

No. 744,127.

PATENTED NOV. 17, 1903.

F. STRASSER.
DUST VAN.

APPLICATION FILED MAR. 17, 1903.

NO MODEL.

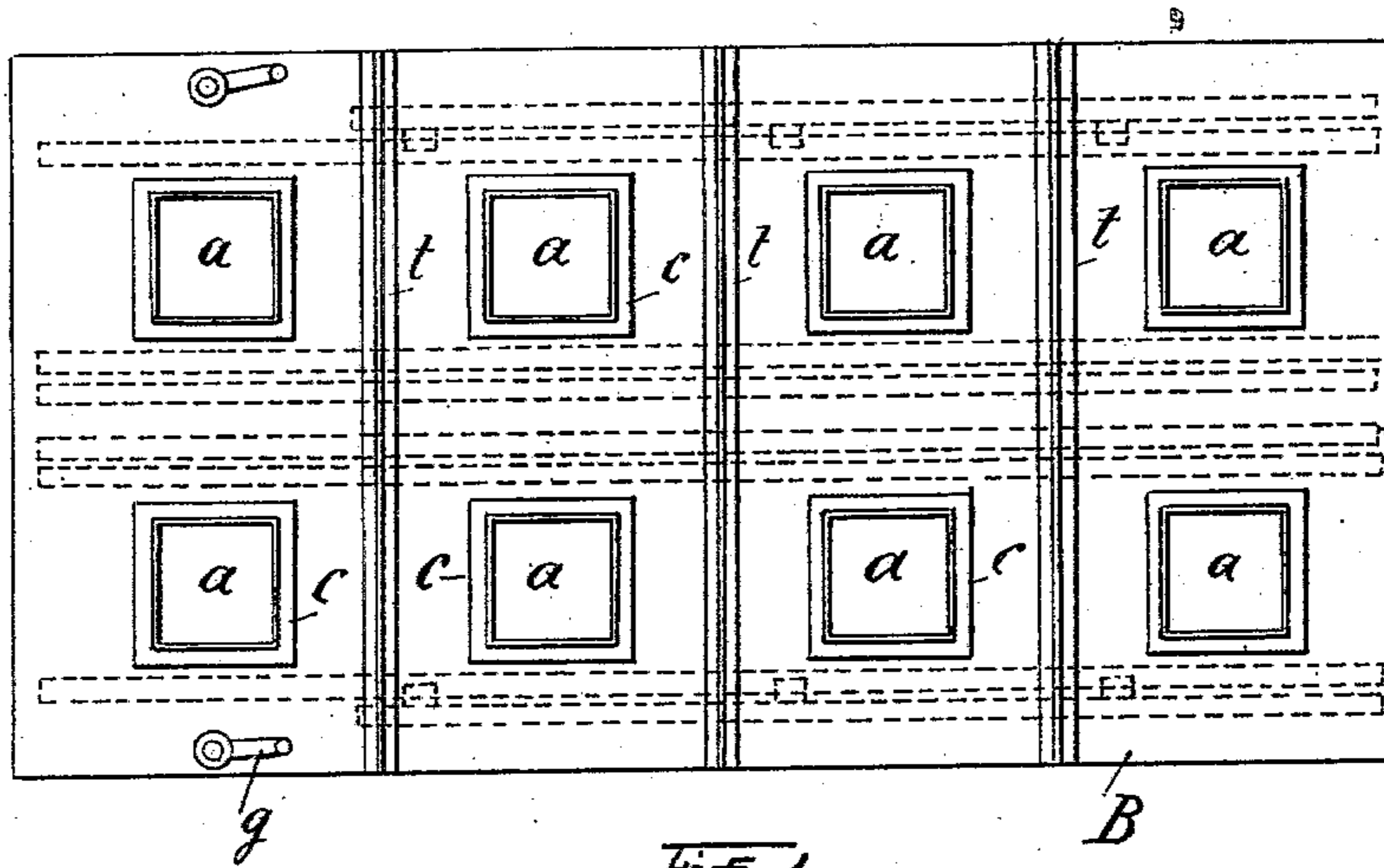


Fig. 1.

