

M. L. MOWRER.
Middlings-Purifiers.

No. 155,743.

Patented Oct. 6, 1874.

Fig. 1.

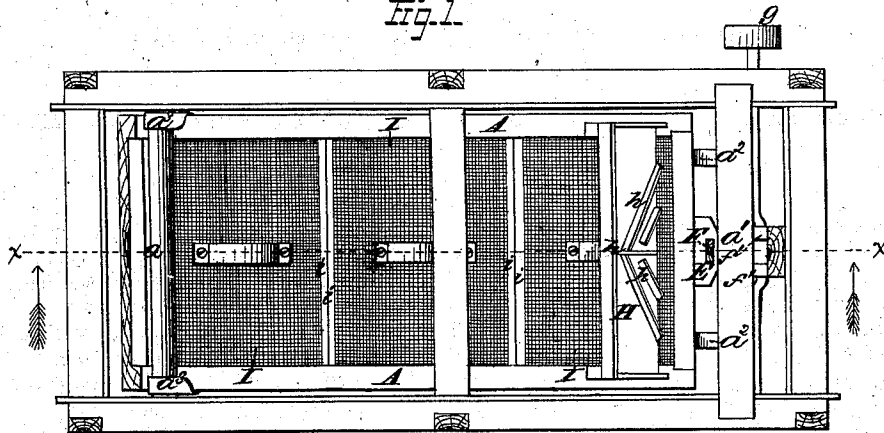
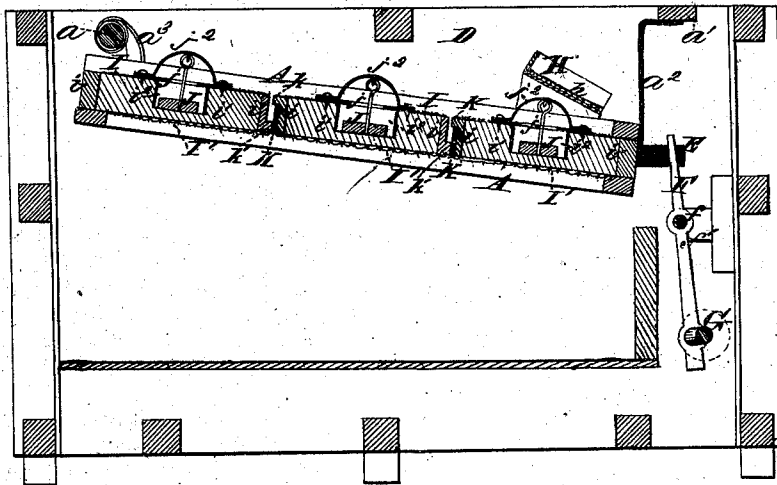


Fig. 2.



WITNESSES.

Jas. C. Hutchinson
 M. M. Sykes

INVENTOR.

Martin L. Mower
 Edson & Bros.
 Attorneys

UNITED STATES PATENT OFFICE.

MARTIN L. MOWRER, OF DAYTON, OHIO.

IMPROVEMENT IN MIDLINGS-PURIFIERS.

Specification forming part of Letters Patent No. **155,743**, dated October 6, 1874; application filed August 21, 1874.

To all whom it may concern:

Be it known that I, MARTIN L. MOWRER, of Dayton, in the county of Montgomery and State of Ohio, have invented a certain new and useful Improvement in Middlings-Purifiers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, in which—

Figure 1 is a plan, and Fig. 2 a vertical longitudinal section, of my improved purifier.

Corresponding parts are denoted by like letters in the two figures.

This invention relates to a certain improvement in middlings-purifiers; and it consists in the employment of knockers arranged so as to act simultaneously upon the upper and lower sieves, and of the insertion between the sieve-frames of rubber or other elastic material, substantially as hereinafter more fully set forth.

In the annexed drawing, A refers to the shaker or frame, having the sieves I I' suspended within and from a roller and cross-beam, a^1 , of a case or receptacle, D, at one end by springs a^2 a^2 , and at its opposite end by straps or cords a^3 a^3 , attached to the roller. To one end of the shaker or frame A is attached, in any known way, a block of rubber, E, which receives the upper end of the lever or pitman F, and by means of which a resilient movement is imparted to the shaker. The lever or pitman F is fulcrumed at f to and between projections f' f' , attached to the inner side of the case D, and suitably connected at its lower end to the crank-shaft G, the end of which, projecting through the case D, is provided with a pulley, g , to receive a band, connected with any suitable motor for communicating motion to the shaker A. Mounted upon the shaker A is a trough, H, for feeding the middlings to the sieves, which is divided up with convergent partitions h h , for properly distributing the middlings when poured or placed in the said trough. I I refer to the upper sieves, and I' I' to the lower sieves, but which are attached to the same frames i i , partitioned at i^1 i^1 . These partitions are cut away, as shown at i^2 i^2 , to receive the knockers J J, which are suspended therein by rods passing

up through elongated slotted plates j j , covering the openings having the knockers, and attached to arched plates j^2 j^2 , secured to the partitions i^1 i^1 of the sieve-frames i i . The knockers J J may be made of any suitable material, and of an oblong or other form.

It will be observed that the knockers are arranged between the two series of sieves, by which each series will be simultaneously and equally acted upon, to jar the middlings sufficiently to separate the refuse matter therefrom.

To augment the vibratory motion of the sieves themselves, and thus expedite the purification of the middlings, strips of rubber or other elastic material, K K, are inserted between the sieve-frames i i , one frame being cut away so as to let the rubber into it, and overhang the rubber, as shown at k k , and the other frame cut away in a like manner, but with its projecting portion k' abutting against the rubber in the adjoining frame, so as to cause it—the frame—to remain intact with its fellow, which will permit the sieve-frames to have an independent vibrating motion as the shaker is put in motion.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The vibrating knockers J J, suspended in recesses i^2 i^2 in the sieve-frames i i , having the sieves I I', substantially as and for the purpose set forth.

2. The strips of rubber or other elastic material, K K, inserted between the sieve-frames i i , having projections k k' , substantially as and for the purpose set forth.

3. The combination, with the sieves I I', of the strips of rubber or other elastic material, K K, inserted between the said sieves, substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name in presence of two subscribing witnesses.

MARTIN L. MOWRER.

Witnesses:

O. M. GOTTSCHALL,
GEO. BUTTERWORTH.