

No. 670,609.

Patented Mar. 26, 1901.

G. F. GODDARD.  
BAG CLEANING MACHINE.

(No Model.)

(Application filed Aug. 3, 1900.)

2 Sheets—Sheet 1.

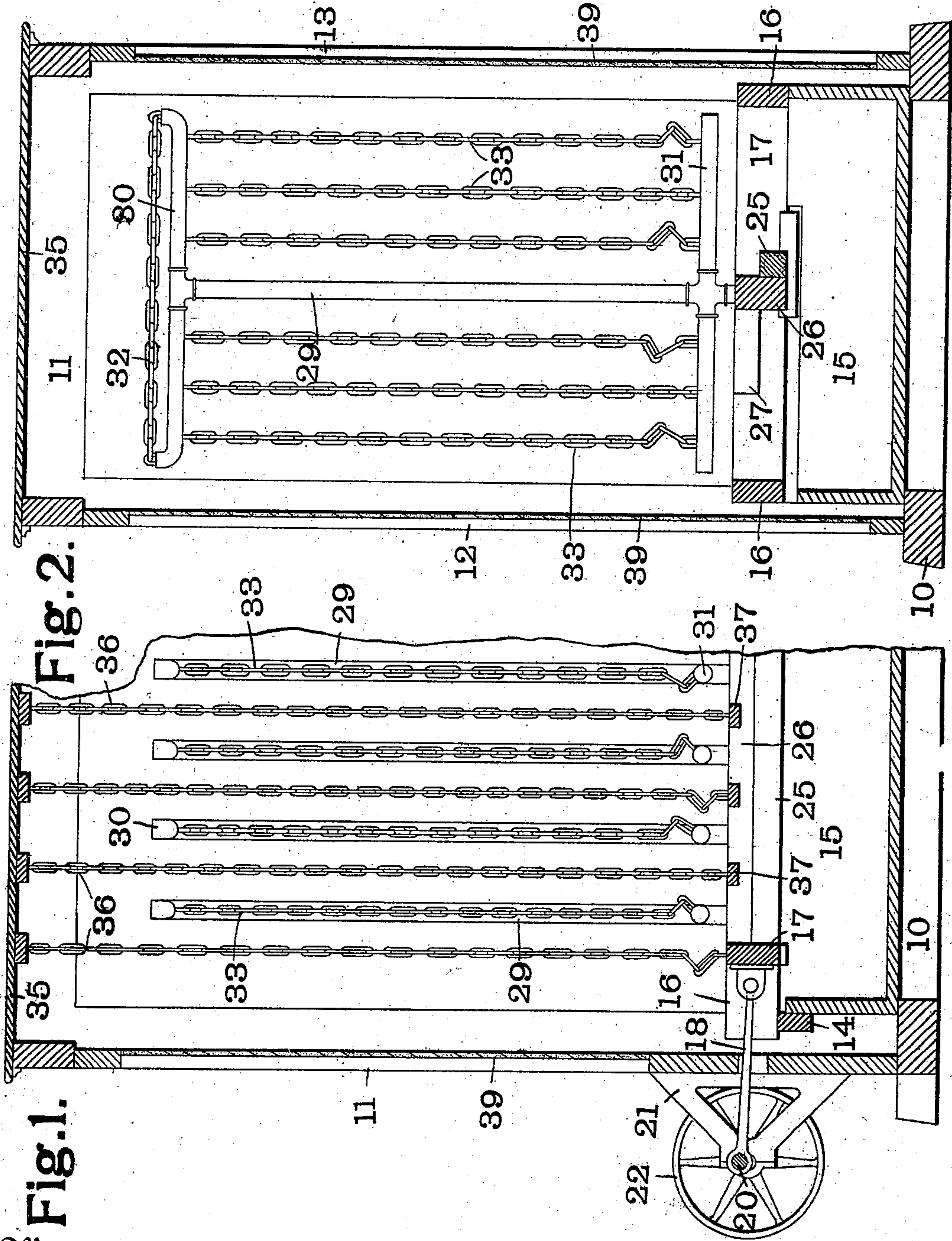


Fig. 1.

Fig. 2.