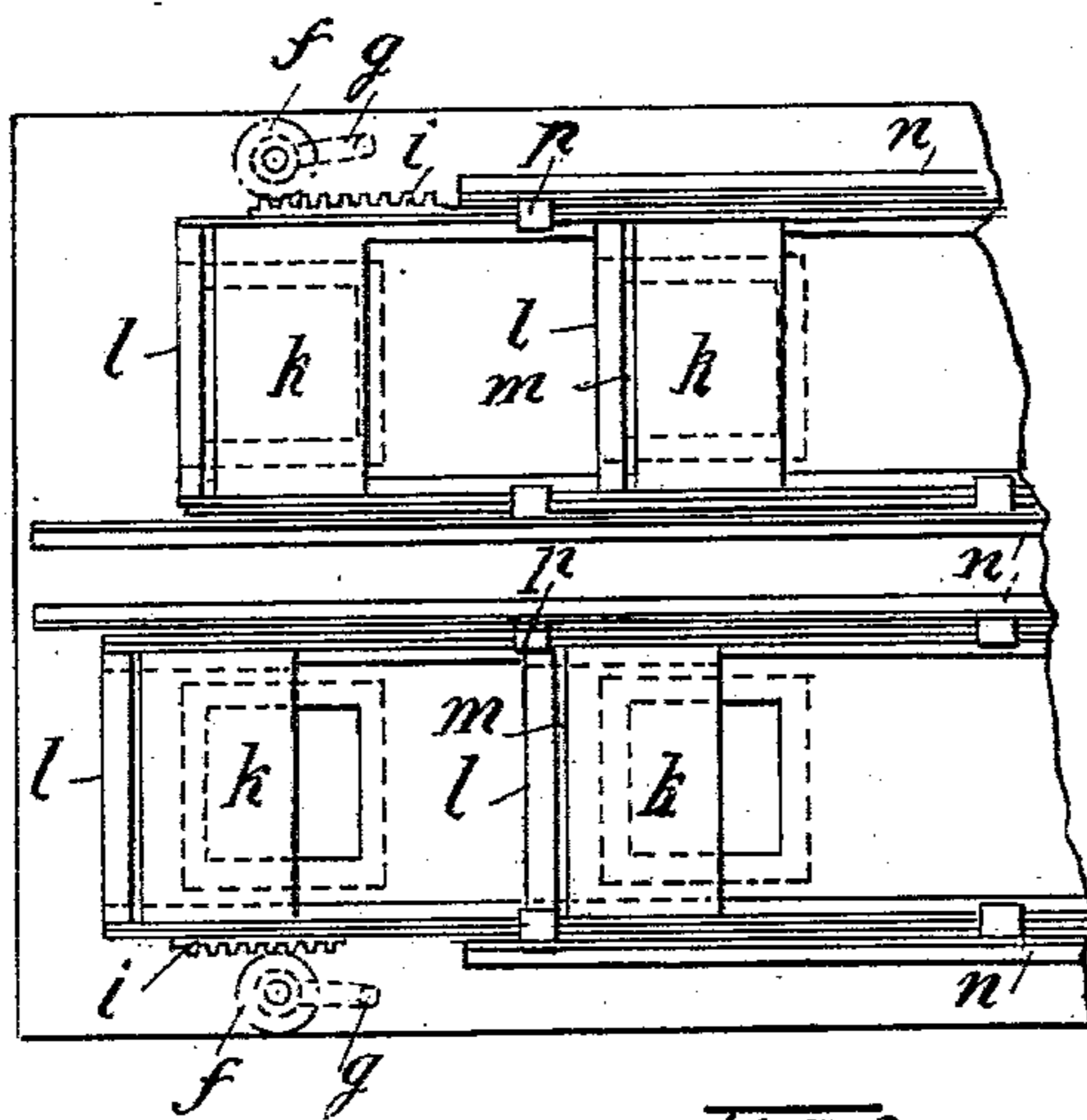


Fig. 2.

