No. 850,931. PATENTED APR. 23, 1907.

M. P. HOFFMAN.

STRAINER AND SIFTER.

APPLICATION FILED DEC. 19, 1906.

Fig. 1.

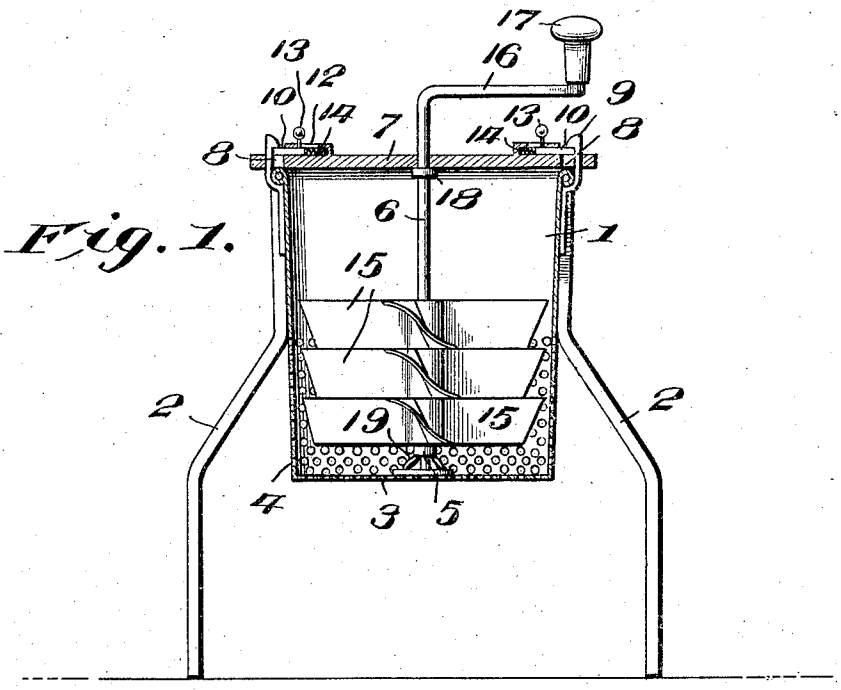
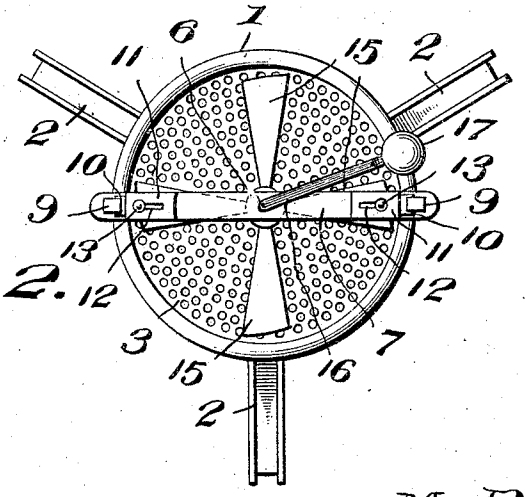


Fig. 2.



Witnesses

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STRAINER AND SIFTER.

No. 850,931. Specification of Letters Patent. Patented April 23, 1907.

Application filed December 19, 1906. Serial No. 348,587.

To all whom it may concern:

Be it known that I, MARIE PAULINA HOFFMAN, a citizen of the United States, residing at Canajoharie, in the county of Montgomery and State of New York, have invented certain new and useful Improvements in Strainers and Sifters; and I 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.

My invention relates to new and useful improvements in strainers and sifters, and more particularly that class adapted to be used for straining fruits, vegetables, jams, and the like and also for sifting flour.

My object is to provide a device of this class which may be cheaply constructed and efficient in its operation.

A further object is to provide means for readily securing the parts together, and a still further object is to provide a suitable supporting means for the device.

Other objects and advantages will be hereinafter referred to in the specification and more particularly pointed out in the claim.

In the accompanying drawings, which are made a part of this application, Figure 1 is a central vertical sectional view through the strainer, and Fig. 2 is a top plan view thereof.

