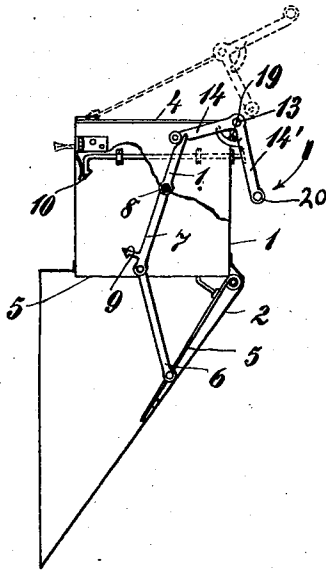


H. SIMON.  
REFUSE CONVEYER.  
APPLICATION FILED NOV. 11, 1909.

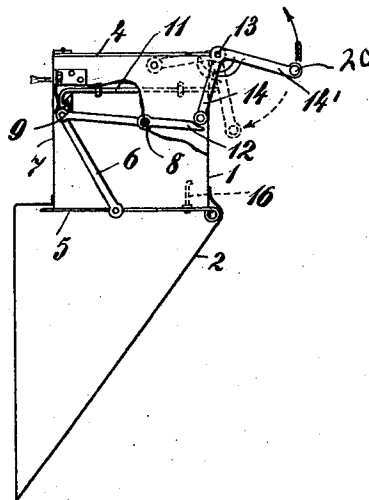
1,001,224.

Patented Aug. 22, 1911.

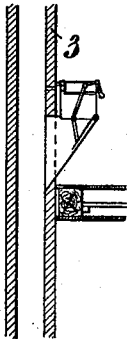
*Fig. 1.*



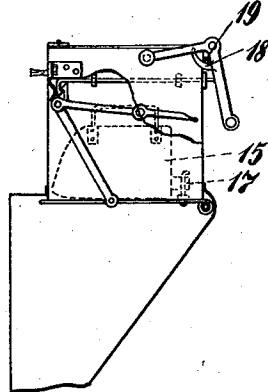
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses:*

*L. E. Backley,*  
*att. in fact*

*Inventor:*

*Hermann Simon,*  
*by Frank S. Appleman,*  
*att.*

# UNITED STATES PATENT OFFICE.

HERMANN SIMON, OF STEGLITZ, GERMANY.

REFUSE-CONVEYER.

1,001,224.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed November 11, 1909. Serial No. 527,448.

*To all whom it may concern:*

Be it known that I, HERMANN SIMON, a subject of the German Emperor, and residing at Steglitz, near Berlin, Germany, have invented certain new and useful Improvements in Refuse-Conveyers, of which the following is a specification.

The subject-matter of my invention is a device by means of which ashes and dust and other refuse can be emptied directly from the kitchen or other chamber of every story through a shaft into the dust-bin placed in the yard or cellar, dust and odor being avoided.

The devices of this kind known heretofore allowed dust and odor to penetrate unimpededly into the rooms because either an intermediate cover was entirely lacking, and consequently the shaft was not closed when emptying rubbish into it, or, if such cover were used, the shaft was not continuously and certainly closed while emptying rubbish into it. In addition, the attendance of such known devices was very troublesome.

A primary object of my invention is to overcome these drawbacks. To this end, I provide a refuse hopper which is operated very simply and has a lever-actuated intermediate cover which tightly closes the shaft before the top cover opens, said intermediate cover being only released or allowing the refuse charged into the dust-box to fall after the top cover has been firmly closed. The ashes together with the bin holding them are inserted into my apparatus and consequently do not require to be emptied in.

One illustrative embodiment of my invention is represented by way of example in the accompanying drawing, wherein:—

Figure 1 is a side elevation showing the box completely closed, the side wall being shown broken away; Fig. 2 is a like view at the moment when the cover is just opening as the angle lever moves in the direction of the upper arrow; Fig. 3 shows diagrammatically the general arrangement of my apparatus with a shaft, and Fig. 4 is a side elevation showing a dust-bin carried by the pivoted bottom.

Referring to the drawing, the bottom part of the box 1 of sheet iron or other suitable material and provided with flat levers is connected by means of a funnel-shaped member 2 with the shaft 3, through which the dust or refuse falls into the dust-hole in the cellar or basement.

