

P. Ceredo,

Ash Sieve.

N^o 59,964.

Patented Nov. 27, 1866.

Fig. 1.

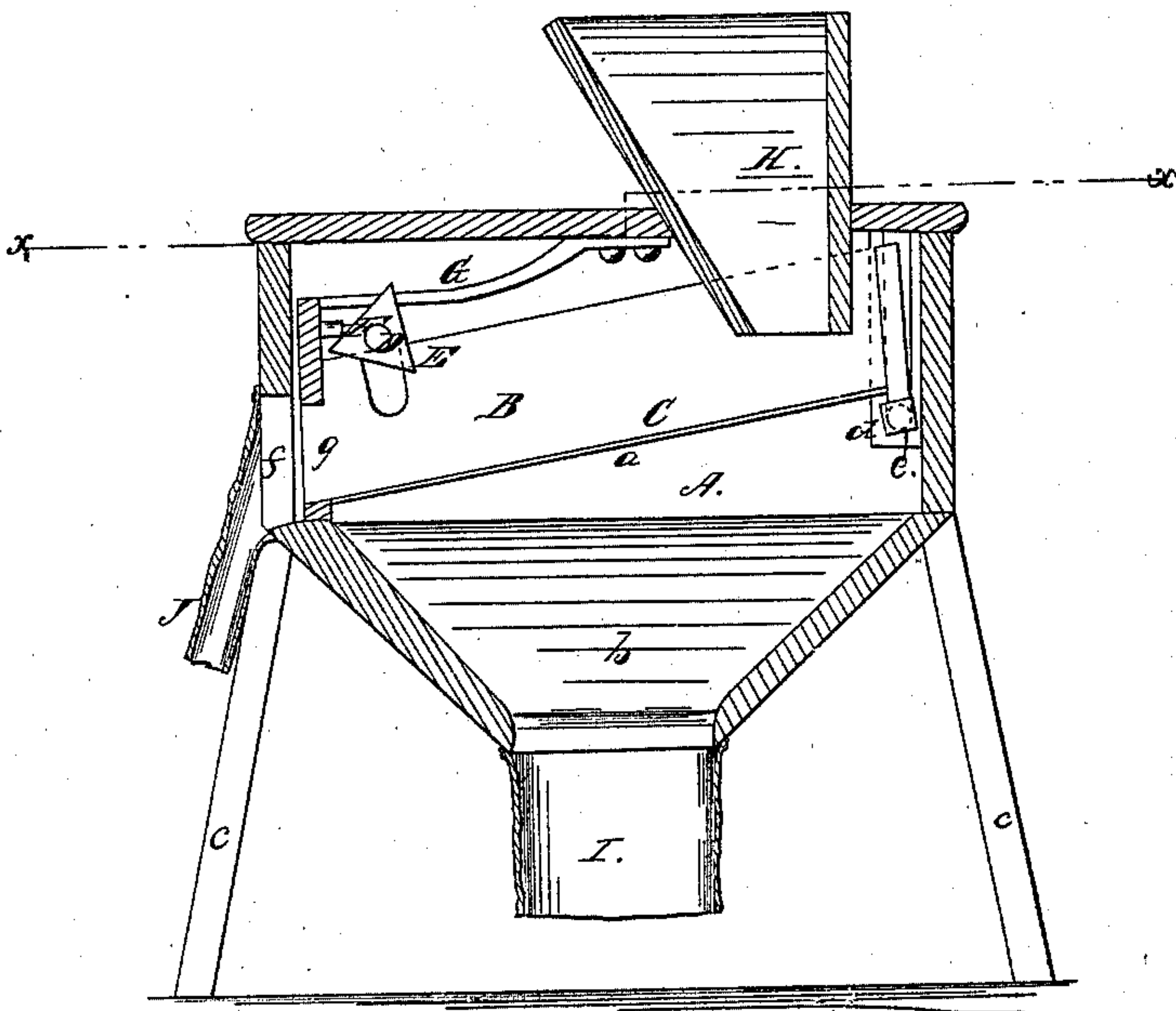
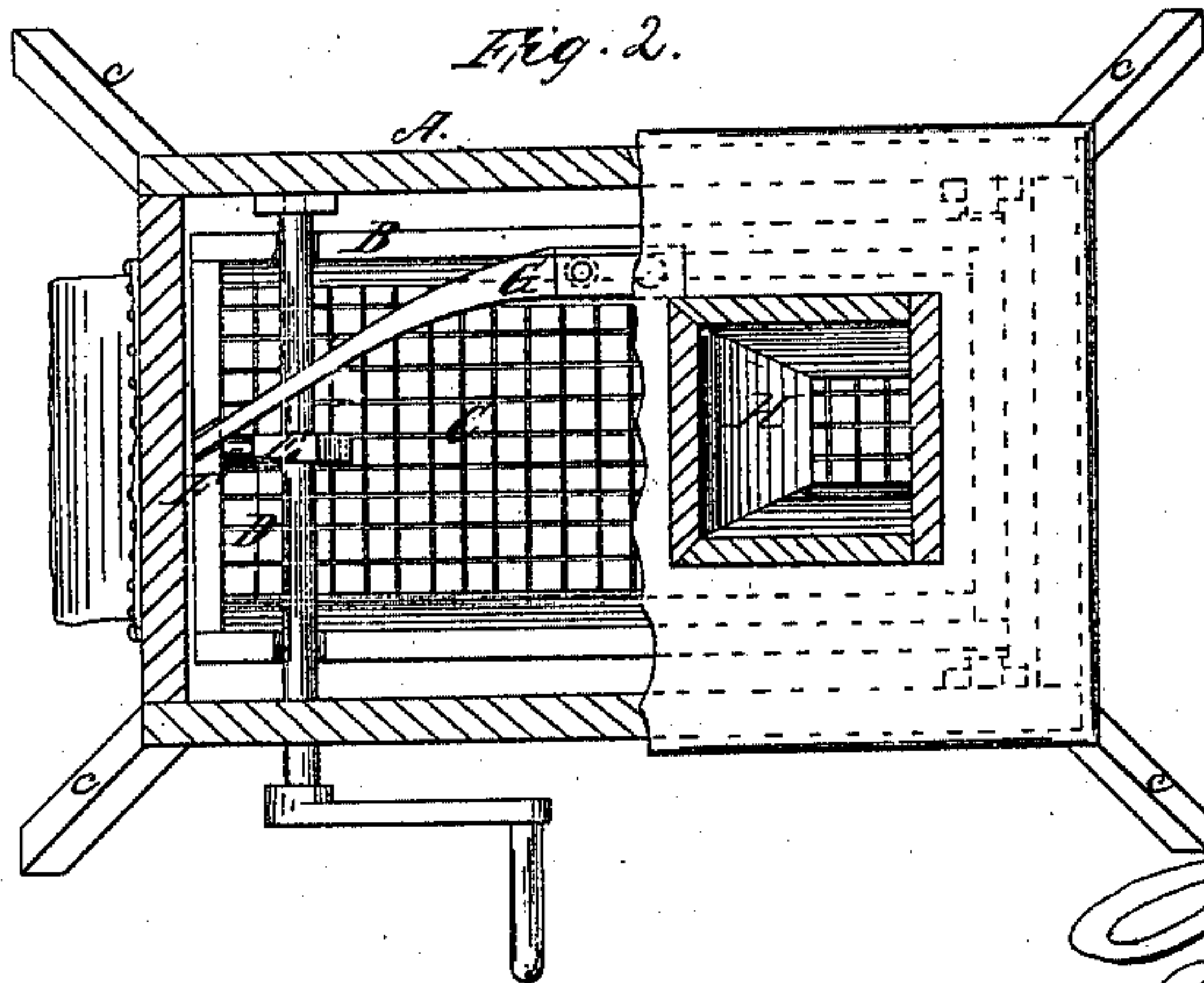


