

July 6, 1937.

M. T. WILLIAMS

2,086,199

CLOTH CLEANER

Filed April 10, 1936

FIG. 1.

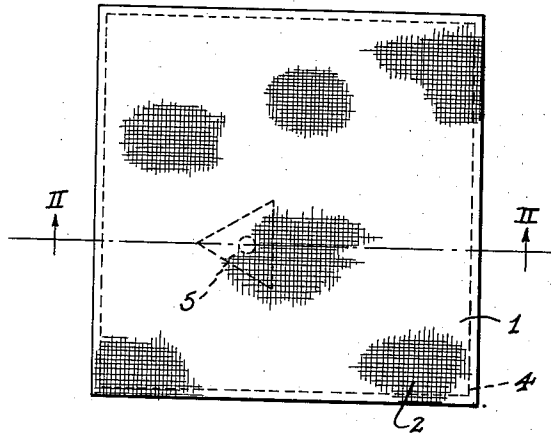


FIG. 2.

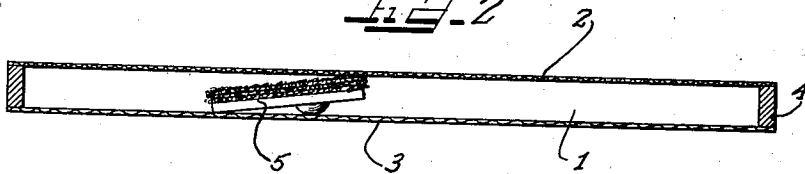


FIG. 3.

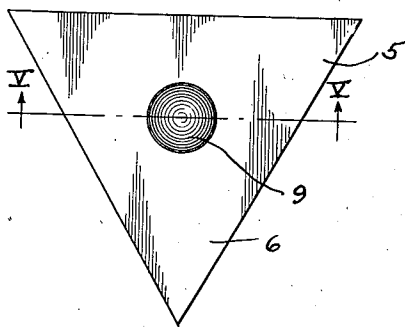


FIG. 4.

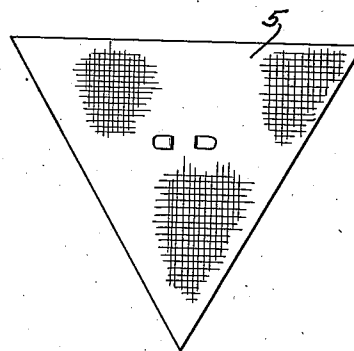
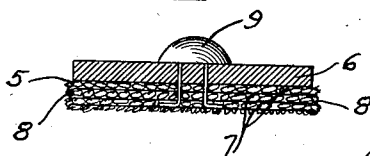


FIG. 5.



MAURICE T. WILLIAMS.

Charles T. Williams

UNITED STATES PATENT OFFICE

2,086,199

CLOTH CLEANER

Maurice T. Williams, Chicago, Ill., assignor to
B. F. Gump Co., Chicago, Ill., a corporation of
Illinois

Application April 10, 1936, Serial No. 73,719

6 Claims. (Cl. 209—387)

This invention relates to a cloth cleaner of that type which bounces around for cleaning the bolting cloth of flour sifters or the like.

In the bolting of flour or the like, there is used a sifter covered with bolting cloth, usually silk. In order to prevent the bolting cloth from clogging up, cloth cleaners are used in the sifters. These cloth cleaners jump around in the sifter and engage the bolting cloth with their frayed edges and clean the same when the sifter is properly agitated.

In the past, these cloth cleaners were made of canvas and of a rectangular shape. These rectangular-shaped cloth cleaners would never enter the corners of the sifters with the result the corners of the bolting cloths would not be cleaned and would become clogged with flour that would soon deteriorate or become rancid. It became the practice in some of the large flour mills to put fillets in the corners of the sifters to overcome this objection. This procedure was however expensive and reduced the effective area of the bolting cloth.

Further as these cloth cleaners were made from canvas, they would not quickly rebound or acquire a sufficiently rapid movement to properly perform their function.

