April 16, 1929. G. B. OWEN 1,709,537

WASTE RECEIVER FOR VACUUM CLEANER BAGS

Original Filed May 13, 1927

Fig. 1.

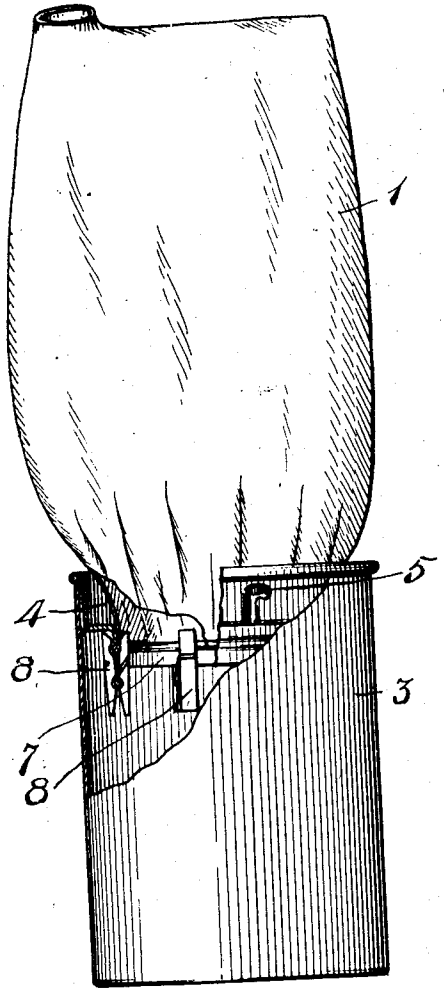



Fig. 2.

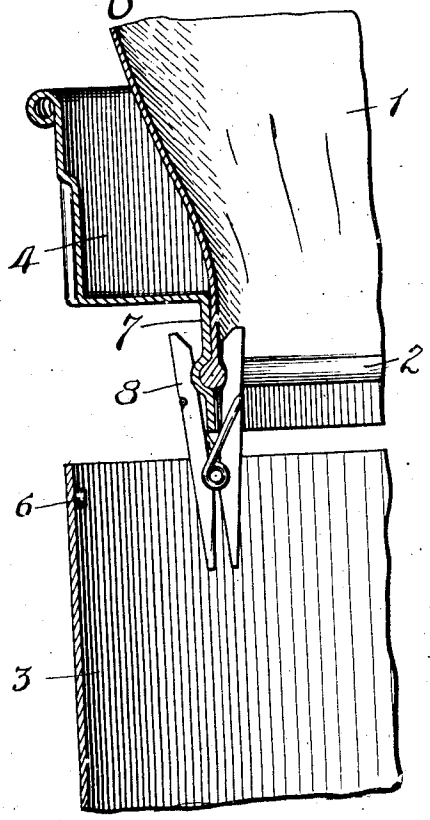



Fig. 4.

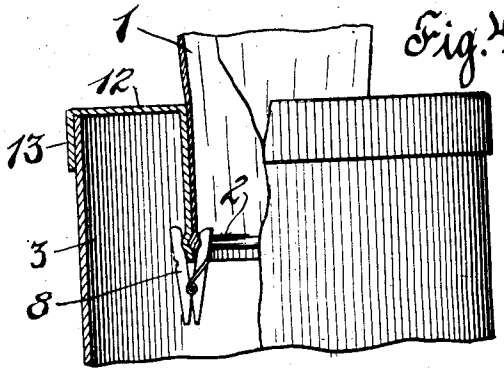
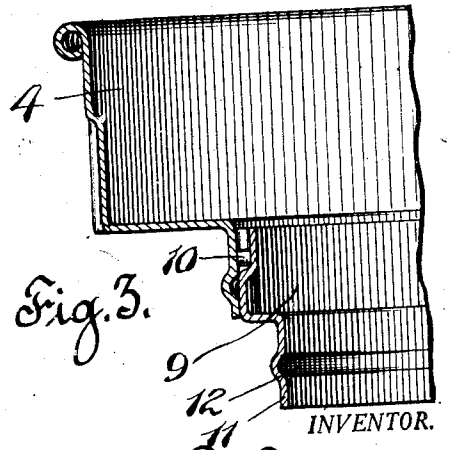



Fig. 3.




INVENTOR.

George B. Owen

BY

Milliken & Beebert

ATTORNEYS.

Patented Apr. 16, 1929. 1,709,537

# UNITED STATES PATENT OFFICE.

GEORGE B. OWEN, OF BROOKLYN, NEW YORK.

## WASTE RECEIVER FOR VACUUM-CLEANER BAGS.

Application filed May 13, 1927, Serial No. 191,018. Renewed October 6, 1928.

My invention relates to certain new and useful improvements in devices for facilitating the emptying of vacuum cleaner bags, whereby the dust, along with dirt, will be properly trapped and not allowed to escape into the room during the emptying process.