Fig. 2.



Witnesses.

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ASH SIFTER.

PAUL CEREDO, OF MONTREAL, CANADA EAST, ASSIGNOR TO HIMSELF AND
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Letters Patent No. 59,964, dated November 27, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, PAUL CEREDO, of Prussia, now temporarily residing in Montreal, in the Province of Canada East, have invented a new and improved Screen or Sifting Device; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention.

Figure 2, a horizontal section of the same, taken in the line $x\ x$, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved screen or sifting device for separating ashes from cinders or unconsumed coal, and for sifting or separating other substances; and it consists in the employment or use of a screen-box, provided with a proper screen, and fitted within a suitable case or box so as to work on journals or pivots, and operated through the medium of a cam and spring, the case in which said screen-box is placed being provided with discharge spouts so arranged in relation with the screen-box as to discharge the two parts, which are separated from each other by the screening process, from different parts of the case and into separate receptacles prepared to receive them.

A represents a case, the upper part, a , of which is of rectangular and the lower part, b , of inverted pyramidal form. This case is supported at a suitable height by means of legs c , and within the upper part, a , of the case there is placed a rectangular screen-box, B, having a screen, C, which forms its bottom. This screen-box has a slightly inclined position, and it is provided at each side of the lower part of its elevated end with a journal, d , said journal being fitted in proper bearings, e , at the inner sides of the case; the front or depressed end of the screen-box, when at its lowest point, resting on the upper edge of one of the sides of the lower part, b , of the case A—see fig. 1. D represents a shaft which passes transversely through the upper part, a , of the case, and has a cam, E, upon it of triangular form, said shaft being just above the screen-box, and the cam E acting upon or against a pin F in the front part of the screen-box, as shown in fig. 1. G is a spring which is attached at one end to the under side of the top of the case A, and has its opposite and free end bearing upon the upper part of the depressed end of the screen-box at about its centre. H is a hopper, which is fitted in the top of the case A, and conducts the material to be sifted into the screen-box B, at its elevated end. At the lower end of the part b of the case A, there is an opening to which a spout, I, is attached, flexible or rigid, and a spout J is attached to the end of the part a of the case A, over an opening, f , which is in line with an opening, g , in the depressed end of the screen-box B.

The operation is as follows: The substance to be screened or sifted is poured into the hopper, H, which conducts it into the screen-box, B, at its elevated end, and, motion being communicated to the shaft, D, by any convenient power, the cam, E, will raise the depressed end of the screen-box, B, in consequence of the angles of the cam striking against the pin F, the screen-box being forced down, as each prominence of the cam passes the pin, by the spring G. By this means a vibratory motion is given the screen-box, and the fine particles of the substance being screened pass through the screen C and down into the lower part, b , of the case and are discharged through the spout I into any convenient receptacle prepared to receive them, while the coarser particles which cannot pass through the screen are discharged from the depressed end of the screen through the opening, g , in the depressed end of the screen-box, and through an opening, f , in the case A, into spout J, which conducts them into a receptacle prepared to receive them. In sifting heavy substances the spring G may be dispensed with, as the screen-box B will in that case fall sufficiently quick under the weight of its contents; but in sifting light substances the spring would be desirable in order to insure a lively motion of the screen-box.

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

The arrangement of the screen-box B, cam E, spring G, spouts I J, constructed and operating in the manner and for the purpose herein specified.

PAUL CEREDO.

Witnesses:

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