Witnesses

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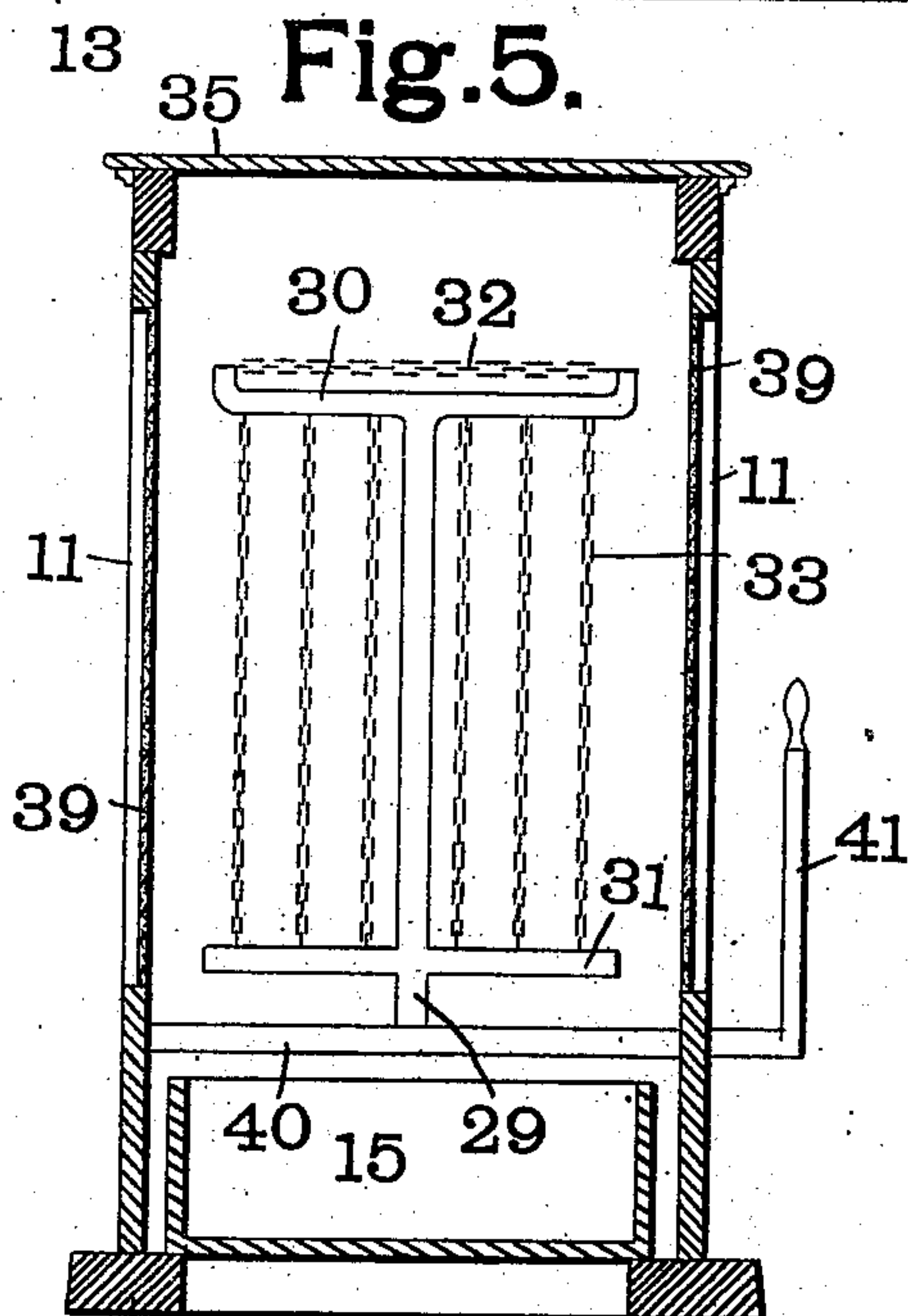
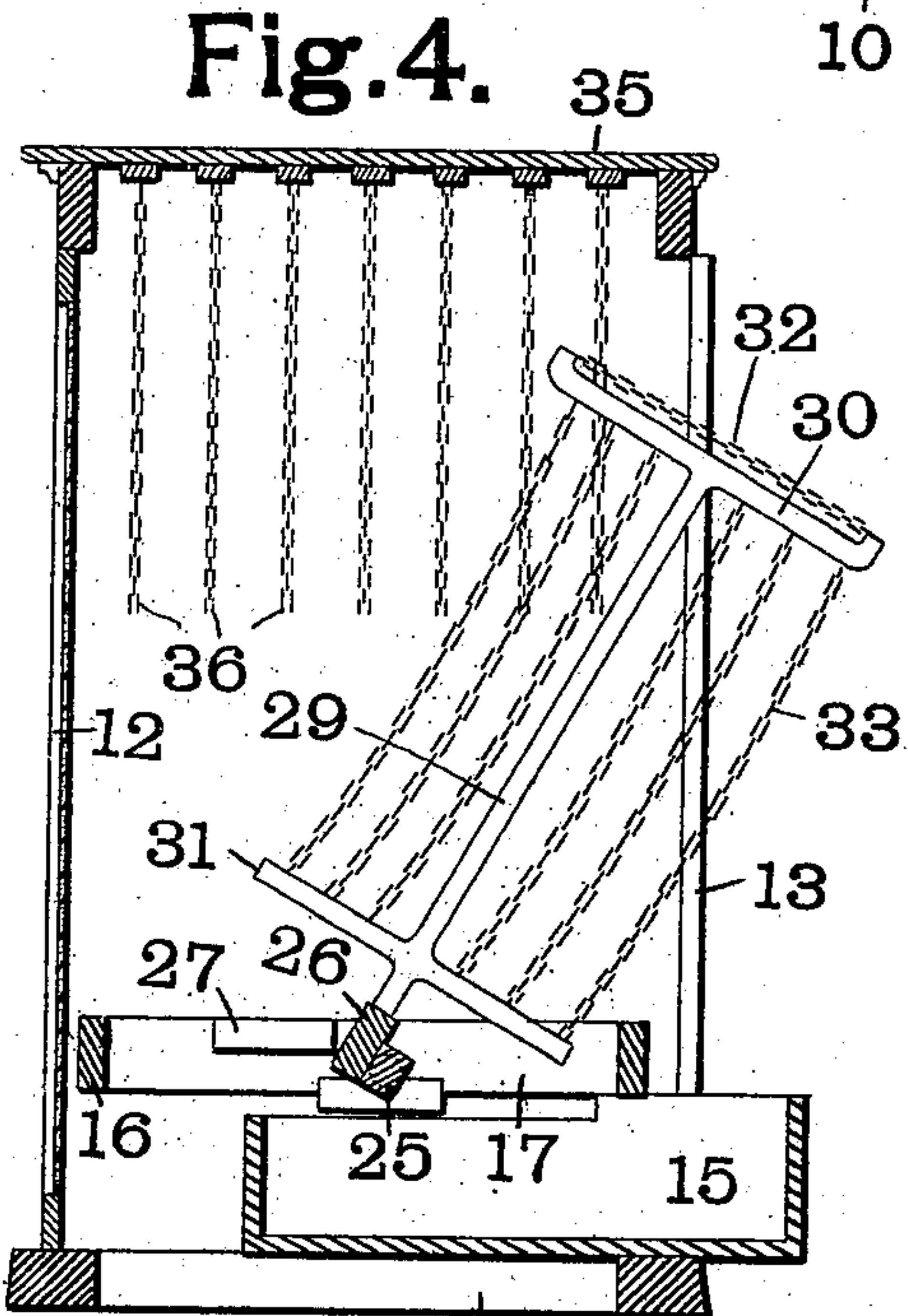
