(No Model.)

C. S. WENGER.

MEANS FOR CLEANING SIEVES OR BOLTING CLOTHS.

No. 303,407. Patented Aug. 12, 1884.

Fig. 1.

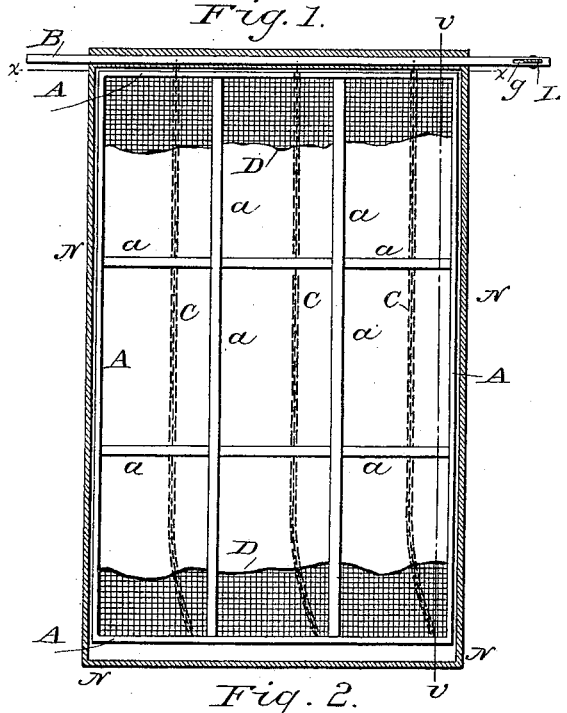


Fig. 2.

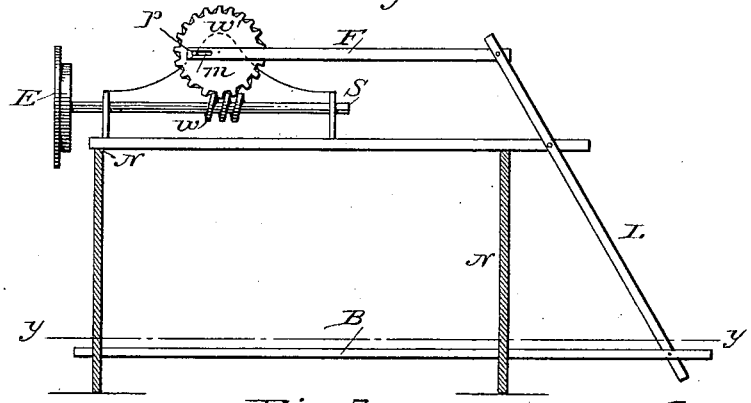
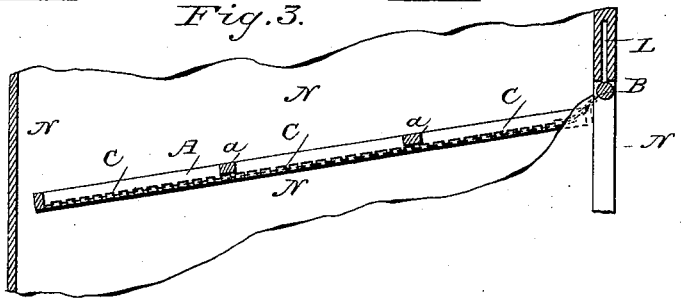


Fig. 3.



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UNITED STATES PATENT OFFICE.

CLAYTON S. WENGER, OF WEST EARL, PENNSYLVANIA.

MEANS FOR CLEANING SIEVES OR BOLTING-CLOTHS.

SPECIFICATION forming part of Letters Patent No. 303,407, dated August 12, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, CLAYTON S. WENGER, a citizen of the United States, residing in West Earl township, in the county of Lancaster, State of Pennsylvania, have invented certain Improvements in Sieve-Cleaning Attachments, of which the following is a specification.

My invention relates to improvements in the means for cleaning sieves or bolting-cloths—such as are used in flour-bolting machines, middlings-purifiers, and the like—in which light chains attached to a movable bar act in connection with the sieve; and the object of my invention is to thoroughly clean the sieve without jarring it or pounding against it. This object I accomplish in a very simple manner by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a sieve with my device attached, the mechanism actuating the same being removed above the line *y y* of Fig. 2. Fig. 2 is a section through the sieve on the line *x x*, and shows a front view of the manner in which power is applied to the reciprocating rod; and Fig. 3 is a longitudinal vertical section through *v v* of Fig. 1.

Similar letters refer to similar parts throughout the several views.

The sieve-frame A is provided with longitudinal and transverse braces *a*, which serve to keep it in shape and the cloth D tightly stretched. In the frame I have been using these braces are set in the upper part of the frame, and the transverse braces are raised above the sieve; but my device will apply equally well to a frame in which the braces are placed beneath the sieve.

At the head of the sieve I have placed a horizontal rod, B, to which are attached following-chains C, somewhat larger than a large-linked watch-chain, which lie loosely upon the cloth, the only place at which they are fastened being to the rod B, as mentioned. The rod B moves slowly back and forth a sufficient distance each way to carry every chain from side to side of its compartment. This movement of the rod is so slow that each chain, by reason of its own weight, follows the movement of its head. When the rod reaches the limit of its movement in either direction, it remains stationary for a short time before reversing its motion, allowing time for the chains to straighten themselves before beginning to return.

As I have said, my device can be used with a sieve in which the braces are put below the cloth by using the device arranged as herein described, or by lengthening the movement of the rod and employing only one chain. Instead of a chain, a long spiral spring may be used, or, in fact, anything else which will be sufficiently pliable to rest its whole length upon the cloth.

In order to give the required movement to the rod B, I employ the following-described mechanism: A driving-shaft, S, is actuated by means of a band-wheel, E. This driving-shaft has attached to it a worm, *w*, which gives motion to the cog-wheel *w'*. The cog-wheel, by means of a crank-pin, *p*, operates the crank F, which again actuates the lever L, connected with the horizontal rod B. The opening *m*, through which the crank is connected with the pin, is a horizontal slot, which prevents the pin from moving the crank back or forth for a few moments as it passes the center on either side of the axle of the cog-wheel. The lever L passes through a slot, *g*, in the rod B sufficiently long to allow of the oscillating of the lever. The ends of the rod rest in and move through openings in the sides of the box N inclosing the sieve.

The sieve has the inclination from the head to the foot, and suitable means for shaking or reciprocating it in the usual manner. The upper end of the following-chains being attached to the horizontal rod B, the lower ends, by means of the motion of the sieve and their own gravity, follow the movement of the upper ends attached to the rod, but follow somewhat behind the heads, so that when the rod ceases its motion in any direction it requires a few moments for the chains to straighten themselves before a reverse movement is begun. I do not, however, confine my claims

to this manner of moving the rod B, as there are other well-known means by which it can can be done; but

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

1. The combination, with a shaking sieve, of a reciprocating rod, and the following-chains attached thereto, substantially as herein specified.

2. The combination, with a shaking sieve, of a reciprocating rod having an intermission between the movements back and forth, and the following-chains attached thereto, as herein specified.

CLAYTON S. WENGER.

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