M. F. Morse,

Flour Siere.

No. 60,539. Patented Dec. 18, 1866.

Fig. 1.

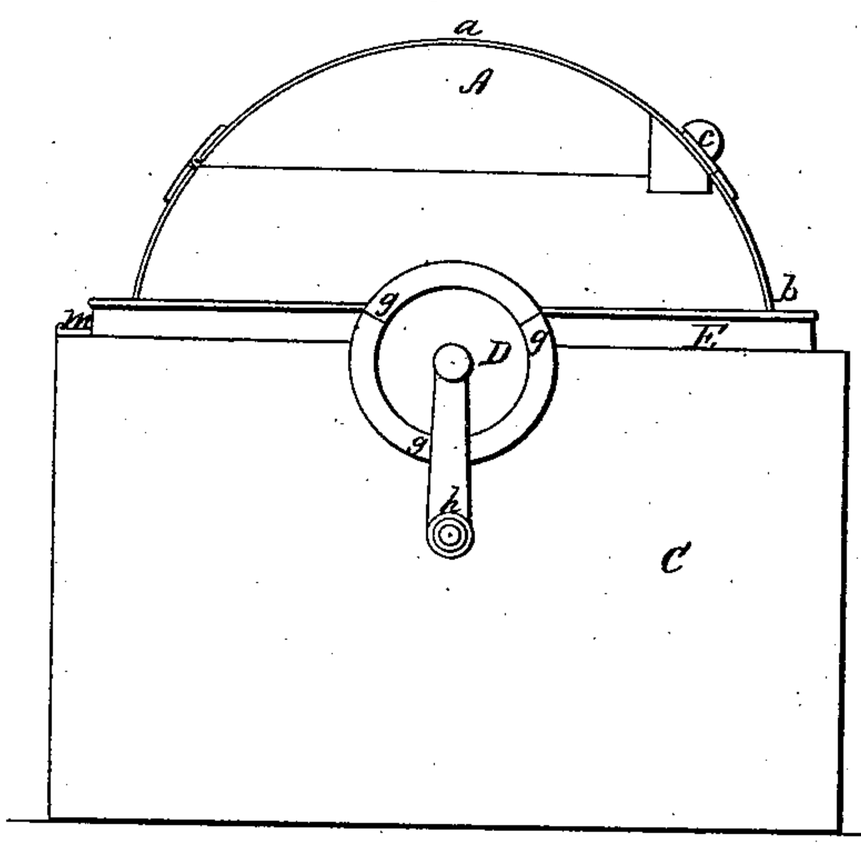


Fig. 3

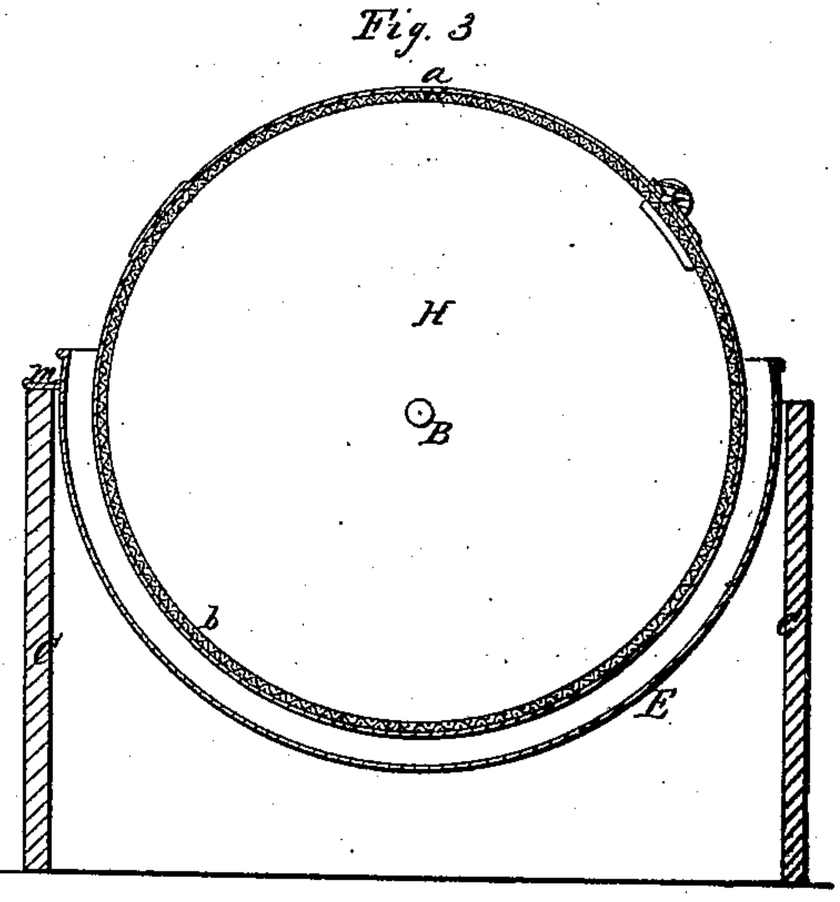
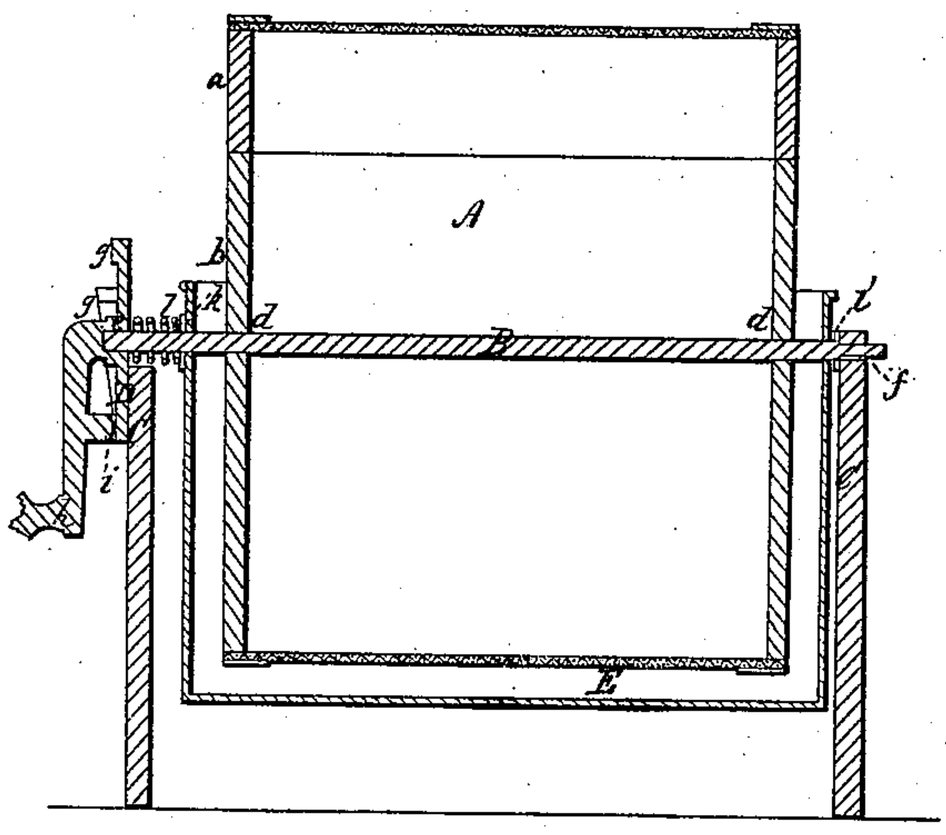


