No. 733,161. PATENTED JULY 7, 1903.

C. B. COMEGYS.

SIFTER.

APPLICATION FILED SEPT. 6, 1902.

NO MODEL.

Fig. 1.

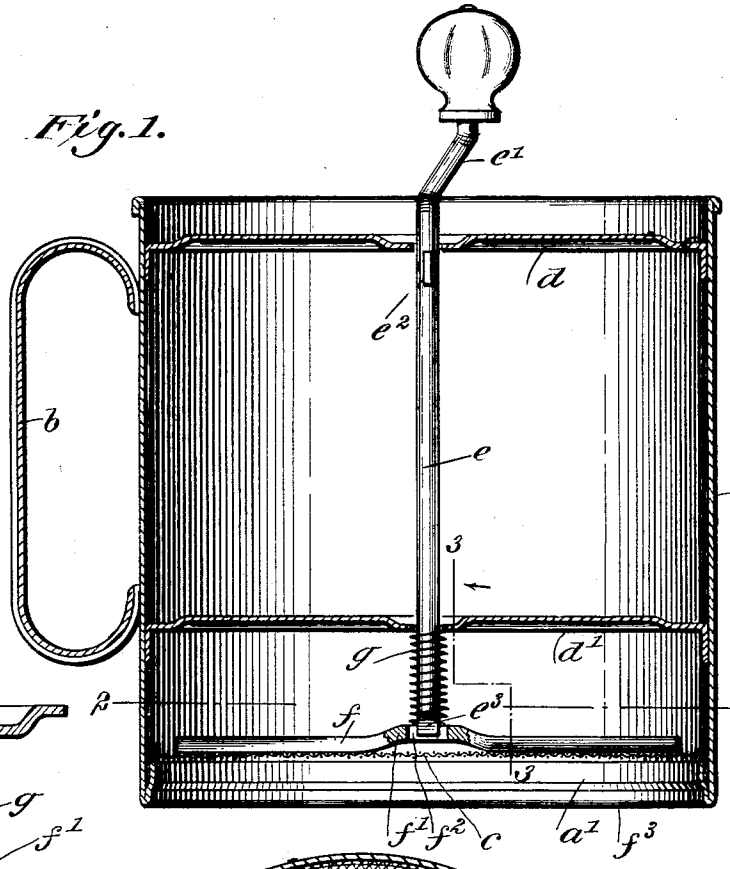


Fig. 3.

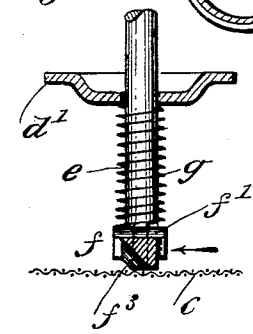


Fig. 4.

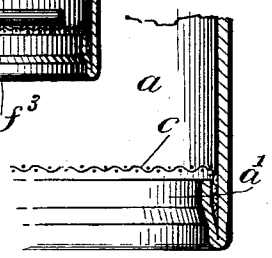
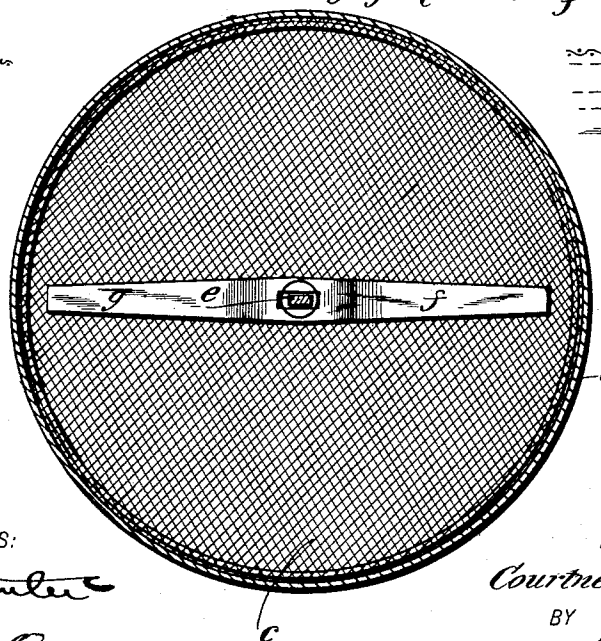


Fig. 2.



WITNESSES:

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No. 733,161. Patented July 7, 1903.