Referring to the drawings, in which similar reference-numerals designate corresponding parts throughout the several views, 1 indicates the body of my improved strainer, which is preferably supported by standards 2, the upper ends of said standards being secured to the upper portion of the body, while the lower ends thereof are directed outwardly and downwardly to remove the same from engagement with the lower end of the body. The bottom 3 of the body 1 and a portion of the side wall thereof are provided with a plurality of perforations 4, through which is adapted to pass the finer particles of the contents of the body. Mounted upon the central portion of the bottom 3 is a socket 5, in which is adapted to be seated the lower end of a shaft 6, while the upper end thereof is disposed through a bar 7, which is provided at its opposite ends with slots 8, through which are adapted to take latches 9, said latches being secured to the outer periphery of the body 1 and extended a sufficient distance above the bar 7 to receive locking-bolts 10, carried by the bar 7, and when the bolts are properly disposed into engagement with the latches the shaft is securely locked in position within the body.

The locking-bolts 10 are seated in suitable housings 11 at each end of the bar 7, each of said housings having a longitudinal slot 12 therein, through which extends an operating-pin 13, and by which means the bolt is moved inwardly and outwardly in the housing. In order to normally hold the locking-bolts into engagement with the latches, I dispose a spring 14 within the housings 11 and between the ends of the housings and the locking-bolts, so that outward pressure will be exerted against the locking-bolts at all times.

Disposed within the body 1 and secured to the shaft 6 are a plurality of blades 15, which are preferably arranged in series and one above the other, one edge of said blades being curved and directed forwardly, while the opposite edges thereof similarly curved and directed rearwardly, thereby forming a passage between each set of blades, which are so arranged that when the shaft 6 is rotated in one direction the contents of the body 1 will be forced downwardly. The outer end of each of the blades 15 is tapered inwardly from its upper edge, so that when the blades are rotated the contents of the body will be forced outwardly as well as downwardly, and thereby forcing a portion of the contents of the body through the perforations in the walls of the body.

The upper end of the shaft 6 is directed at right angles to the shaft to form a crank 16, to the upper end of which is secured a handle 17, and by which means the shaft and blades secured thereto are rotated. The shaft 6 is held firmly seated within the socket by disposing a collar 18 around the shaft 6, which is adapted to engage the lower surface of the bar 7, so that when said bar is locked in engagement with the latches the shaft 6 will be held against lateral movement.

The socket 15 is disposed a distance above the bottom 3 and is supported by means of radiating arms 19, so that when the shaft is disposed in the socket after the particles to be strained have been placed in the body the shaft will readily enter the socket and force the particles therein downwardly and between the arms. It will be seen also that by disposing the socket above the bottom 3 that the first tier of blades will be elevated above the bottom, and thereby provide space for the accumulation of the solid particles of the article being strained, although, if de-

sired, the first tier of blades may be disposed directly into engagement with the surface of the bottom.

In operation the article to be strained or sifted is placed within the body 1 and the shaft and blades carried thereby then introduced into the body and the lower end of the shaft seated in the socket 5, after which the bar 7 is disposed over the latches 9 and the locking-bolts 10 disposed into engagement therewith, and after the parts are thus secured together the blades are rotated to the left, which will result in driving the contents of the body toward the perforated portion thereof and directing the finer particles of the contents of the body through the perforations, while the solid particles thereof are retained within the space formed between the lower tier of blades and the bottom section 3.

What I claim is—

In a device of the class described the combination with a body having its bottom and a portion of the wall thereof provided with a plurality of perforations and supporting means for said body, of a shaft vertically disposed in said body, a socket secured to the bottom of said body and adapted to receive the lower end of said shaft, a plurality of blades arranged in series and one above the other, the upper edges of said blades being curved and directed forwardly while the lower edges thereof are curved and directed rearwardly, each of said blades having tapered outer ends, a crank at the end of said shaft and means to hold said shaft within said body and prevent longitudinal and lateral movement thereof.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARIE PAULINA HOFFMAN.

Witnesses:

B. F. SPRAKER,

E. A. SHINEMAN.