No. 809,178. PATENTED JAN. 2, 1906.

E. T. FARMER.

FLOUR SIFTER.

APPLICATION FILED APR. 11, 1905.

FIG. 1.

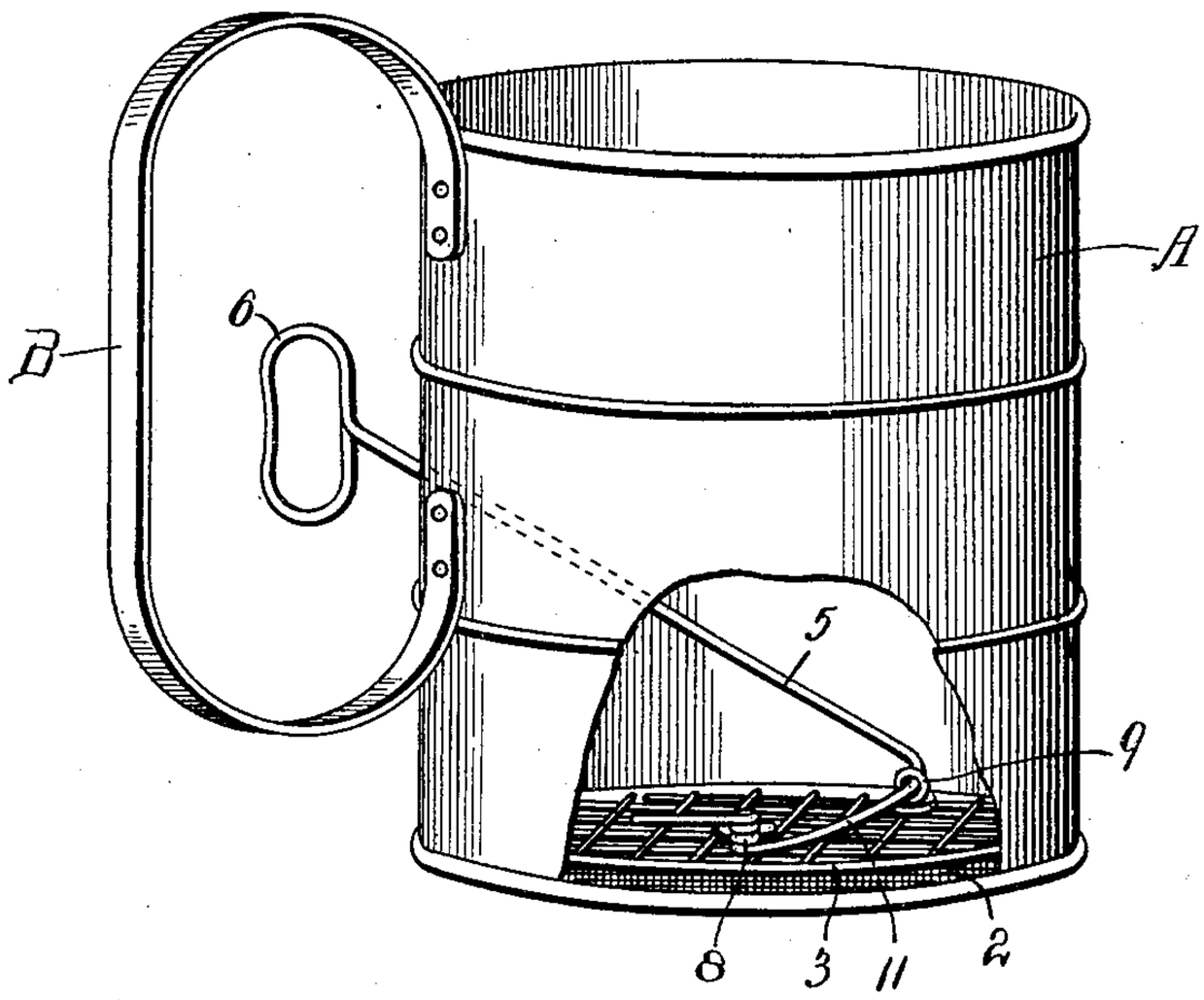
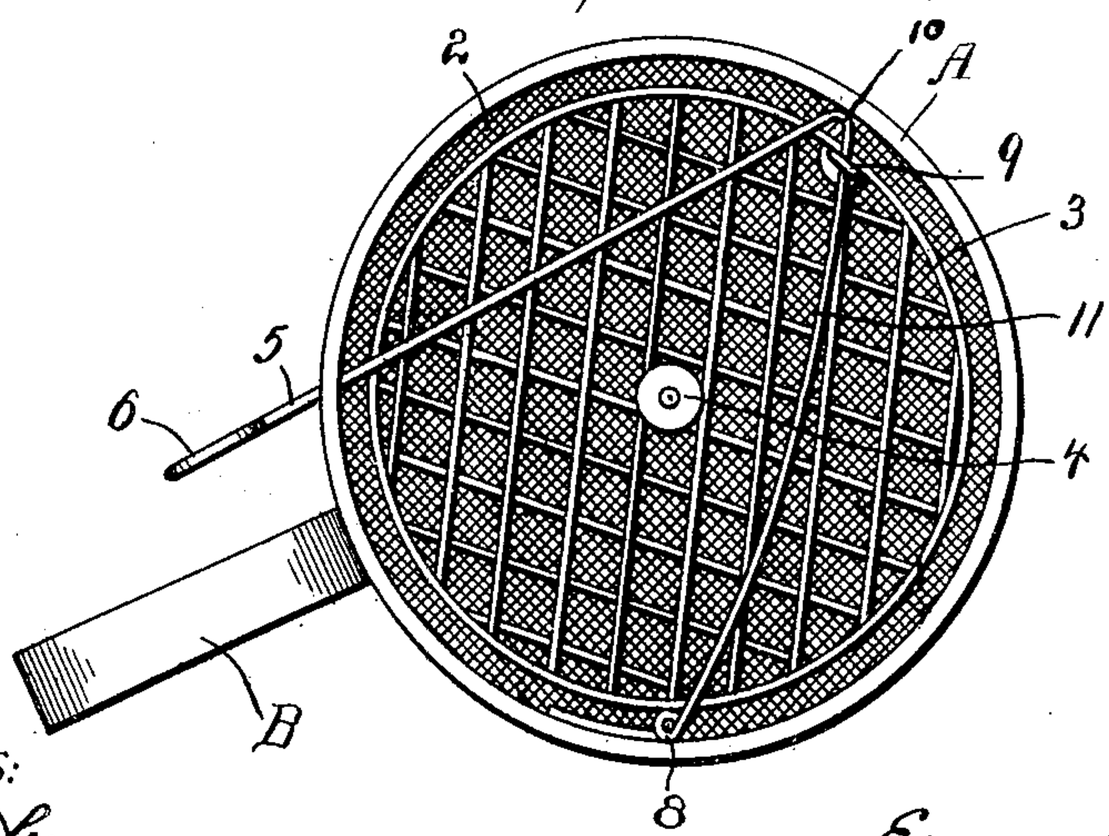