In the drawings—

Fig. 1 is a side elevation on a reduced scale of my device as in use, said view being partly broken away in section;

Fig. 2 is a relatively enlarged detail view, chiefly in section;

Fig. 3 is a sectional, fragmentary view of a modification;

Fig. 4 is a view, partly in side elevation and partly in section, of another modification.

1 represents the usual bag such as is attached to a vacuum cleaner. The open end of this bag is usually provided with a ring-like reinforcement 2 of some suitable kind. When such bags are removed from the vacuum cleaner they contain a great quantity of finely divided dust-like material, as well as heavier particles of refuse, that the machine has picked up. In the emptying of such bags must dust frequently escapes. To prevent this I provide an improved receptacle into which the entire contents of the bag may be transferred, without allowing dust to escape. The main body 3 of the receptacle may be of any suitable shape, such as a can of suitable size. 4 is what I will term a detachable stopper, which may be slid into the open end of the can and held there friction tight or by a bayonet joint, the two parts of such a joint being indicated, respectively, at 5—6. The stopper is provided with an opening in the center, with a depending flange 7 preferably provided with an annular groove or recess therein, to receive the reinforcement 2, as very clearly seen in the enlarged view (Fig. 2). Manifestly, the stopper would be inverted when applied to the bag, so that the contents of the latter would not escape.

When the ring 2 is in place in the groove any suitable fastening may be employed, such as one or more spring clips 8, to clamp the bag and the stopper together. The neck 7 for the opening in the stopper is reduced in diameter, so as to afford clearance for the fastening means 8, between the said neck 7 and the wall of the can 3.

The can 3 is applied to the stopper 4 bottom up, and when securely in place the parts are reversed into the position shown in Fig. 1, so that the contents of the bag will fall down into the receptacle 3, which, then being closed by the stopper 4, receives all the dirt and dust from the bag 1. When the bag is fully emptied the stopper 4 may be detached and the bag may be detached from the stopper and returned to the vacuum cleaner, whereupon the contents of the receptacle 3 may be emptied at some remote point, where the escape of dust will not be injurious.

In Fig. 3 I have shown a modification in which I provide an adapter 9, which is in the form of a sleeve, adapted to fit into the neck 7 of the stopper 4 and be held there in any suitable way, as by a bayonet joint 10. The adapter has a contracted neck 11 which, in turn, may have an annular recess 12 to receive the reinforcing flange of a smaller bag.

In the modification shown in Fig. 4 the stopper is indicated at 12, the same being provided with a flange 13, adapted to be slipped onto the outside of the receptacle 3, after the manner of a can cover, as shown in the other figures.

I claim:

1. In a device of the character described, a waste-receiving receptacle open at one end, a stopper detachably connected to the open end, a passage through the stopper, of smaller diameter than the can, with means for detachably securing the open end of a vacuum cleaner bag to said stopper around the edge of the opening therein.

2. In a device of the character described, a waste-receiving receptacle open at one end, a stopper detachably connected to the open end, a passage through the stopper, of smaller diameter than the can, with means for detachably securing the open end of a vacuum cleaner bag to said stopper around the edge of the opening therein, and a flange around said opening for receiving said fastening means.

3. In a device of the character described, a waste-receiving receptacle open at one end, a stopper detachably connected to the open end, a passage through the stopper, of smaller diameter than the can, with means for detachably securing the open end of a vacuum cleaner bag to said stopper around the edge of the opening therein, and a flange around said opening for receiving said fastening means, said flange having an annular groove on the inner side thereof.

4. In a device of the character described, a waste-receiving receptacle open at one end, a stopper detachably connected to the open end, a passage through the stopper, of smaller diameter than the can, with means for detachably securing the open end of a vacuum cleaner bag to said stopper around the edge of the opening therein, and a flange around said opening for receiving said fastening means, said flange having an annular groove on the inner side thereof, said clamping means comprising a detachable spring clip.

5. In a device of the character described, a waste receiving receptacle open at one end, a ring slidably connected to said open end and detachable therefrom, with means independent of the receptacle for detachably securing the open end of a vacuum cleaner bag to said ring, whereby when the ring is in place in a receptacle and the bag is in place on the ring, the entire contents of the bag may be transferred to the receptacle.

6. In a device of the character described, a waste receiving receptacle open at one end, whereby the contents may be freely discharged therefrom, a ring detachably connected to the open end, with means for detachably securing the open end of a vacuum cleaner bag to said ring, whereby when the ring is in place in a receptacle and the bag is in place on the ring, the entire contents of the bag may be transferred to the receptacle, with means for detachably interlocking said ring to said receptacle.

7. In a device of the character described, a waste receiving receptacle having an opening at one end whereby the contents thereof may be freely discharged therefrom and to receive waste from a vacuum cleaner bag, a vacuum cleaner bag having a discharge opening therein, a ring for supporting the bag around the discharge opening, said ring being attachable to and detachable from said receptacle, said bag being detachably connected to said ring independently of the receptacle.

GEORGE B. OWEN.