

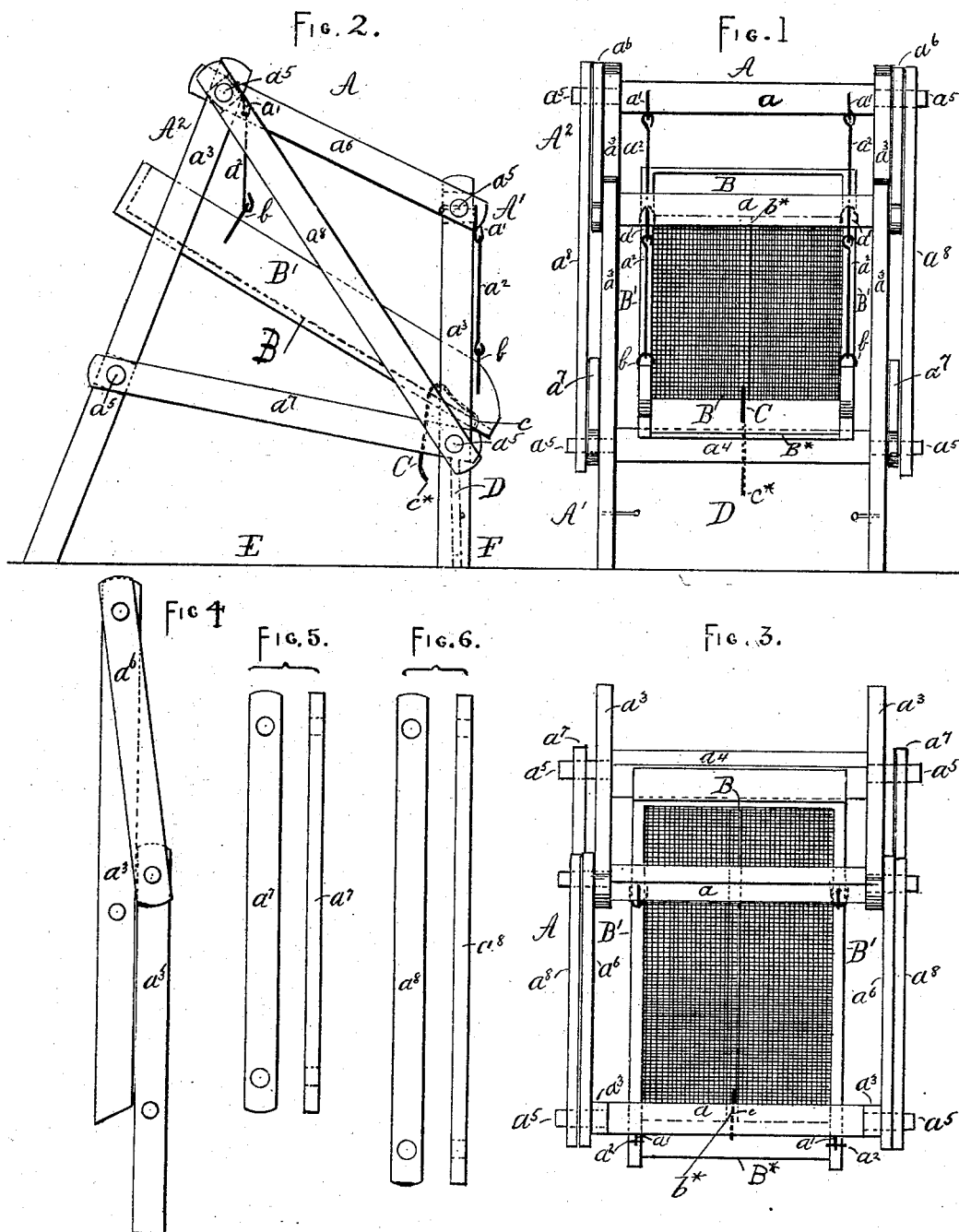
(No Model.)

E. A. WILSON.

SELF SHAKING SIFTER FOR SAND.

No. 267,049.

Patented Nov. 7, 1882.



WITNESSES: _____

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UNITED STATES PATENT OFFICE.

ELIZABETH A. WILSON, OF BELVIDERE, ILLINOIS.

SELF-SHAKING SIFTER FOR SAND.

SPECIFICATION forming part of Letters Patent No. 267,049, dated November 7, 1882.

Application filed July 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH A. WILSON, a citizen of the United States, residing at Belvidere, in the county of Boone and State of Illinois, have invented certain new and useful Improvements in Self-Shaking Sifters for Sand and Analogous Substances, of which the following is a specification.

My invention relates to improvements in that class of sifters for sand and analogous substances commonly called "self-shaking sand-sifters"; and the object of my invention is to so construct the frame of said sifters that the same may be readily folded up or taken apart for the purposes of transportation from place to place and as readily put into position for use—an advantage which will be a great benefit to masons and others, especially in the country districts, where transportation is difficult to obtain at any time, and especially in bad weather.