FIG. 2.



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FLOUR-SIFTER.

No. 809,178. Specification of Letters Patent. Patented Jan. 2, 1906.

Application filed April 11, 1905. Serial No. 254,913.

To all whom it may concern:

Be it known that I, EDWIN T. FARMER, a citizen of the United States, residing at Carthage, in the county of Jasper and State of Missouri, have invented new and useful Improvements in and Relating to Flour-Sifters, of which the following is a specification.

My invention relates to a flour-sifter, and has for its object to produce a sifter of simple construction provided with novel agitating means that may be conveniently operated.

In the drawings, Figure 1 is a perspective view of a flour-sifter embodying my invention, parts being broken away to show the internal construction. Fig. 2 is a top plan view of the same.

Referring to the drawings, A represents the containing vessel or body of the sifter, which may be of any preferred size and construction and has secured to one side a handle B. The bottom of the vessel is closed by a screen 2, of any suitable construction, secured to the sides of the vessel A in any preferred manner. On the inner surface of the screen 2, and concentric therewith and preferably parallel thereto, is arranged the agitator 3, which may be of a woven-wire construction coarser in mesh than the screen 2. The agitator 3 is secured to the screen 2 by the pivot 4, which permits the agitator 3 to rotate above the stationary screen 2, and thereby cause the flour to be sifted through the latter.

In order to provide means for sifting the flour or material being operated upon by rotating the agitator, I secure a spring, preferably a coiled spring 8, to the inner wall of the vessel and provide the spring with a relatively long arm 11, that extends across the agitator substantially parallel therewith to the edge thereof that is opposite the spring, where it is connected with the agitator by a hook or eye 9, through which the arm 11 loosely passes. To rotate the agitator in opposition to the spring, I employ a rod 5, that is connected at its inner end at 10 with the arm 11 of the spring and extends thence outward through the wall of the containing body or vessel of the sifter, its outer end being formed into a handle 6, that is arranged in such proximity to the main supporting-handle B that the person using the sifter can manipulate the rod by means of one finger of the hand that supports the sifter. For convenience of manufacture the rod 5, arm 11, and spring 8 are formed of an integral piece of elastic wire.

It will be seen by reference to Fig. 2 that the arm 11 is subtended across the agitator, one end thereof being connected to the side of the vessel and its opposite end extending through the eye 9 and being bent at an angle and extending upward relative to the plane of the agitator, its outer end extending through the side of the casing close to the handle B. It will thus be seen that the arm 11 and rod 5 are substantially **V**-shaped as viewed from above and arranged to form an inscribed angle within the containing vessel, the vertex 10 of the angle operating as a stop to engage the eye 9 to limit the movement of the agitator in its forward movement when the rod 5 is pulled and also as a stop to engage with the inner wall of the containing vessel, so that when the handle 6 is released and the spring 8 returns the agitator to the position shown in Fig. 2 the end of the arm 11 comes forcibly into contact with the vessel and jars the same, thereby tending to clear the meshes of the screen.

From the above description it will be seen that by giving the handle 6 a slight forward movement the rod 5 will cause the agitator 3 to be rotated a slight distance on its pivot and that when the handle 6 is released the tension of the spring 8 will move the agitator back to its normal position, thus causing the flour to be sifted through the screen 2. The operator while supporting the sifter by means of the handle B may pass one finger through the handle 6, and thus support and operate the sifter by the use of one hand only.

It will be observed that the arm 11 and rod 5 extend across the interior of the containing vessel above the agitator and as they are moved to work the sifter they themselves operate to stir up and agitate the flour, thereby preventing the formation of lumps, which it might be difficult for the agitator alone to break up.

What I claim is—

In a flour-sifter, the combination with a cylindrical-shaped containing vessel provided with a screen-bottom, an agitator pivotally mounted thereon, a spring-arm subtended across the agitator and arranged to lie close to the same, one end of the arm being con-

nected to the side of the vessel and its opposite end to the circumferential edge of the agitator, and a rod connected to the spring-arm near its point of connection with the agitator and extending upward therefrom and through the side of the vessel in close proximity to the handle thereof, whereby the agitator may be operated, substantially as set forth.

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Witnesses:
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