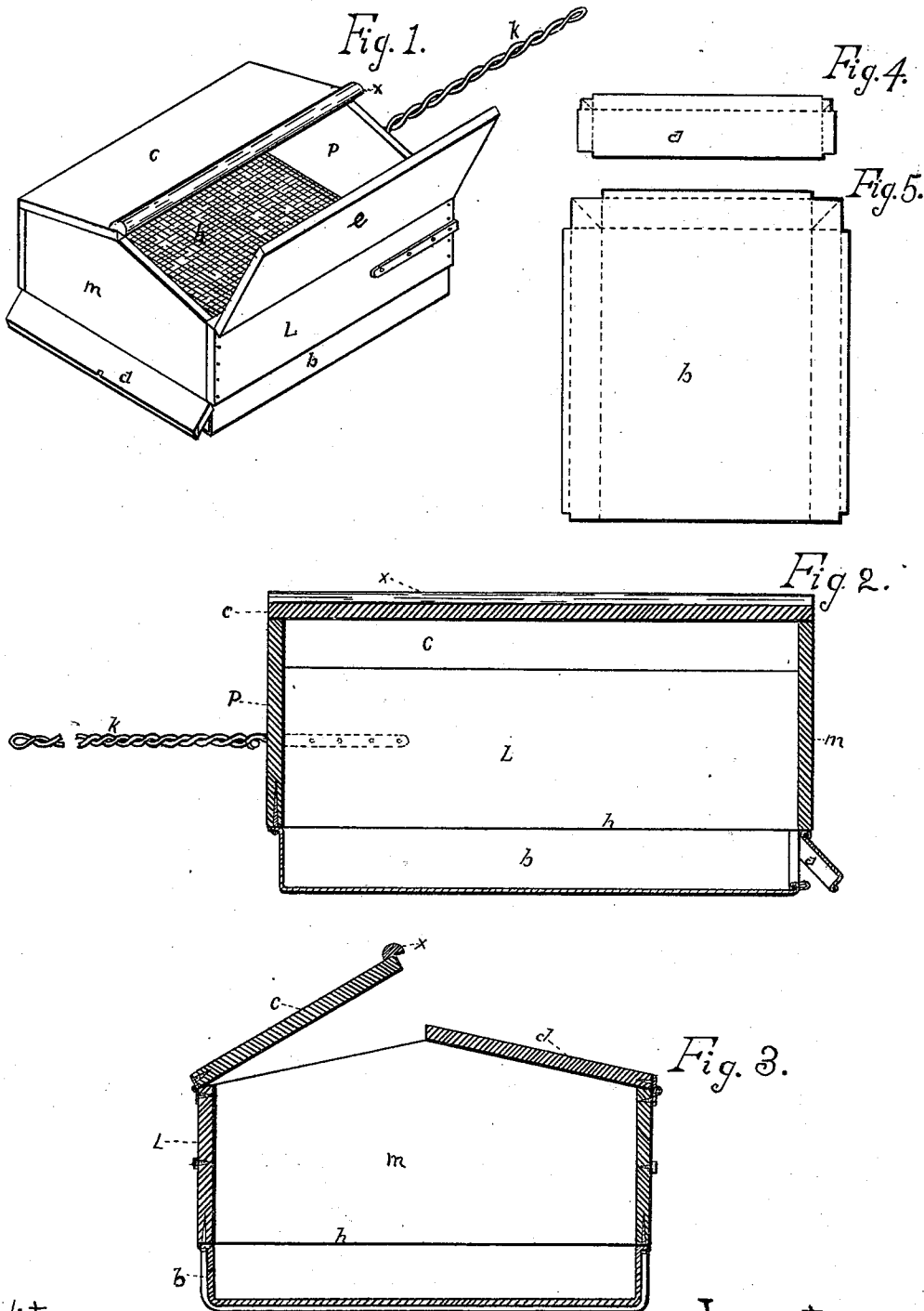


(No Model.)

J. L. RAPPLEYEA.
DUSTLESS COAL OR FLOUR SIFTER.

No. 549,019.

Patented Oct. 29, 1895.



Witnesses.

