

(No Model.)

J. A. McANULTY.
ACTUATING MECHANISM FOR FLOUR BOLTS.

No. 546,240.

Patented Sept. 10, 1895.

Fig. 1.

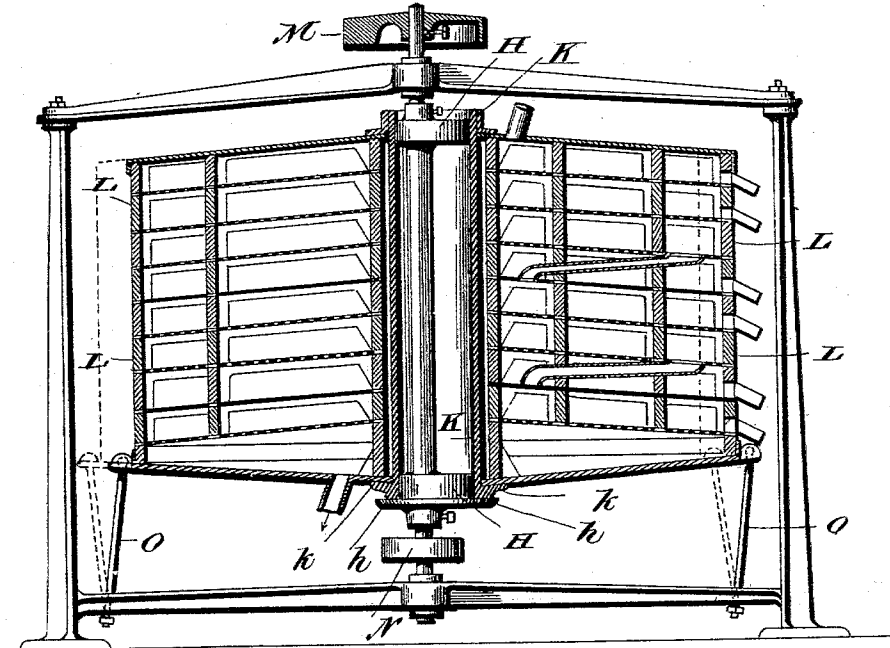
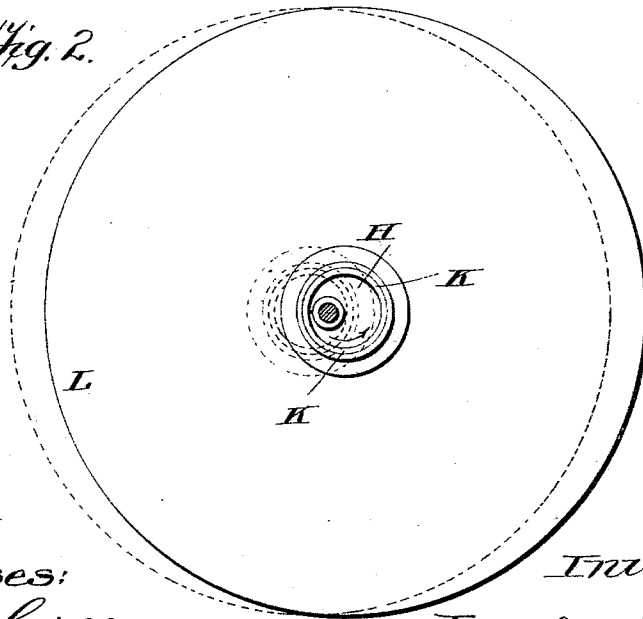


Fig. 2.



Witnesses:

L. C. Hills.

F. B. Keefe.

Inventor:

John Armstrong McAnulty

by Maxwell Bailey
his Atty.

UNITED STATES PATENT OFFICE.

JOHN A. McANULTY, OF MANHEIM, PENNSYLVANIA, ASSIGNOR TO JOHN A. McANULTY, OF SAME PLACE, AND J. HAMILTON SMALL AND W. T. NELSON, OF YORK, PENNSYLVANIA.

ACTUATING MECHANISM FOR FLOUR-BOLTS.

SPECIFICATION forming part of Letters Patent No. 546,240, dated September 10, 1895.

Application filed January 18, 1895. Serial No. 535,388. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. McANULTY, a citizen of the United States, residing at Manheim, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Actuating Mechanism for Flour-Bolts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to flour-bolts of the kind described in my application filed September 10, 1894, Serial No. 522,673—that is to say, a flour-bolt wherein an eccentric-shaft for giving gyratory motion to the sieves is combined with a sieve-supporting frame sleeved centrally upon and supported by the eccentric-shaft, and means whereby said frame is held against rotation while permitted gyratory movement.

My present improvements consist in combining with the instrumentalities above enumerated a counterbalance or counterweight mounted on and revolving with the eccentric-shaft for the purpose of preventing the jar and shake and swaying or swinging motion of such machines, which, by reason of the unequal distribution of weight therein, is apt to occur when the parts are in rapid movement.

The nature of my improvement can best be explained and understood by reference to the accompanying drawings, in which—

Figure 1 is a vertical central section of a flour-bolt embodying my invention. Fig. 2 is a plan of the upper sieve, showing in dotted lines the change in position of the sieve due to the thread of the eccentric.

The sieve-supporting frame, which is sleeved centrally upon the eccentric-shaft, consists of a sleeve K, which fits around the eccentric or double eccentric H, and at its base rests upon the flange h of the eccentric. At the lower end of the sleeve K is a flanged portion k, which forms a support for the series of superposed sieving-frames L of any desired form and number. These sieves have central circular openings to fit around the sleeve K, and they are secured to the same or to its base by bolts or in any other suitable manner.

The centrally-sleeved sieve-supporting frame is prevented from rotating with the eccentric-shaft by any customary or suitable means, which will permit said frame to receive the gyratory movement due to the rotation of the eccentric-shaft. These means consist in the present instance of metallic spring-bars O, having their headed upper ends seated in downwardly-opening cup-shaped sockets at the outer extremities of lateral extensions of the sleeved supporting-frame. The bars O have their lower ends fitted in sockets in the lower part of the stationary framework of the machine. Thus far the machine is similar to that of my application, Serial No. 522,673, hereinbefore referred to.

Upon the upper end of the eccentric-shaft is mounted a counterbalance, preferably made in the form of a wheel M, having a sufficient weight in one side to counterbalance the weight of the sieves, together with the weight of material contained within the sieves when in operation, said counterbalance being mounted upon the shaft in such a manner as to carry the weighted part directly opposite the greatest eccentric portion of the cam H. One weight counterbalancing the other gives to the machine a steady movement free from vibration. A drive-pulley N is mounted upon the shaft below the eccentric-cams and sieving-frames, by which to connect by belt to a motive power.

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

In a flour bolt the combination of an eccentric shaft for giving gyratory motion to the sieve; a sieve supporting frame sleeved centrally upon and supported by said shaft; means whereby said frame is held against rotation while permitted gyratory movement; and a counter balance on said eccentric shaft, all substantially as and for the purposes hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. McANULTY.

Witnesses:

H. C. ROBINSON,
LEVI P. WHITE.