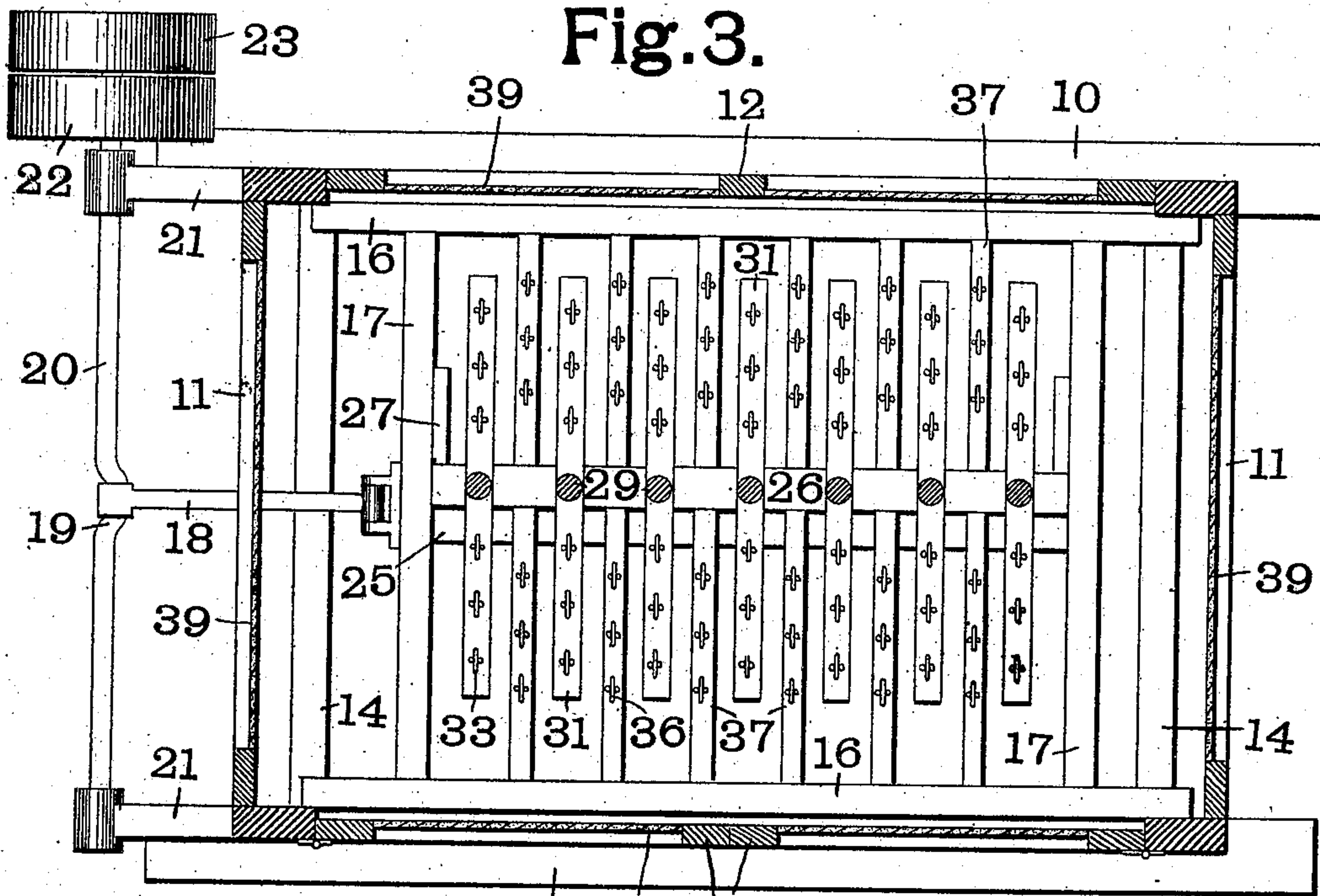
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Witnesses 10