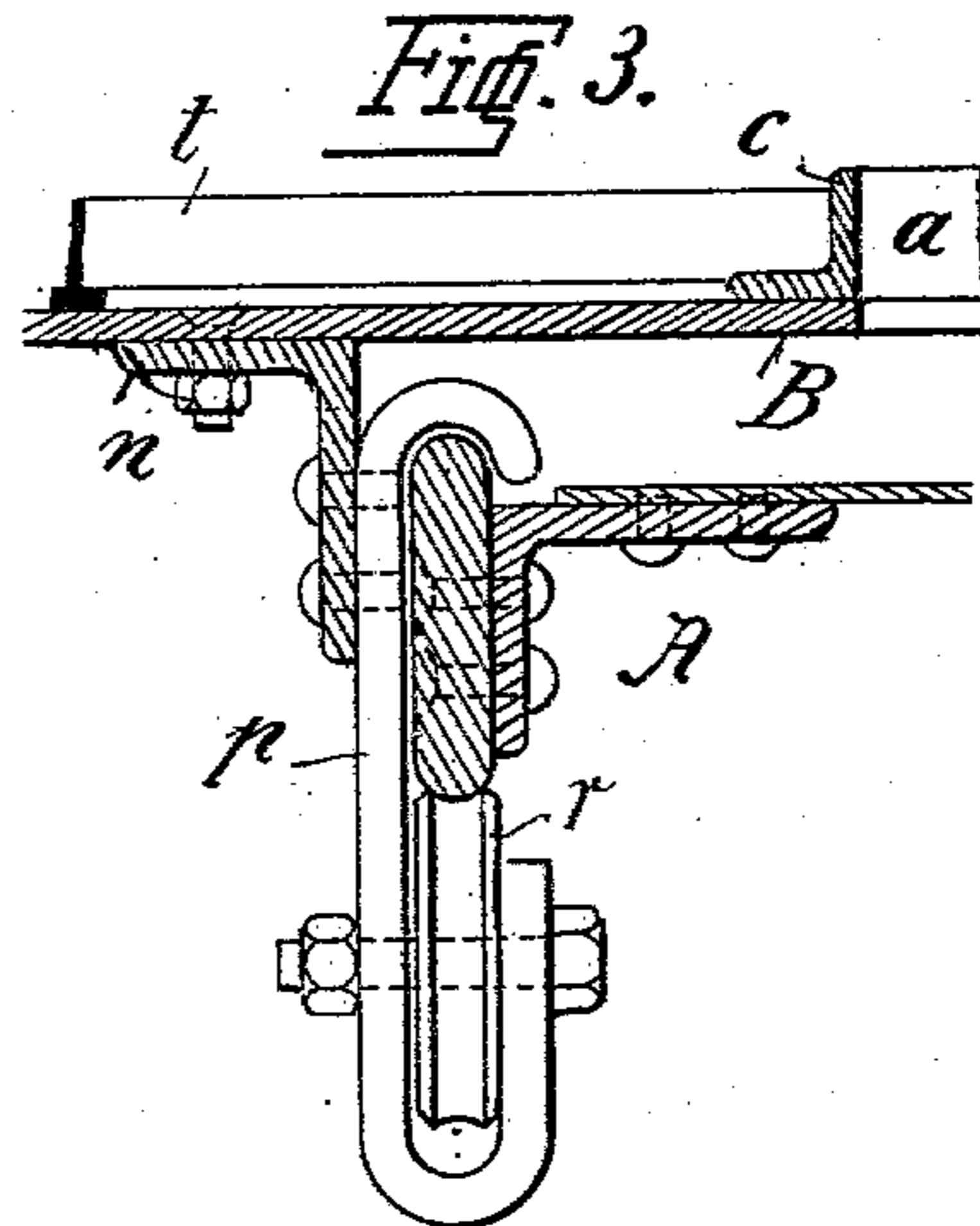


Fig. 3.

