(No Model.)

F. A. HOVEY.

COMBINED FLOUR SAFE AND SIEVE.

No. 345,139. Patented July 6, 1886.

Fig. 1.

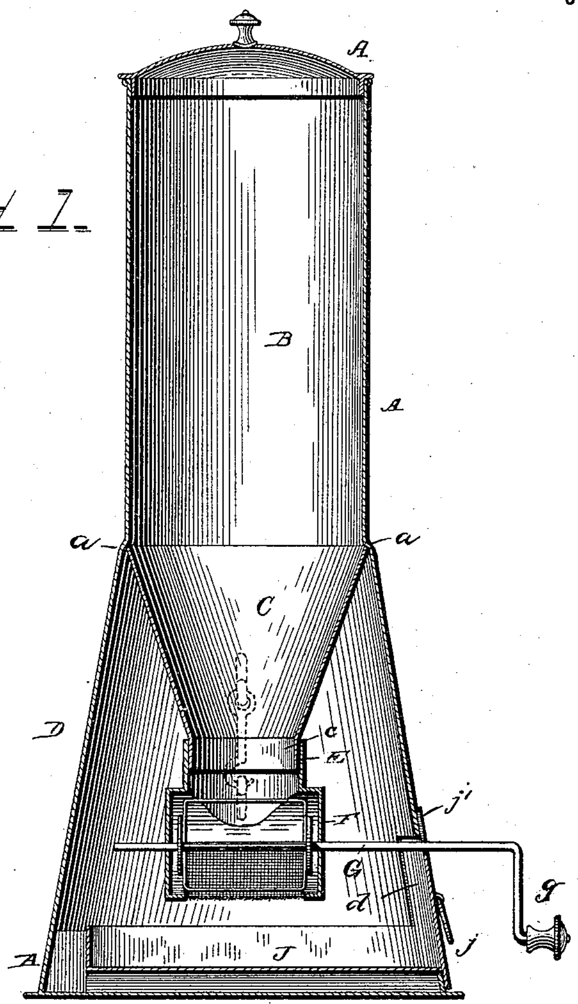


Fig. 2.

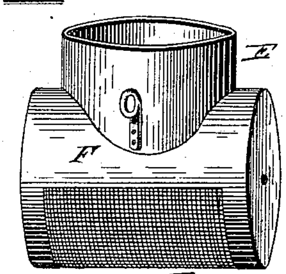


Fig. 3.

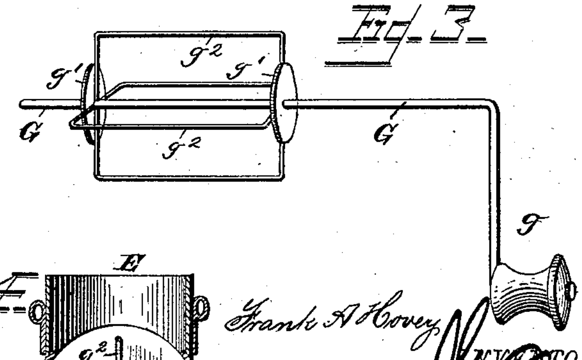
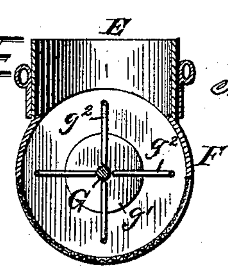


Fig. 4.



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FRANK AUGUSTIN HOVEY, OF MADISON, NEBRASKA, ASSIGNOR OF ONE-HALF TO WILLIAM L. RAMEY, OF SAME PLACE.

COMBINED FLOUR SAFE AND SIEVE.

SPECIFICATION forming part of Letters Patent No. 345,139, dated July 6, 1886.

Application filed December 11, 1884. Serial No. 150,116. (No model.)

