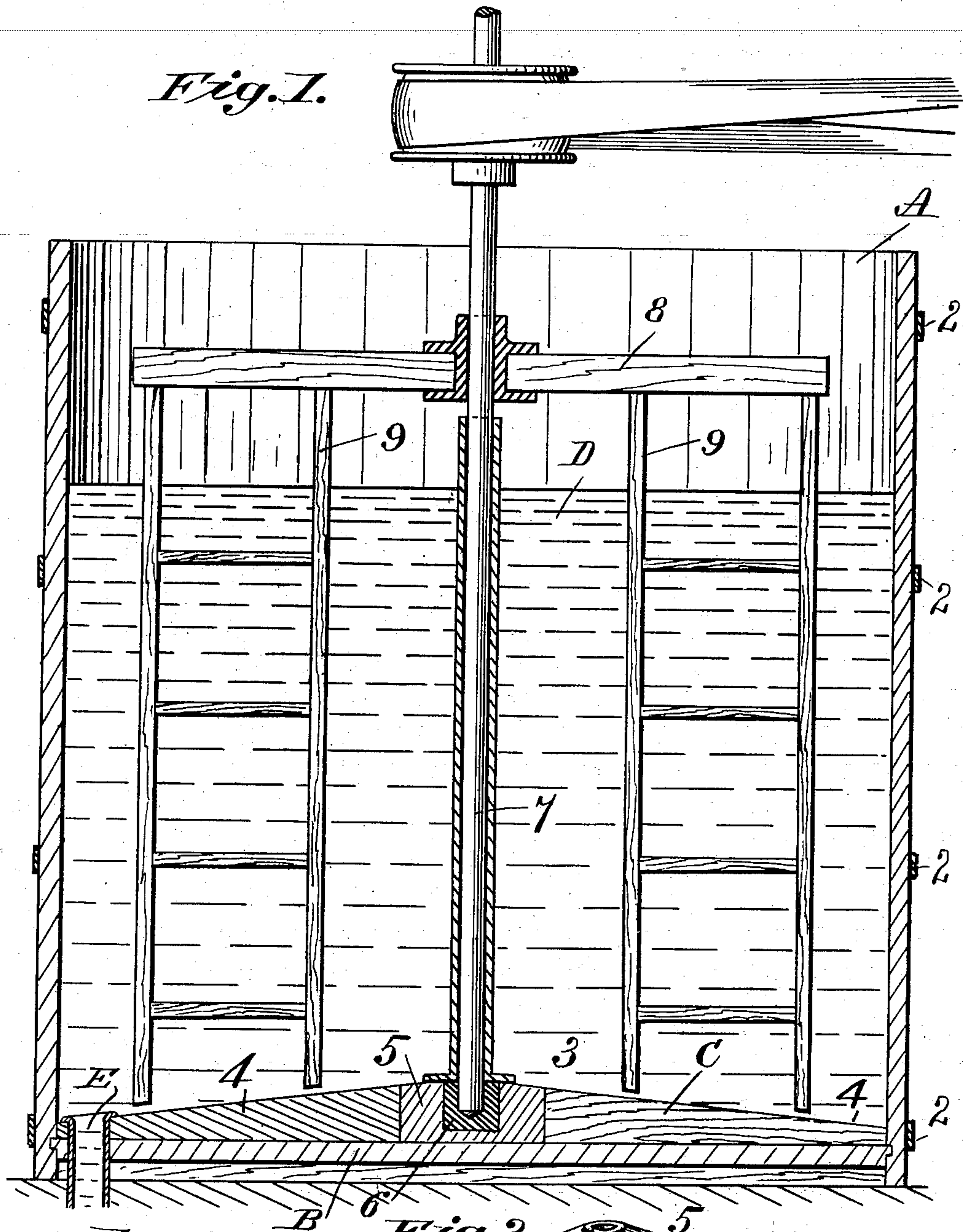
Patented July 31, 1900.

