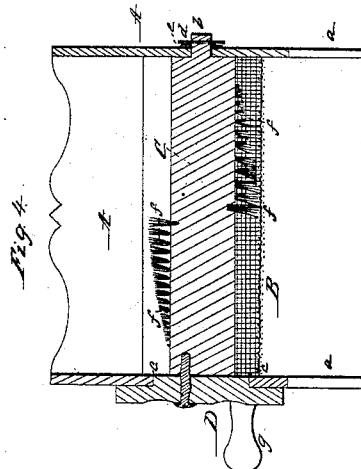
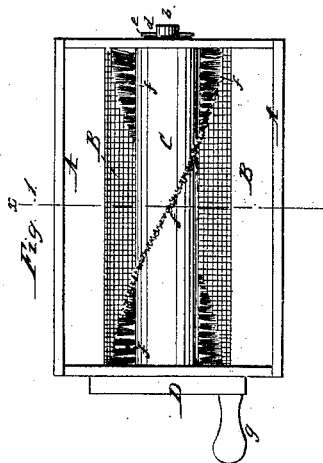
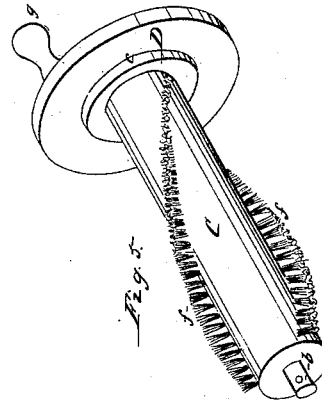
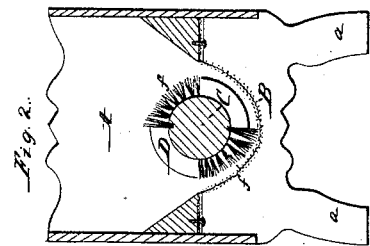
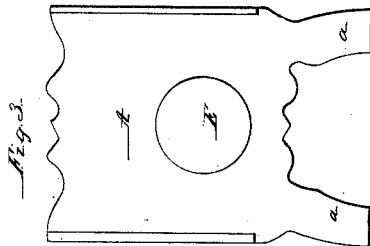


N. W. Foye,
Flour Siere

N^o 49,870

Patented Sep. 12, 1865.



Witnesses:
P. C. Totten
W. J. Cambridge

Inventor:
N. W. Foye

UNITED STATES PATENT OFFICE.

NATHANIEL W. FOYE, OF CAMBRIDGE, MASSACHUSETTS.

FLOUR-SIFTER.

Specification forming part of Letters Patent No. 49,870, dated September 12, 1865.

To all whom it may concern:

Be it known that I, NATHANIEL W. FOYE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improved Flour-Sifter, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of my improved sifter. Fig. 2 is a transverse section through the same on the line *x x* of Fig. 1. Fig. 3 is an end elevation of the same, the brush-shaft being removed. Fig. 4 is a central longitudinal section through the same. Fig. 5 is a view of the removable brush-shaft detached.

That class of flour-sifters now in use, where the flour is rubbed over a sieve by means of a revolving shaft provided with beaters or rubbers, are objectionable on account of the central rubbing-shaft not being made easily removable, thereby rendering it difficult to clean it or the sieve beneath.

My invention has for its object to overcome this difficulty, and consists in making the rubbing-shaft removable and providing it at one end with a disk or head to prevent the escape of the flour, by which arrangement the operation of cleaning the sifter is greatly facilitated.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is a box or hopper, which is supported on legs *a*, and has attached to its lower end a sieve, B, of a curved form, as seen in Fig. 2.

C is a shaft, at one end of which is a journal, *b*, which revolves in the end of the box A, while its opposite end is furnished with a disk or head, D, having a shoulder, *c*, which fits snugly into and revolves in a circular opening,

E, Fig. 3, in the end of the box A. The shaft C is held in place by means of a pin, *d*, and washer, *e*, and is provided with brushes *f* running spirally around it, which serve to agitate the flour, as the shaft is revolved by means of the handle *g*, and rub it across the sieve, causing the finer particles to pass rapidly through, the spiral form of the brushes, serving to carry the flour longitudinally across the sieve. These brushes *f* are made to rub against the sieve B, which is thus prevented from becoming easily clogged; they also yield on coming into contact with any hard substance, thereby preventing the sieve from being pierced or otherwise injured.

The opening E is of greater diameter than the shaft C, so as to admit the brushes *f*; and it will be seen that this opening is tightly closed by the shoulder *c* of the head D, thus effectually preventing the escape of the flour.

When it is desired to clean the sifter after using, or in the event of its becoming clogged, it is simply necessary to remove the pin *d* and washer *e*, when the brush-shaft may be readily drawn out through the opening E, thus greatly facilitating the operation of cleaning both the brush-shaft and the interior of the sifter.

The brushes *f*, instead of running spirally around the shaft, may, if preferred, be placed in parallel rows, or run in any desired direction.

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

The removable rubbing or brush shaft C, with its shouldered head or disk D, in combination with the box or hopper A and sieve B, substantially as and for the purpose set forth.

N. W. FOYE.

Witnesses:

P. E. TESCHEMACHER,
W. J. CAMBRIDGE.