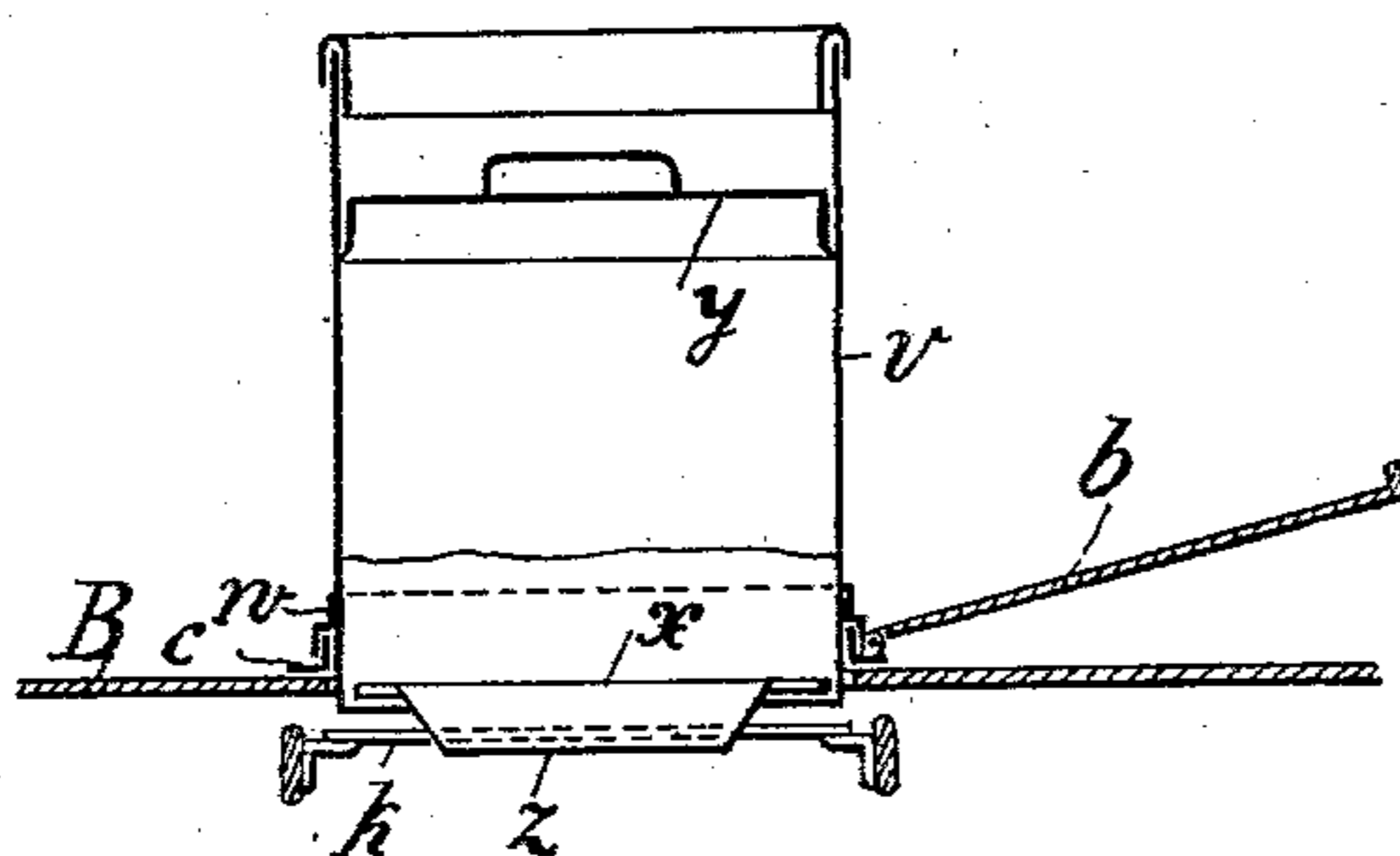


Fig. 4.