This invention is designed to overcome the above noted objection in making the cloth cleaners of triangular shape with sufficiently long and narrow apices that will dart into the corners of the sifter compartment for cleaning the bolting cloth at all points, and in order to cause the cleaners to rebound more quickly and acquire a more lively movement as they jump around in the screens, the backs are made of some suitable solid material such as linoleum that will cause a quick rebound from the bottom of the sifter and a more rapid movement around the sifter that will more thoroughly clean the bolting cloth and greatly increase its capacity.

The invention comprises the novel structure and combination of parts hereinafter described and more particularly pointed out and defined in the appended claims.

In the accompanying drawing which illustrates a preferred form of this invention and in which similar reference numerals refer to similar features in the different views:

Figure 1 is a top plan view of a section of a sifter containing a cloth cleaner involving this invention.

Figure 2 is an enlarged sectional view taken upon the line II—II of Figure 1 showing the cloth cleaner in elevation.

Figure 3 is a bottom plan view of a cloth cleaner involving this invention.

Figure 4 is a top plan view of the improved cloth cleaner.

Figure 5 is a sectional view taken upon the line V—V of Figure 3 looking in the direction of the arrows.

In the drawing, there is shown a sifter 1 covered with bolting cloth 2 which is usually some form of silk through which the flour or similar substance is bolted. The sifter has a perforated bottom 3 in the form of a screen upon which the cloth cleaner 5 is supported. The bolting cloth 2 and screen 3 are usually attached to a suitable frame 4 as is well known in the art. The sifter or screen 1 is made of a size equal to about one-fourth the size of a regular screen in order to show the usual compartment in which a cloth cleaner operates.

According to this invention, the cloth cleaner 5 consists of a triangular backing piece 6 of resilient material which preferably consists of linoleum but which may consist of rubber or any other suitable material that possesses sufficient resiliency so that it will quickly rebound when striking an object in order to provide a rapid agitation. The backing piece should however be sufficiently tough so that it will not readily wear. Upon the backing piece, there are secured in any suitable manner several plies 7 of suitable fabric such as linen or like material. These fabric plies should of course be of triangular shape and slightly larger than the backing piece 6 so that the edges 8 thereof will slightly project beyond the edges of the backing piece. The edges 8 of the linen plies are frayed and when the cloth cleaner jumps around in the sifter, the frayed edges will engage or brush the bolting cloth and prevent clogging thereof. A metal dome-shaped head 9 is suitably secured to the backing piece 6 near the center of the triangle. This dome-shaped head 9 partially supports the cleaner 5 at times on the screen 3 during its movement.

When the sifter is in use and is agitated, the cleaner 5 will also be agitated and will travel or jump around all over the screen and brush the bolting cloth at all points. Due to the sharp apices and the form of the cleaner, such sharp apices will enter the corners of the sifter for cleansing the bolting cloth at the corners, and due to the resilient or solid backing, a much more lively agitation of the cleaner is allowed.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing

from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

5 I claim as my invention:

1. A bouncing cloth cleaner comprising a triangular linoleum base member having a central metal dome and plies of linen secured to the free face thereof.
- 10 2. A bouncing cloth cleaner comprising a base of reboundable material having a substantially triangular shape, fabric plies secured to one face, and a metal dome secured to the other face.
- 15 3. A bouncing cloth cleaner comprising a flat solid base member of triangular shape, fabric plies secured to one face thereof and a metal dome secured to the other face.
4. A bouncing cloth cleaner comprising a flat

resilient triangular base, fabric secured to one face and a metal dome secured to the other face.

5. A bouncing cloth cleaner comprising a flat triangular base of linoleum, plies of linen secured to one face thereof and extending beyond the edges thereof and a metal dome secured to the other face, said triangular shape forming sharp corners adapted for entering the corners of a sieve.

6. A bouncing cloth cleaner comprising a triangular base of rigid but reboundable material, fabric secured to one face of said base and extending slightly beyond the edges thereof and a metal dome secured to the other face, said triangular shape forming sharp corners adapted for entering the corners of a sieve.

MAURICE T. WILLIAMS.