UNITED STATES PATENT OFFICE.

COURTNEY B. COMEGYS, OF ASHGROVE, MISSOURI.

SIFTER.

SPECIFICATION forming part of Letters Patent No. 733,161, dated July 7, 1903.

Application filed September 6, 1902. Serial No. 122,330. (No model.)

To all whom it may concern:

Be it known that I, COURTNEY B. COMEGYS, a citizen of the United States, and a resident of Ashgrove, in the county of Greene and State of Missouri, have invented a new and Improved Sifter, of which the following is a full, clear, and exact description.

This invention relates to a sifter intended especially for household use to facilitate sifting flour and other cereals.

It relates to that class of household sifters in which a can is provided with a sieve in the bottom and an agitator working over the sieve. This class of devices has never been generally adopted, owing to the fact that inventors in attempting to make such devices efficient in operation have so materially increased their cost as to render them commercially impracticable. My invention seeks to produce a thoroughly durable and efficient sifter at such cost as will insure its extensive adaptation. This end I attain by certain novel features of construction which will be hereinafter fully set forth.

This specification is an exact description of one example of my invention, while the claim defines the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section of the invention. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1. Fig. 3 is a detail section on the line 3 3 of Fig. 1, illustrating particularly the manner of mounting the agitator; and Fig. 4 is an enlarged section showing the manner of fastening the screen in place.

a indicates a can, which according to the preferred construction is formed of a sheet-metal tube or cylinder and provided with a handle *b*, suitably fastened to the side thereof. Each end of the can *a* is open, and the bottom end has a sieve or screen *c* extended across it and secured in place by turning up the lower edge of the can to form a clenching-flange *a'*, engaging a corresponding downwardly-directed flange formed around the edge of the sieve. Fastened in the can and extending diametrically across the same are two bars *d* and *d'*; these bars being arranged in a vertical plane and having centrally-located openings through which is extended loosely a vertical shaft *e*. This shaft has its upper end formed with a crank *e'* thereon. The shaft is free to turn in the bars *d*, but is prevented from being moved upward by means of a lug or lugs e^2, said lug or lugs being preferably punched up from the material forming the shaft. This constitutes an efficient and at the same time a cheap manner of holding the shaft in place. If desired, however, a pin may be passed through the shaft or a collar may be fastened thereto.

f indicates the agitator, which is in the form of a bar lying horizontally over the sifter *c*, said bar having a raised middle portion *f'*, in which is formed a narrow opening or slot f^2. This slot receives the flattened lower end e^3 of the shaft *e* in such a manner that the agitator is free to move vertically with respect to the shaft, but is forced to turn with the shaft.

g indicates an expansive spiral spring which surrounds the shaft *e* and bears between the cross-bar *d'* and the agitator *f*, this spring pressing the agitator down firmly yet yieldingly into engagement with the sieve.

The agitator being mounted in the manner described comprises, therefore, two arms projecting from the raised middle portion *f'*, and these arms, as best illustrated in Fig. 3, are beveled at the points f^3, thus forming an inclined side, as shown. Said bevels f^3 are formed on opposite sides of the respective arms of the agitator, and the agitator is adapted to be turned in the direction indicated by the arrow in Fig. 3, or, in other words, with the beveled faces f^3 forward. This causes said beveled or inclined faces to ride over the lumps of flour or other material lying in the sieve and effectually to crush the same.

The use of the invention will be fully understood from the prior art, and it will be seen from the foregoing description that the sifter is constructed in a durable manner and with every provision for the efficient action of the parts, and at the same time, owing to the peculiar construction shown, the sifter may be produced at such a slight cost as to warrant its extensive employment.

Various changes in the form, proportions, and minor details of my invention may be resorted to without departing from the spirit

and scope thereof. Hence I consider myself entitled to all such variations as may lie within the scope of my claim.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A sifter comprising a can or body having a sieve in the bottom thereof, two cross-bars fastened to the inner sides of the can, one above the other, a vertically-disposed shaft mounted to turn in said cross-bars and having a lug struck up from the material thereof, for engaging the under side of the upper bar, an agitator having a raised central portion formed with a slot, the lower end of the shaft being flattened to fit said slot, and a spring surrounding said shaft and exerting its tension between parts of the lower cross-bar and said agitator, all substantially as shown and described.

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

COURTNEY B. COMEGYS.

Witnesses:
G. A. SMITH,
H. E. SMITH.