Fig. 2.



Witnesses;

Frederick Curtis

C. A. Swadkins

Inventor;

Mark F. Morse

by his attorney.

R. H. Eddy

United States Patent Office.

IMPROVED ROTARY SIFTER.

MARK F. MORSE, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 60,539, *dated December* 18, 1866.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, MARK F. MORSE, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful or improved Flour Sifter; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is an end elevation.

Figure 2 is a longitudinal section; and

Figure 3, a transverse section of it.

In the drawings, A denotes a cylindrical drum having its periphery made of woven wire or a foraminous plate. Furthermore the said drum is constructed in two segmental parts *a b*, one of which is hinged to the other and constitutes a door thereto, a turn button, *c*, being applied to the door for the purpose of keeping it closed while the drum A may be in operation. A shaft, B, runs axially through and is fixed to the drum or its heads, *d d*, and is supported in suitable bearings, *e f*, applied to a frame, C, within which the drum is placed. The shaft also goes through a plate or disk, D, provided with a series of cams, *g g g*, arranged in a circular path on it. A handle, *h*, fixed on one end of the shaft has a stud, *i*, extending from it and so as to touch either of the said cams. Between the disk D, and a shoulder, *k*, fixed on the shaft, there is a spring, *l*, which encompasses the shaft, and serves to move the drum in a direction opposite to that in which it may be moved by the action of one of the cams. There is also placed on the shaft and between the shoulder *k*, and another such shoulder, *l'*, fixed on the shaft, a cap, E, which is a segment of a drum somewhat larger than half of it. This cap should be so applied to the shaft as to be capable of being turned freely thereon, and should be provided with a stopping flange *m*, (or its equivalent,) arranged as shown in the drawings. This flange serves to arrest the movement of the cap in its proper position for either wholly covering or uncovering the sifting drum A. The cap E, when over the drum while it may be in the act of sifting, will prevent the upward escape of the material which may be within such drum. So, when the cap is turned down underneath the drum, such cap will serve to catch and retain any of the material which may drop from the drum, either while it may be in revolution or be in the act of being transported from one place to another. Thus, it will be seen, that the cap arranged with and applied to the drum and its shaft is of advantage in other respects than as a mere casing to extend over the drum. By laying hold of the handle and putting the sifting drum in revolution, such drum during such revolution will have a series of endwise, sudden, concussive movements imparted to it, such as will greatly facilitate the disturbance of any material while within it and in the act of being sifted.

I do not claim a rotary sifting drum, but what I claim as my invention is—

The combination and arrangement of the disk D, its series of cams *g g g*, the stud *i*, and the spring *l*, with the sifting drum, its shaft, and supporting frame, the whole being to operate as specified.

MARK F. MORSE.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.