A. C. Ormsby
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UNITED STATES PATENT OFFICE.

JOHN L. RAPPLEYEA, OF NEWBURG, NEW YORK, ASSIGNOR TO CHARLOTTE
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DUSTLESS COAL OR FLOUR SIFTER.

SPECIFICATION forming part of Letters Patent No. 549,019, dated October 29, 1895.

Application filed June 15, 1895. Serial No. 552,894. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. RAPPLEYEA, a citizen of the United States, residing at the city of Newburg, in the county of Orange and State of New York, have invented a new and useful Dustless Coal and Flour Sifter, of which the following is a specification.

My invention relates to improvements in sifters, and has for its object to provide a sifter which will be comparatively dustless in its operation, and which is simple in construction, and which may be readily cleaned or repaired when necessary.

My invention will be better understood by reference to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 is a perspective view of my improved sifter, one of the hinged covers being raised to show the screen. Fig. 2 is a central longitudinal vertical section through the same. Fig. 3 is a vertical cross-section through the same. Fig. 4 is a plan view of the metallic blank from which the outlet-door is made, the dotted lines indicating where the blank is folded in order to fit over the end of the bottom trough; and Fig. 5 is a similar view of the blank from which the bottom trough or receptacle is made, the inner dotted lines indicating where the blank is folded to make the sides of the trough and the outer dotted lines indicating where the blank is folded to make the flanges upon the sides of the trough, by means of which the trough is secured to the bottom of the upper receptacle.

My sifter is composed of a rectangular box or receptacle, into which the ashes or flour to be sifted is poured, and a metallic trough open at one end for emptying the same is secured to the bottom edges of this rectangular box by means of screws passing through flanges on said trough, and the screen for sifting the material is held between the flanges on the bottom trough and the bottom edges of the upper box or receptacle, as will be hereinafter more fully described.

The upper box *L* is provided with hinged covers *c* and *e*, and a strip *x* is secured along the edge of one of said covers in order to make a tighter joint and prevent the escape of dust. The box is provided with end pieces *m* and *p*, sloping as shown, and at one end is

provided with a handle *k* for shaking the sifter.

The bottom trough *b* is made with a flange around three of its sides and is open at one end to allow the sifted material to be emptied. This flange is perforated to admit screws for securing the trough to the upper box, as shown in Figs. 2 and 3.

The screen *h* is held between the flanges on the bottom trough and the bottom edges of the upper box or receptacle, and the screws passing through the flanges on the said bottom trough also pass through the meshes of the screen along its edges and securely hold the said screen in position; but it will be seen that the said screen may be readily removed for the purposes of cleaning, repairing, &c., by simply taking out the screws.

A door *d*, made so as to fit over the end of the bottom trough, is hinged beneath one end of the upper box, and when closed engages a catch on the trough, which holds the said door closed.

In operation the ashes or other material to be sifted are poured into the box or receptacle *L* and fall upon the screen *h*, the door *d* being kept closed. By agitating the sifter by means of the handle *k* the fine material will fall through the screen and down into the bottom trough *b*. When the bottom trough becomes full, or when all the material has been sifted, the outlet-door *d* may be opened and the sifted material poured out. The larger particles will remain upon the screen and may be emptied by tilting the sifter.

It will be seen that I provide a neat, cheap, and efficient device for sifting coal-ashes, flour, or any other substance that would ordinarily require to be sifted in a household.

It will be seen that the screen being readily removable, several different grades of screens may be made to accompany each sifter, and a fine or a coarse screen may be used, according to the material to be sifted.

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

In a sifter of the character described, the combination with the rectangular box *L*, having hinged lids *c* and *e* forming an approximately dust tight cover therefor, of the metallic trough *b* having flanges along three of

its upper edges by means of which flanges the
said trough is secured to the box L by screws
passing through said flanges, the said trough
being open at one end for the discharge of
5 its contents; the door *d* hinged to one end of
the box L and adapted to close the open end
of said trough *b*; the metallic screen *h* held
along its edges between the said trough *b* and

the said box L, and a handle by means of
which the sifter may be agitated, substan- to
tially as described.

JOHN L. RAPPLEYEA.

Witnesses:

A. C. ORMSBEE,
HENRY KOHL.