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10

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# UNITED STATES PATENT OFFICE.

GEORGE F. GODDARD, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ELBRIDGE B. GODDARD, DOING BUSINESS AS E. GODDARD FLOUR COMPANY, OF SAME PLACE.

## BAG-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 670,609, dated March 26, 1901.

Application filed August 3, 1900. Serial No. 25,752. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. GODDARD, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have  
5 invented a certain new and useful Bag-Cleaning Machine, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference  
10 being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide a machine which will effectively remove any material adhering either to the inside or out-  
15 side of bags or sacks.

My invention is especially adapted to cleaning bags or sacks which have contained flour; but it may be used to clean any kind of bag or sack.

20 My invention consists of various novel features and details of construction, all of which are fully described in the following specification and pointed out in the claims affixed hereto.

25 In the accompanying drawings, which illustrate a bag-cleaning machine made in accordance with my invention, Figure 1 is a vertical longitudinal section of a portion of the machine. Fig. 2 is a vertical cross-section. Fig.  
30 3 is a longitudinal horizontal section. Fig. 4 is a view, on a reduced scale, similar to Fig. 2, but showing the parts in a different position; and Fig. 5 is a vertical longitudinal view of a modified form of the machine.

35 10 is the base of the machine, to which are secured the two ends 11 and the back 12.

13 represents the doors, which are hinged to the ends 11 and which form the front of the machine.

40 14 represents cross-bars between which slides a drawer 15, forming the bottom of the machine. Sliding on the cross-bars 14 are two timbers 16, which form the side timbers of the frame of which 17 are the end timbers.

45 Pivoted to one of the end timbers 17 is a pitman-rod 18, the opposite end of which surrounds a double crank 19 in a shaft 20. The shaft 20 is supported by two brackets 21, secured to one of the ends 11. Secured to one  
50 end of the shaft 20 are tight and loose pulleys

22 and 23, by means of which the said shaft 20 is driven to impart a reciprocating motion to the frame resting on the cross-bars 14. Pivoted between the end timbers 17 of the frame is a longitudinal timber 25, to one side  
55 of which is secured a timber 26.

27 represents stops which are secured to the end timbers 17 and which limit the movement of the timbers 25 and 26 on their pivots.