P. P. EMORY.  
STUFF CHEST FOR PAPER MILLS.

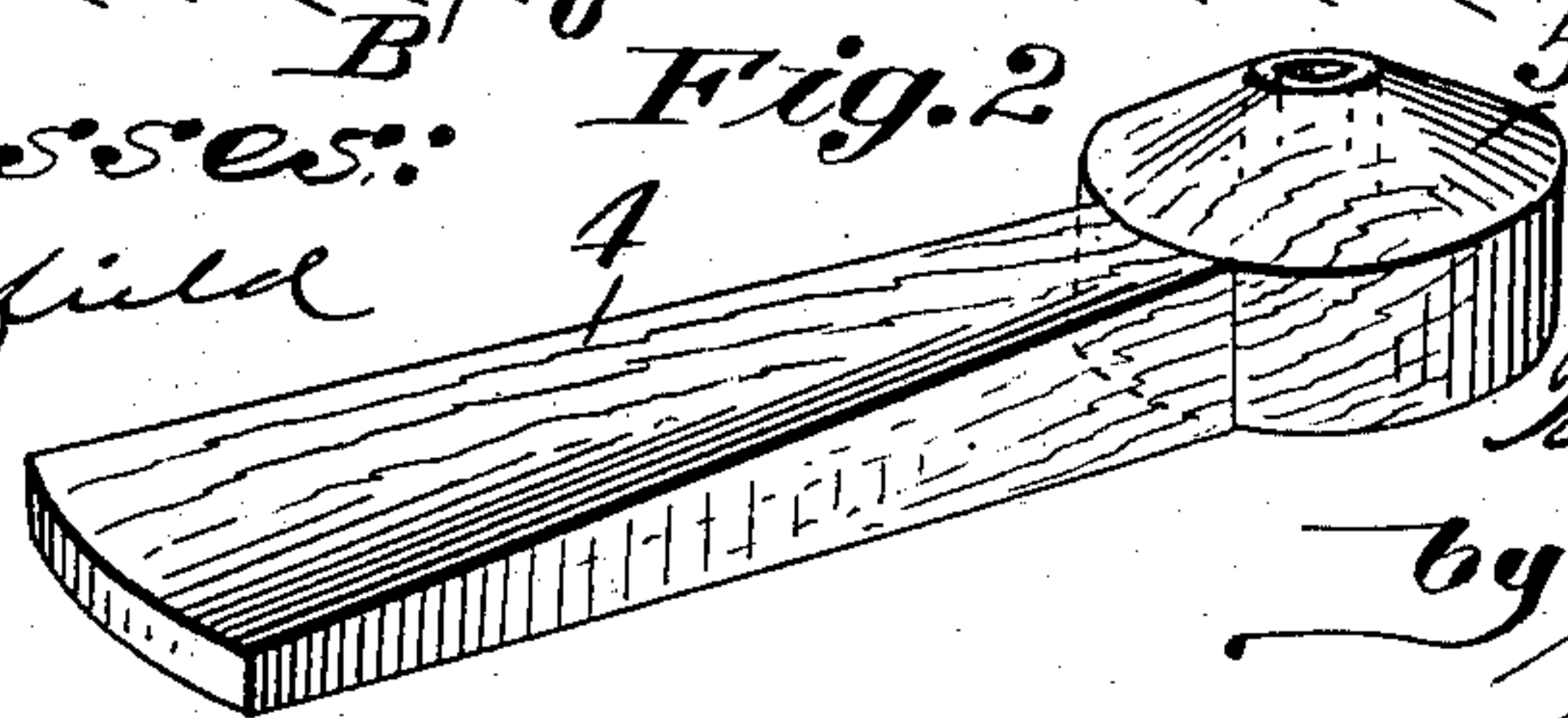
(Application filed May 14, 1900.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## STUFF-CHEST FOR PAPER-MILLS.