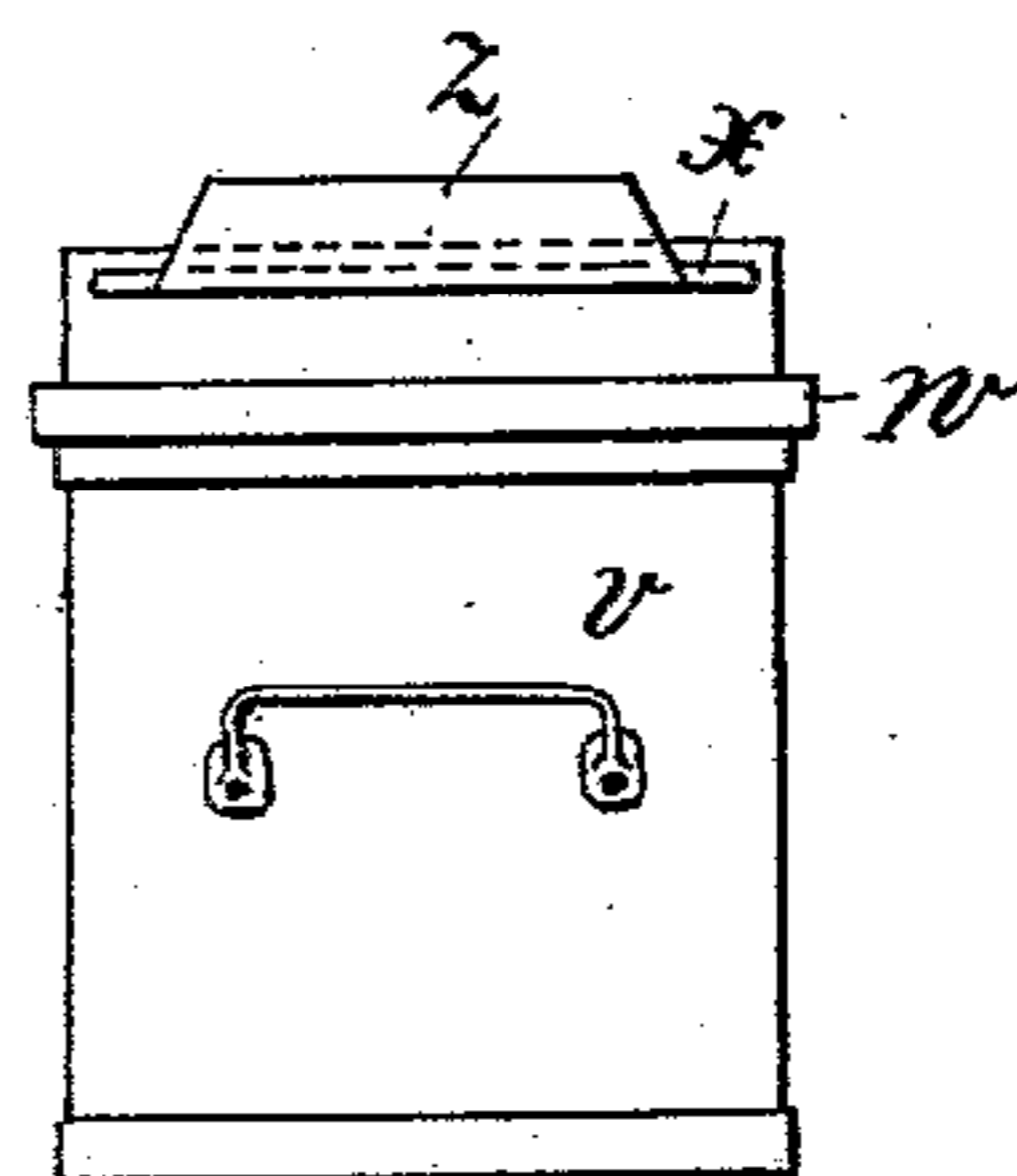


Fig. 5.

Witnesses:
Fritz Isler.
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by Ferdinand Munch
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UNITED STATES PATENT OFFICE.

FRIEDRICH STRASSER, OF ZURICH, SWITZERLAND.

DUST-VAN.

SPECIFICATION forming part of Letters Patent No. 744,127, dated November 17, 1903.

Application filed March 17, 1903. Serial No. 148,238. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH STRASSER, engineer, a citizen of the Republic of Switzerland, and a resident of Zurich, Switzerland, have invented new and useful Improvements in Dust-Vans, of which the following is a specification.

This invention relates to that class of dust-vans in connection with which dust-bins of uniform size and particular construction are used. The construction of this class of dust-vans, or more precisely of the cover-plate of the same, is improved according to the present invention in such a manner that the van is tightly closed when the dust-bins are emptied into the van.

In the accompanying drawings, Figure 1 shows a ground plan of the cover-plate of the van. Fig. 2 represents part of the lower surface of the cover-plate. Fig. 3 shows in vertical section how the movable frame below the cover-plate is suspended. Fig. 4 shows in side view, partly in section, a dust-bin placed on the van to be emptied. Fig. 5 is a side view of a dust-bin used in connection with the improved dust-van.