To all whom it may concern:

Be it known that I, FRANK AUGUSTIN HOVEY, of Madison, in the county of Madison and State of Nebraska, have invented certain new and useful Improvements in Combined Flour Safes and Sieves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section through the center of my improved safe and sieve, showing the agitator and its appurtenances in elevation. Fig. 2 is a perspective view of the cylindrical sieve. Fig. 3 is a perspective view of the agitator and its appurtenances removed from the sieve. Fig. 4 is a transverse section of the sieve and the agitator in place therein.

The safe is constructed of an external shell or casing, A, the upper portion, B, of which is cylindrical, while the lower portion, D, is flared outwardly, for the twofold purpose of affording a broader base to resist the tendency which will exist when the safe is full to overturn from top-heaviness, and to afford more room within the base for the purpose hereinafter set forth. Where the upper or cylindrical and the lower or conical portions, B and D, meet, the shell is formed with an offset or shoulder, *a*, and from this depends an inverted conical section or funnel, C, which terminates at its apex or lower end in an annular flange, *c*. The inner diameter of the base of the cone C (or its upper portion, as here employed) is about the same as that of the cylindrical portion B of the case, the offset *a* being formed for the reception thereof, so that the inner surfaces of the cylinder B and cone C shall be flush where the two unite, thus avoiding the formation of a shoulder on the interior of the safe.

It will be seen that the cylindrical portion B and the inverted conical section C form the safe proper for the reception of the flour, while the conical portion D forms merely a base for supporting the safe and a protecting-casing for the lower end thereof and its appurtenances, presently to be described.

F represents a cylinder, more or less of which may be formed of wire-gauze or other sifting material, through which the contents of safe B C can pass. Secured to and opening into one side of this cylinder is an annular hub or socket, E, which is of such size as to fit snugly the annular terminus *c* of the conical section C of the safe. The cylinder F thus constitutes the bottom of the safe, and in order that it may not be forced off by the superincumbent contents one or more catches are employed. I have shown two eyes secured to opposite sides of the cylinder, with which engage hooks depending from the sides of the inverted conical section C. The heads of the cylinder F are perforated, and through them is passed a shaft, G, which passes out through an opening, *d*, in the protecting-casing D, and terminates in a crank-handle, *g*. Secured to this shaft is an agitator, which may be of any desired construction. I have shown it formed of two disks, *g'*, secured to the shaft G at the proper distance asunder, and pieces of stout wire *g²*, each bent into a rectangular shape and secured to said disks.

The flour or other material contained in the safe will not pass through the sieve simply of its own weight—that is, to any material extent—but when the agitator is moved it will pass freely, the sieve catching and confining within the agitator-cylinder any foreign substances.

The agitator-cylinder is made detachable from the safe C, and the opening *d* sufficiently large to permit its removal, for the purpose of removing from time to time any impurities which the sieve shall arrest.

J is a receptacle or drawer for catching the sifted material as it falls from the sieve, the front *j* of said drawer being sufficiently enlarged to completely close the opening *d* in the case D, said front being notched, as at *j'*, for the passage of the shaft G of the agitator. The single opening *d* is thus utilized for three purposes: first, the passage of the agitator-shaft; second, the removal of the agitator-cylinder and sieve, and, third, the insertion and removal of the receptacle J.

I am aware that a combined flour safe and sieve is not broadly new, and do not claim such as my invention; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a flour-safe terminating at bottom in an inverted cone having an annular flange, of a cylinder having a sieve

and an annular hub fitting said flange, and an agitator in said cylinder, for the purpose set forth.

2. The combination, with the safe terminating at bottom in an inverted cone having an annular flange and a casing surrounding the bottom portion of the safe, and having an opening therethrough, of a cylinder having a sieve and an annular hub fitting said annular flange, an agitator within said cylinder having a shaft passing out through said opening, a crank, and a drawer or receptacle having an enlarged front closing said opening, substantially as set forth.

FRANK AUGUSTIN HOVEY.

Witnesses:
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