SPECIFICATION forming part of Letters Patent No. 654,961, dated July 31, 1900.

Application filed May 14, 1900. Serial No. 16,562. (No model.)

*To all whom it may concern:*

Be it known that I, PASCHAL P. EMORY, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Stuff-Chests for Paper-Mills, of which the following is a specification.

This invention relates to stuff-chests for paper-mills, the object being to provide an improved bottom construction for such chests whereby the very considerable waste of a part of the paper-pulp which has been subjected to the action of the agitating devices of the chest and is being discharged therefrom for use on the paper-machine is avoided and an improved bottom is provided for resisting the great weight of the contents of the chest. The value of the pulp at this stage of the paper-making process is greater than at any other, and hence it is obvious that any means which will obviate more or less loss thereof when the pulp is transferred from said chest to said machine will prove of great advantage to the paper manufacturer, and such is the character of the improvements hereinbelow shown and described.

In the drawings forming part of this specification, Figure 1 is a vertical sectional view of the stuff-chest of a paper-mill containing my improvements, in which are illustrated the common pulp-agitating devices in side elevation, together with means for rotating the same. Fig. 2 is a perspective view of one of the bottom-sections of said chest and the central step-block thereof.

In the drawings, A is the body of the chest, preferably of cylindrical form and surrounded by the retaining-hoops 2.

The bottom of the chest consists of the main or lower one B, which is fixed to the inner wall of the body A of the chest, as shown, and of the superposed bottom-covering C, which is highest at a central point 3 within the chest and has a surface inclining from said central point to the inner wall of the body A, as shown.

The quantity of pulp and water usually contained in the chest to be operated upon and there indicated by D has a weight of many tons, and hence the inner bottom construction herein shown, which while capable

of resisting said weight provides, as below set forth, most efficient means for obviating the aforesaid waste of pulp when the chest is emptied of its contents through the outlet-pipe E, located at the lowest point of said bottom C or at the junction of the border thereof and the lower end of the inner wall of said body.

In emptying stuff-chests having flat bottoms, such as is illustrated by said lower bottom-section B, a considerable quantity of the pulp is left thereon after said emptying operation which cannot run off through the said outlet, and that renders it necessary for a person to enter the chest and with a brush or similar implement remove the pulp which adheres to the bottom, as aforesaid. This method of completing the removal of the pulp results in such soiling thereof as unfits it for mixture with the first self-discharged mass thereof, and its value is greatly deteriorated and it is rendered unfit for use with that which has passed out of the chest, and the prevention of this injury to the pulp above referred to constitutes one of the said objects of this invention.

Said inner-bottom construction consists of a series of dovetail-shaped or tapering sections 4 (preferably of wood) of gradually-decreasing thickness from the narrower ends thereof to the wider one, as shown, whereby when laid upon said bottom B they form said inner bottom, which inclines, as shown, from the center of the chest to the inner wall thereof. The thicker ends of said sections 4 have a circular step-block 5 fitted therebetween, as shown in Fig. 1, and in said block is secured the shaft-step 6.

The pulp-agitating devices of the chest consist of a vertical shaft 7, having its lower end supported in said step, and a suitable support for its upper end, a driving-pulley and belt connection, as shown, or other suitable means for rotating said shaft and pulp-agitating devices carried on said shaft, comprising the bar 8 and the ordinary depending pulp engaging and stirring elements 9 9.

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

In a paper-mill stuff-chest, a fixed lower bottom, an inner bottom laid thereon on which the



pulp lies and over which it moves when discharged from the chest, comprising a series of tapering sections of gradually-decreasing thickness from the narrower to the wider end  
5 thereof laid on said fixed bottom, said sections extending from a central point on said lower bottom to the inner wall of the chest thereby forming a bottom inclined from said

central point to said inner wall, and a step-block inserted between the central extremities of said sections, substantially as described. 10

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