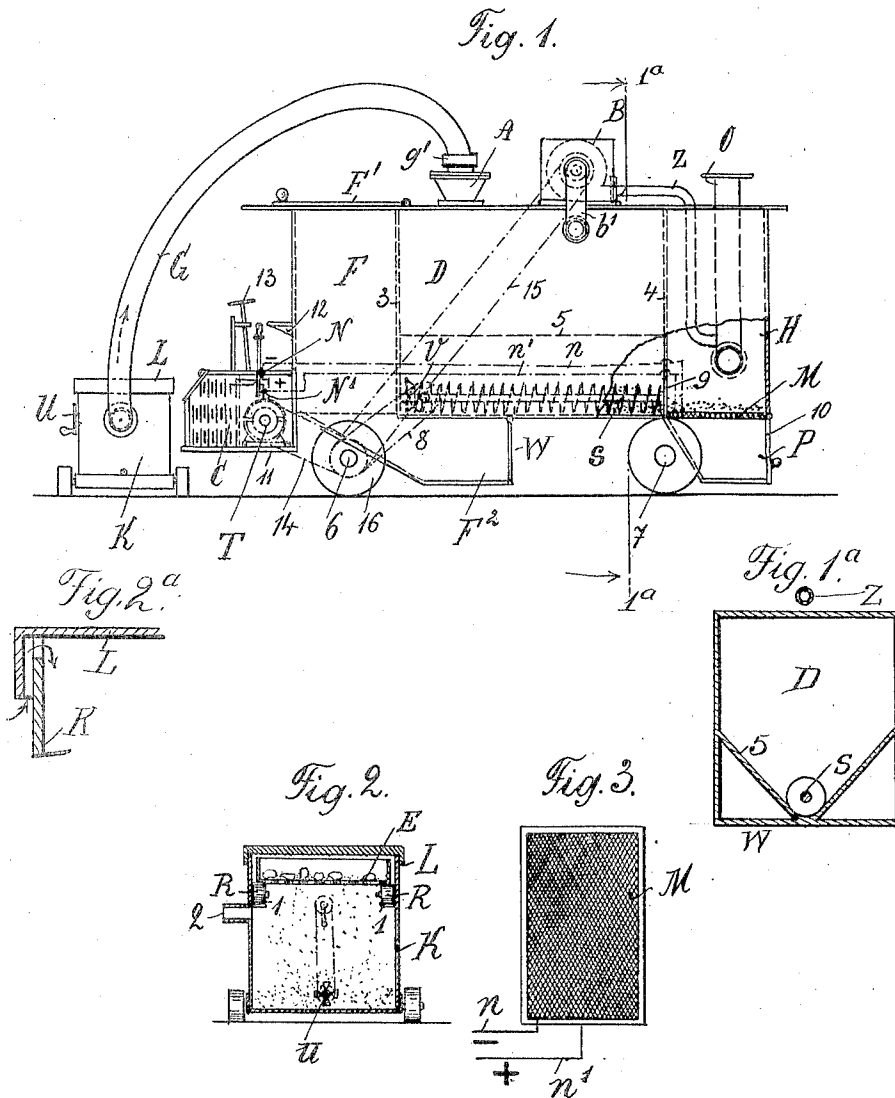


G. MAYER-DINKEL.
GARBAGE CARTING AND DESTRUCTING DEVICE.
APPLICATION FILED MAY 9, 1911.

1,009,914.

Patented Nov. 28, 1911.



WITNESSES:

John C. Sanders
Arthur S. Peck.

INVENTOR:

Gustav Mayer-Dinkel,
By *[Signature]*
ATTY

UNITED STATES PATENT OFFICE.

GUSTAV MAYER-DINKEL, OF MANNHEIM, GERMANY.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GUSTAV MAYER-DINKEL, a citizen of the Empire of Germany, residing at Mannheim, in the Empire of Germany, have invented a new and useful Garbage Carting and Destructing Device, of which the following is a specification.

My invention relates to a novel device for automatically carting and destructing garbage.

The novel device consists of a cart comprising a storage battery, an electromotor, a storage compartment for small garbage with funnel above and conveyer below, a storage compartment for coarse garbage with trap-doors, an exhaustor, a furnace with an electric burner, a transmission from the electromotor to the front wheel shaft, the exhaustor, and the conveyer, and means for passing an electric current from the battery through the electric burner and the electromotor, further of a wheeled garbage receptacle with portable sieve for each house or plant, and of a hose for connecting any garbage receptacle with the funnel of the cart.

I will now proceed to describe my invention with reference to the accompanying drawing, in which—

Figure 1 is an elevation of the garbage carting and destructing device, a part being shown in section, Fig. 1^a is a cross section through the line 1^a 1^a in Fig. 1, Fig. 2 is a cross section on an enlarged scale through the wheeled garbage receptacle with portable sieve, Fig. 2^a is a detail on a larger scale, and Fig. 3 is a plan view on an enlarged scale of the electric burner.

Similar characters of reference refer to similar parts throughout the several views.

The wheeled garbage receptacle K shown in section at Fig. 2 may be rectangular in horizontal section and is provided with two parallel rails 1, 1, on which the wheels R, R of a sieve E are made to roll in either direction. The cover L is loose on the receptacle and should in any known manner permit air to enter the receptacle. For example a flap may be left between the border of the cover and the walls of the receptacle and the upper edge of the latter may be notched, see Fig. 2^a, so that air can enter the receptacle on being sucked in. An agitator U of any known construction may be provided in the receptacle K for stirring up the garbage and facilitating the sucking off of the garbage by

means of a current of air through a tubular connection 2.