Secured in the longitudinal timber 26 are  
60 a number of uprights 29, to each of which is secured an upper cross-piece 30 and a lower cross-piece 31. The uprights 29 may be made of metal tubing; but I prefer to make them  
65 of some tough resilient timber, such as hickory. Each of the uprights 29, together with its cross-pieces 30 and 31, forms a bag-holding frame. The ends of the cross-pieces 30 and 31 are preferably bent upward and connected by means of a chain 32. The cross-  
70 pieces 30 and 31 are connected by means of chains 33, part of which is preferably drawn taut, while the remainder is provided with some slack, so as to allow a motion independent of the frames when the frames are recip-  
75 roated. Suspended from the top 35 of the machine are chains 36, which are arranged to come between the uprights 29. The chains 36 may either extend down and be secured to cross-pieces 37, held between the side timbers  
80 16, as shown in Fig. 1, or they may extend only part of the way down and have the ends free, as shown in Fig. 4. If the former construction is used, I prefer to have some of the  
85 chains drawn taut and the others provided with slack in the same manner as the chains 23. The ends 11, back 12, and doors 13 preferably consist of wooden frames, which are covered with thin foraminous material 39,  
90 such as cheese-cloth, so as to allow the air to circulate through the machine, but to prevent the escape of the flour or other dust from the machine.

In the modification shown in Fig. 5 the reciprocating frame is dispensed with and a  
95 shaft 40 is passed longitudinally through the machine and pivoted in the ends 11. To this shaft 40 is secured one or more of the bag-holding frames. One end of the shaft 40 extends beyond the end of the machine and is  
100



provided with a handle 41, by means of which the shaft 40 can be rocked, thus imparting an oscillating movement to the frame.

In operating my machine the doors 13 are opened and the longitudinal timbers 25 and 26 are swung on their pivots, so as to bring the bag-holding frames in the position shown in Fig. 4. The bags can now be slipped onto the frames until their bottoms rest on the cross-chains 32. The frames are then swung back into position, their movement being limited by the stops 27. The doors are now closed and the shaft 20 rotated by means of a pulley 22. This imparts a reciprocating motion to the main frame which supports the bag-carrying frames. This will cause the chains 33 to strike against the inner sides of the bags and the chains 36 to strike against the outer sides of the bags. The dust dislodged from the bags will fall into the drawer 15. This is facilitated by the passage of the air through the foraminous sides of the machine. As soon as the bags are cleaned the doors 13 can be opened and the bag-carrying frames swung forward, so that the bags can be readily removed.

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

1. In a bag-cleaning machine, a bag-holding frame, beaters carried by said frame, and means for imparting a vibrating motion to said frame.

2. In a bag-cleaning machine, a bag-carrying frame, flexible beaters carried by said frame, and means for imparting a vibrating motion to said frame.

3. In a bag-cleaning machine, a bag-holding frame, chain beaters carried by said frame, and means for imparting a vibrating motion to said frame.

4. In a bag-cleaning machine, a bag-holding frame, a casing for said frame, beaters carried by said casing and cooperating with said frame, and means for imparting a vibrating motion to said frame.

5. In a bag-cleaning machine, a bag-holding frame, a casing for said frame, flexible beaters carried by said casing and cooperating with said frame, and means for imparting a vibrating motion to said frame.

6. In a bag-cleaning machine, a bag-holding frame, a casing for said frame, chain beaters carried by said casing and cooperating with said frame, and means for imparting a vibrating motion to said frame.

7. In a bag-cleaning machine, a bag-holding frame, chain beaters carried by said frame, a casing for said frame, chain beaters carried by said casing and cooperating with said frame, and means for imparting a vibrating motion to said frame.

8. In a bag-cleaning machine, a bag-holding frame, a casing for said frame formed partly of foraminous material, and means for imparting a vibrating motion to said frame.

9. In a bag-cleaning machine, a casing, a main frame slidably mounted in said casing, a plurality of bag-holding frames mounted on said main frame, beaters carried by said bag-holding frames, and means for reciprocating said main frame.

10. In a bag-cleaning machine, a casing, a main frame slidably mounted in said casing, a plurality of bag-holding frames mounted on said main frame, beaters carried by said bag-holding frames, beaters carried by said casing and cooperating with said bag-holding frames, and means for reciprocating said main frame.

11. In a bag-cleaning machine, a casing, a main frame slidably mounted in said casing, a plurality of bag-holding frames pivotally mounted on said main frame, beaters carried by said bag-holding frames, and means for reciprocating said main frame.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

GEORGE F. GODDARD. [L. S.]

Witnesses:

W. A. ALEXANDER,  
ROY GRAY.