The van proper may be constructed in any suitable manner. It is closed by a fixed cover-plate B, in which a certain number of square openings *a* are provided. Along the edges of the openings *a* frames *c*, of angle-iron, are fixed, to which lids *b*, Fig. 4, are hinged. The cover-plate *a* is strengthened by transverse rails *t* of T-iron. On the lower surface of the cover-plate *a* angle-irons *n* are secured at both sides of the openings *a*, to which two or more brackets *p* are bolted, in the lower upwardly-bent ends of which rollers *r* are rotatably mounted. These rollers *r* serve for supporting the movable frames, of which one is provided for each row of openings *a*. The movable frames *A* are composed of longitudinal angle-irons and transverse bars *l*. On the longitudinal angle-irons plates *k*, of sheet-iron, are fixed, so that in one position of the movable frame the openings *a* in the cover-plate are closed by said plates *k*, while in the other extreme position of the frame the openings *a* are free.

The frames *A* can be moved to and fro by means of racks *i* and toothed wheels *f*, adapted to be rotated from outside the vans by means

of cranks *g*. At the left-hand side of each of the plates *k* a transverse bar *l* is fixed in such a manner that a small slot *m* is left between the transverse bar *l* and the edge of plate *k*.

The dust-bins *v*, Figs. 4 and 5, correspond in cross-section to the openings *a*, and being a little smaller than these openings they can be easily inserted into the same. The dust-bins *v* are closed by covers *x*, which are guided in suitable grooves in the walls of said bins. One end of the lids *x* is bent, so as to form an upwardly-projecting flap *z*.

Somewhat below the upper edge a shoulder *w* is provided on the dust-bin *v*. The bottom *y* of the dust-bins *v* is movably connected with the side walls by a strip of india-rubber, strong canvas, or similar material. At the outer surface of the bottom *y* a suitable handle is arranged.

The device is used as follows: When the dust-van is out of operation, the frames *A* are in such a position that the plates *k* close the openings *a* from below, which openings are closed from above by the lids *b*. If now a dust-bin is to be emptied, the lid *b* of one of the openings *a* is lifted, and the dust-bin *v* is inserted into the opening *a* upside down, so that the flap *z* of the cover of the dust-bin enters the slot *m* at the left-hand side of the respective plate *k*. The shoulder *w* of the dust-bin *v* rests on the upper end of the angle-iron frame *c*. There can be placed as many dust-bins on the dust-vans as there are openings *a*. If now the crank *g* of one of the movable frames *A* is rotated, this frame *A* is moved to the left, so that the openings *a* are left free by the plates *k*. Simultaneously the covers *x* of the dust-bins *v* are drawn out, so that the contents of the dust-bins can fall into the van. To insure a thorough emptying of the bins, the movable bottoms may be pressed down. The dust-bins cannot be removed before the frame *A* has returned to its original position—that is to say, before the openings *a* are closed again by the plates *k*, so that when the dust-bins are removed no dust or bad smell rises from the interior of the van.

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

Improved dust-vans, comprising in combi-

nation with a suitably-constructed van proper,
a fixed cover-plate, square openings in said
cover-plate, frames of angle-iron on the edges
of said openings, lids linked to one side of
5 said frames, brackets on the lower surface
of the cover-plate fixed at both sides of the
openings *a*, rollers mounted in said brackets,
movable frames, one for each row of open-
ings, supported by said rollers, plates of sheet-
10 iron fixed on said movable frame so as to
close the openings in the cover-plate when the
frame is in its locking position, transverse bars
at the left-hand side of said plates, a slot be-
tween each of said transverse bars and fixed
15 plates, dust-bins of slightly-smaller dimen-
sions than the openings of the cover-plate, a
lid at the upper end of said dust-bin sliding

in suitable grooves, an upwardly-projecting
flap at one end of said lid adapted to engage
the slot at the side of the respective fixed 20
plate when the dust-bin is inserted in an open-
ing of the cover-plate, a rack for each movable
frame, a toothed wheel for each rack and a
crank for rotating said wheel from outside
the cover-plate, substantially as described 25
and shown and for the purpose set forth.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

FRIEDRICH STRASSER.

Witnesses:

A. LIEBERKNECHT,
TH. EDEL.