In carrying out my invention I form my framing in two main portions—one front, one rear—each provided with cross-bars and hooks or suspending means to which are attached rods or chains, the lower ends of which are adapted to engage with loops or hooks on the side of the sieve, thereby forming supports for the same, while at the same time the sieve is free to move backward and forward for shaking purposes. The front and back portions of the frame are formed in sections, each capable of being taken apart, and at their upper ends the said front and back frames are connected together by means of side bars, which are pivoted to the ends of the cross-bars. A pair of braces on each side of the device, which are capable of ready removal, serve to hold the front and back portions of the frame in their proper position for use, which, when removed, allow the said portions to be readily folded up for transportation.

The device is so constructed that, in addition to being capable of folding up, it can be taken apart piece by piece for packing or storing purposes.

A suitable jolt-pin is applied to the under side of the sieve to give the return shaking motion after the sand has been thrown on the sieve, which engages with a bar of the front portion of the frame. The front portion is also

provided with a shield-board to prevent the mixing of the fine or sifted with coarse or unsifted material.

The accompanying drawings form part of this specification, and illustrate what I consider the best means of carrying out my invention.

Figure 1 represents a front view, Fig. 2 a side view, and Fig. 3 a plan, of my improved device in position for use. Fig. 4 shows the framing with the side bars removed, folded up for transportation. Figs. 5 and 6 show one pair of the side bars separately.

The same letters of reference indicate corresponding parts wherever they occur.

A represents the framing of my improved sieve, which is formed in two main portions, A' A², each of which is provided with cross-bars *a a* and hooks *a'* or equivalent suspending means, to which are attached rods or chains *a²*, the lower ends of which engage with loops or hooks *b* on the sides B' of the sieve B, thereby forming supports for the sieve B, while at the same time the sieve B is free to move backward and forward for shaking purposes. The front portion, A', and rear portion, A², of the frame A are each composed of two vertical standards, *a³ a³*, which at their upper ends are connected by means of the cross-bars *a*, while toward their lower ends they are again connected by cross-bars *a⁴*. The cross-bars *a* and *a⁴* are provided with pins or extensions *a⁵*, capable of passing through holes in the standards *a³*, thereby allowing of the ready removal of the same.

a⁶ a⁶ are side bars, which are pivoted to the extensions *a⁵* of the bars *a*.

A pair of braces, *a⁷ a⁸*, *a⁷ a⁸*, on each side of the device, which are formed with holes in their ends capable of being passed over the ends of the pins or extensions *a⁵ a⁵*, serve to hold the front portion, A', and back portion, A², of the frame A in their proper position for use, as shown by Figs. 1, 2, and 3, while, when removed, as shown by Figs. 4, 5, and 6, the portions A' A² of the frame A may be readily folded up for transportation.

C is a jolt-pin, affixed to the sieve B to give the return shaking motion to the sieve B after the said sieve has come forward after being thrust backward by the weight and impetus of the sand or material thrown upon it. The

jolt-pin C engages with the cross-bar a^4 of the front portion, A' , of the frame A. The jolt-pin C is formed by preference of stout iron or steel wire or rod, the end c of which is bent downward and passed through or otherwise
 5 suitably secured to or in the forward cross bar or piece, B^* , of the sieve B. From the point c the jolt-pin C is extended rearward and passed through the center bar or stay, b^* , of the sieve
 10 B, and is then extended downward and provided by preference with a curved end, C^* , as shown in Fig. 2, adapted to strike against the cross-bar a^4 and shake the sieve B after the said sieve B has been driven backward by the
 15 force of the material thrown onto the surface of the sieve B and such force has been expended, and the sieve falls forward by reason of its gravity, thereby imparting a jogging or shaking motion to the sieve.

20 D is a shield-board, applied to the lower part of the front portion, A' , of the frame A, for the purpose of preventing the mixing of the fine and sifted portion, which will fall at E, and the coarse and unsifted portions, which
 25 fall or lie at F.

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

1. In a self-shaking sifting device, the combination, with a folding frame, A, composed 30 of two main portions, A' A^2 , having standards a^3 a^3 , connected by cross-bars a a , a^4 a^4 , provided with pins or extensions a^5 a^5 , passing through the standards a^3 a^3 of the pivoted bars a^6 a^6 , and removable side bars, a^7 a^8 , a^7 a^8 , sub- 35 stantially as and for the purpose described.

2. In a self shaking sifting device, the combination, with a folding frame composed of two main portions, A' A^2 , pivoted to cross- 40 bars a^6 a^6 , and held in position by removable side bars, a^7 a^8 , a^7 a^8 , of the sieve B, suspending means a a' a^2 b , and jolt-pin C, substantially as and for the purpose described.

3. A folding self-shaking sifting device having a frame, A, constructed in two parts, A' A^2 , 45 pivoted together by means of bars a^6 , removable distending-bars a^7 a^8 , a^7 a^8 , suspending means a a' a^2 , sieve B, jolt-pin C, and dividing board or shield D, all arranged and adapted to operate substantially as shown and described. 50

In witness whereof I have hereunto set my hand.

ELIZABETH A. WILSON.

Witnesses:

NETTIE HILL,
C. E. FULLER.