Box 1 is closed from without by the hinged lid 4, whereas it is closed from the funnel-shaped ash-chute 2 by a flap or bottom 5 likewise pivotally mounted on the box. A lever 6, pivotally connected to the flap, is provided at each side of the box, and a lever 7, fulcrumed on the wall of the box at 8, is pivotally connected to each of these levers. Levers 7 have a hook 9, with which the corresponding hook 10 of a spring-pressed, outwardly-projecting rod 11 engages as soon as flap 5 closes box 1. The outwardly-projecting portion of rod 11 contacts with lever arm 14' as soon as this is in the position shown in Fig. 1.

On the outwardly-projecting part of axle 8 is attached lever 12 forming an extension of lever 7; lever-arm 14 fulcrumed at 13 on lid 4 lies against said lever 12 so that when lever 14, 14' are rotated in the direction of the upper arrow in Fig. 2 levers 12 and 7 are reversed and flap 5 is brought into its closing position, (Fig. 2). These levers 14, 14' are rotated by the handle 20 connecting them. When levers 14, 14' are rotated further lid 4 is lifted from box 1 so that refuse can be emptied into it or the dust-bin 15 can be inserted or removed. Flap 5 has a projection or stop 16 behind which the eye 17 attached to the dust-bin 15 can be placed so that the dust-bin is prevented from falling when flap 5 is in the position shown in Fig. 1.

Now in order that lid 4 may lie tightly on box 1 as soon as flap 5 moves downwardly, lever arm 14' is provided with a hook 18 which may be guided through the wall of the box and abut against the wall itself or slide outside under a corresponding abutment 19. Said hook 18 is bent eccentrically around axle 13 in such manner that the distance from said axle to the root of the hook 18 is less than that from the axle to the tip of the hook 18. In this manner lid 4 is pressed firmer on the box 1 when handle 20 is depressed.

My improved apparatus is operated as follows: By reversing the levers 14, 14' in the direction of the upper arrow in Fig. 2 levers 12, 7, 6 and flap 5 are reversed until they are locked by hook 9 engaging hook 10. During this movement lid 4 cannot rise since hook 18 is still held by the abutment or pin 19.

In the position according to Fig. 2 lid 4 is raised, together with its levers 14, 14', by means of handle 20, the refuse is emptied

in or ash-bin 15 is inserted into box 1, when the lid is replaced on the box and levers 14, 14' rotated in the direction of the dotted arrow in Fig. 2, whereby lid 4 is locked by means of hook 18. As soon as lever arm 14' abuts against the spring-pressed rod 11 and is pressed farther toward the rear wall of the box, hook 10 releases hook 9, flap 5 descends and the refuse falls into the hopper 2 and shaft 3.

I claim:—

1. In a refuse conveyer of the character described, the combination, with a dust box having a lid pivoted thereon and a pivoted bottom or flap, of an angle lever fulcrumed on said lid, a spring-pressed rod having a hook mounted movably on a side wall of the box and projecting in front thereof, and a two-armed lever fulcrumed on said side wall and connected with said flap, the latter lever having a hook arranged to engage said former hook, and said angle lever being adapted to coact with said two-armed lever, and thereby raise said flap into its closed position, and with said rod and thereby disengage said hooks.

2. In a refuse conveyer of the character described, the combination, with a dust box having a lid pivoted thereon and a pivoted bottom or flap, of an angle lever fulcrumed

on said lid, an eccentrically-curved hook attached to the angle lever, an abutment on said box normally engaged by said hook, and a two-armed lever fulcrumed on a wall of the box and connected with said flap, said angle lever being arranged to coact with said two-armed lever and thereby raise the flap into its closed position, substantially as described.

3. In a refuse conveyer of the character described, the combination of a dust box having a lid pivoted thereon and a pivoted bottom or flap, an angle lever, having an eccentrically-curved hook, fulcrumed on said lid, said box having an abutment normally engaged by said hook, a two-armed lever fulcrumed on a side wall of the box, a link connecting one end of the latter lever with said flap, said angle-lever normally depressing the other end of the two-armed lever and thereby holding the flap elevated, and a stop (16) on said flap for holding a dust-bin when the flap is in its lowest position.

In testimony whereof, I affix my signature in the presence of two witnesses.

HERMANN SIMON.

Witnesses:

WOLDEMAR HAUPT,  
HENRY HASPER.