

(No Model.)

W. L. ARMSTRONG.
SIEVE.

No. 478,976.

Patented July 19, 1892.

Fig 1

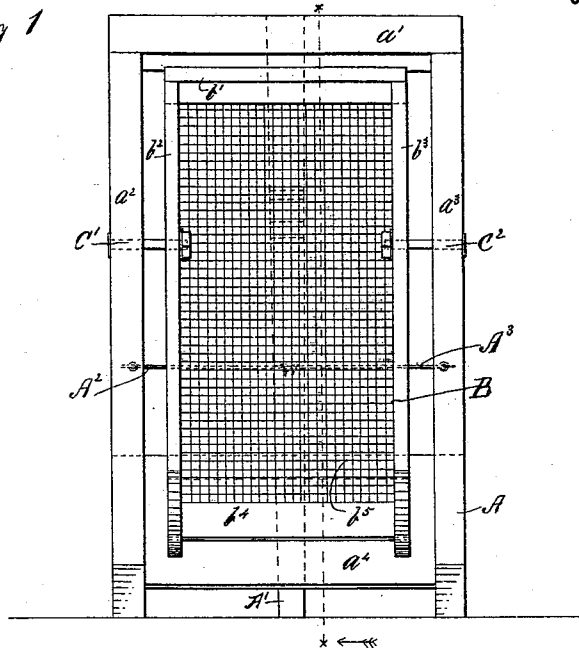
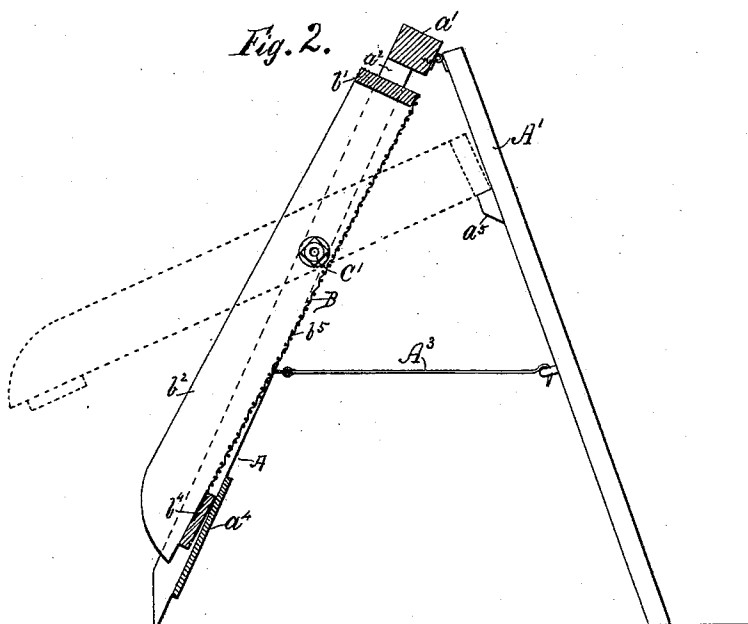


Fig. 2.



WITNESSES:

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SIEVE.

SPECIFICATION forming part of Letters Patent No. 478,976, dated July 19, 1892.

Application filed August 25, 1891. Serial No. 403,732. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. ARMSTRONG, of Bellport, Suffolk county, and State of New York, have invented a certain new and useful Improvement in Sieves, of which the following is a specification.

My improvement relates to sieves or screens, such as are used for sand or coal.

The improvement consists in the combination, with a frame, of a screen pivoted immediately of its upper and lower ends to said frame, whereby when sand or coal is thrown against it it will be oscillated out of its normal position and will afterward return there-to by gravity, and thus automatically perform the thumping which is necessary to keep it clear.

In the accompanying drawings, Figure 1 is a front view of a screen embodying my improvement. Fig. 2 is a central longitudinal section of the same, representing a sieve in bold outline as occupying its normal position and in dotted outline as occupying a position which it will assume when sand or coal is thrown upon it.

Similar letters of reference designate corresponding parts in all the figures.

A designates a frame of open construction having, as here shown, a top a' and two sides $a^2 a^3$, which are flush at the front, and having a bottom a^4 , which is rearward of the front surfaces of the sides.

The frame A may be supported in an inclined position by a prop A' , hinged at its upper end to the top piece of the frame A. This prop may be maintained in proper position to the frame A by rods $A^2 A^3$, connected at one end to the rear of the side pieces of the frame A by means of staples and having at the other end hooks, which may engage with a staple fastened to the prop A' .

B designates a sieve having a frame composed of a top piece b' and two side pieces $b^2 b^3$, which are shown as flush, and a bottom piece b^4 , which is arranged rearward of the side pieces. The sieve material b^5 may be of the usual kind and may be fastened in any

suitable manner to the frame $b' b^2 b^3 b^4$. The frame of this sieve lies within the top piece and the side pieces of the frame A and is pivoted intermediately of its upper and lower ends to the side pieces of the frame A by bolts $C' C^2$. Normally the sieve will occupy such position that the bottom piece b^4 of its frame will rest against the bottom piece a^4 of the frame A. The prop A' is provided with a stop a^5 .

When coal, sand, or other material is thrown with a shovel or other device against the upper part of the sieve, the sieve will be tilted or oscillated in such direction that its upper end will move rearward. Its movement will be limited by the stop a^5 of the prop A' . The sieve will still have an inclined position, and therefore the material thrown upon it which cannot pass through its meshes will slide down, and on reaching the lower part of the sieve will tilt the sieve back into its normal position, so that its lower end will rest against the bottom piece a^4 of the frame A. The material thrown against the sieve will therefore cause the sieve to do its own thumping, or, in other words, to operate automatically to perform the thumping.

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

The combination, with a frame having a bottom piece secured to the rear side of the side pieces, of a sieve pivoted intermediate of its ends to the side pieces of said frame and constructed to oscillate when material is thrown against its upper portion above the pivotal point, the said sieve having sufficient length to contact with the bottom piece of the frame, a prop for the frame, and a stop on the prop for limiting the tilting of the sieve, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. L. ARMSTRONG.

Witnesses:

JAMES R. WATKINS,
THOS. F. PETERSON.