The cart W may be of any known construction and be divided by partitions 3 and 4 into three closed compartments F, D and H. The compartment F has a trap-door F¹ above and another trap-door F² below, and serves for storing up the coarse garbage separated by the portable sieve E in the receptacle K. The compartment D has a funnel A above and a hopper 5 below, which is formed by two opposite inclined walls. In this hopper 5 a conveyer s of any known construction is disposed, which is adapted to be driven from the front wheel shaft 6 by means of two chain wheels, an endless chain 8 and two bevel wheels V. The partition 4 has below an opening 9, through which the conveyer s can consecutively feed the garbage from the compartment D to the compartment H serving as a furnace. A hose G of any known construction serves for connecting the tubular connection 2 of any receptacle K with the funnel A of the cart W by means of any known joint g'. The compartment H is connected with a tube O serving as a chimney and is provided with a horizontal electric heater M (Fig. 3) of any known construction which serves at the same time as a grate. An ash-pit P of any known construction with a door 10 is provided beneath the electric burner M. An exhaustor B is disposed on the top of the cart W and its suction part is connected with the compartment D by a bend b', while its delivery part is connected by a tube z with the lower end of the chimney O.

The cart W is provided with a box 11, in which a storage battery C of any known construction is disposed, while its top serves as a foot rest for the driver on a seat 12. Also an electromotor T of any known construction is disposed in the box 11 and can be connected with and disconnected from the battery C in any known manner. The electric burner M is connected by conductors n and n' with the two poles +N and -N of the battery C and a switch N' within reach of the driver serves for closing and breaking this circuit. The electromotor T is arranged to drive the wheel shaft 6 by means of two chain wheels and an endless chain 14 and also the exhaustor B by means of two pulleys and an endless belt 15. Any known means are provided, whereby it is rendered possible to connect at

will the electromotor T either with the exhauster B alone, or with the exhauster B and the conveyer s at a time, or with the exhauster B, the conveyer s and the front wheel shaft 6 at a time. Either the front wheels 16 or the rear wheels 7 are arranged to be steered from the driver's seat 12 by means of a device 13 of any known construction.

10 The device described operates as follows: After the cart W has moved to any desired place and stopped, the respective garbage receptacle K, the sieve E of which has been charged with garbage, is wheeled to the cart and its tubular connection 2 is by the hose 15 G connected with the funnel A, whereupon the exhauster B alone is started, so that it sucks in air from without through the spaces around and the notches beneath the cover 20 L and through the sieve E, then through the lower part of the receptacle K, the connection 2 and the hose G into the compartment D, and afterward through the bend 25 b'. The current of air will force the small garbage through the holes of the sieve E, while the coarse garbage will be retained by the sieve E. The current of air will carry with it the small garbage through the connection 2 and the hose G into the compartment D, where the garbage by reason 30 of its greater weight separates from the air and falls down into the hopper 5. The separated air is discharged by the exhauster B through the tube Z into the chimney O, where it passes upward into the atmosphere. Should the receptacle K have been previously filled with small garbage by reciprocating the sieve E with the hand, it will be necessary to stir up the small garbage 40 by means of the agitator U, so as to enable the current of air to carry away with it the garbage.

When the receptacle K is empty, the cover L is opened and the sieve E filled with coarse 45 garbage is taken out of the receptacle and is charged into the compartment F through the opened trap-door F', after which the sieve E is replaced and the front wheel shaft 16 is started for moving the cart W 50 to some other place, where another charge of garbage is treated in a similar manner.

When the hopper 5 is sufficiently filled during the stoppage of the cart W at either the first or the following place, the conveyer s is started and the electric burner M 55 is inserted in the circuit of the battery C by means of the switch N', so that the destruction of the small garbage by burning in the furnace H can take place. The exhauster B produces a draft, so that the products of combustion can be carried away

through the chimney O. The rotation of the conveyer s and the operation of the burner M go on during the travels and stoppages of the cart. When the compartment F is 65 full of coarse garbage, it is on some suitable place emptied by opening the lower trap-door F'. The coarse garbage can then be treated in any known manner.

The garbage carting and destructing device 70 can be varied in many respects without departing from the spirit of my invention.

I claim:

1. In a garbage carting and destructing device, the combination with a cart, of an 75 exhauster on said cart, a portable garbage receptacle, means for connecting said portable receptacle with said cart, means for driving said exhauster, so as to produce a current of air through said receptacle for 80 carrying with it the garbage to said cart, and means in said cart for destructing the garbage by burning.

2. In a garbage carting and destructing device, the combination with a cart comprising a storage chamber and a furnace, of a 85 portable garbage receptacle, means for connecting said portable receptacle with the storage chamber of said cart, and an exhauster on said cart adapted to suck in air 90 through said portable receptacle for carrying away the garbage with the current of air into the storage chamber, and to discharge the air separated into the furnace for producing a draft. 95

3. In a garbage carting and destructing device, the combination with a cart comprising a storage chamber with hopper and a furnace, of a portable garbage receptacle, means for connecting said portable receptacle with the storage chamber of said cart, an electromotor on said cart, a storage battery on said cart, an electric burner in said furnace, means for passing at will a current from said battery through said electric 105 burner and said electromotor simultaneously or separately, an exhauster on said cart adapted to suck in air through said portable receptacle for carrying away the garbage with the current of air into the storage 110 chamber, and to discharge the air separated into the furnace for producing a draft, a conveyer in said hopper adapted to feed the garbage to said furnace, and means for transmitting at will the motion from said 115 electromotor to said exhauster, said conveyer and the wheels of said cart simultaneously or severally.

GUSTAV MAYER-DINKEL.

Witnesses:

A. O. TITTMANN,
HANS C. AUERSON.