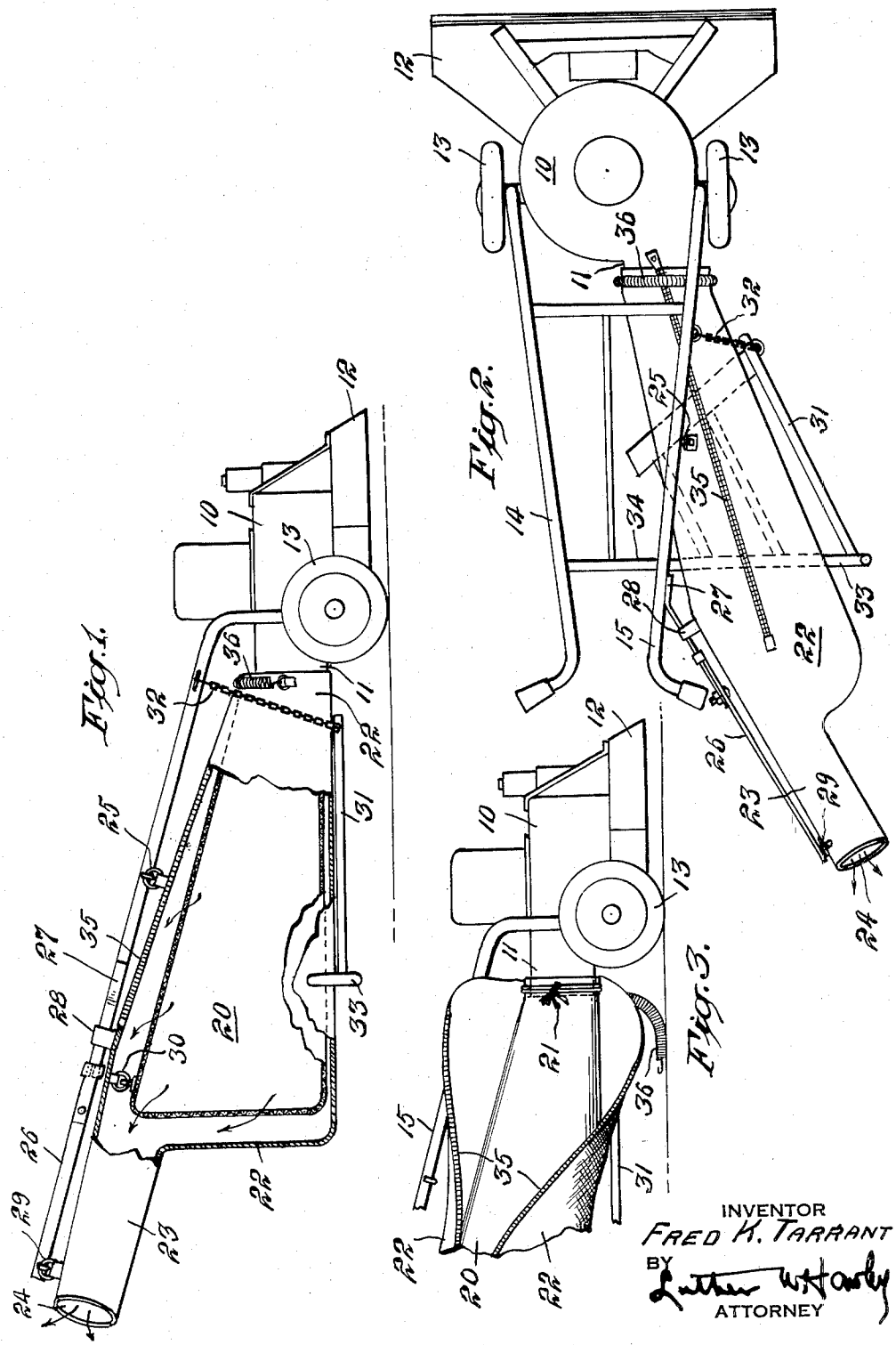
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MACHINE FOR PICKING UP LITTER

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MACHINE FOR PICKING UP LITTER

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2 Claims. (Cl. 15—350)

This invention relates to a cleaning machine and particularly a suction cleaner for cleaning streets, parking lots, parks, etc. from litter, cans, cartons, paper plates, etc.

When such litter material is picked up and sucked into the machine, a large amount of dust and dirt is also sucked into and passes through the wall of the porous bag or container in which the litter is collected. This dust is blown out from the back of the machine into the face and on the person of the operator, making the operation of the machine very difficult, if not impossible.

This invention has for its salient object to provide in a machine of the character described, means for concentrating the dust and directing it out of the machine but away from the operator.

Further objects of the invention will appear from the following specification taken in connection with the drawings which form a part of this application, and in which:

Fig. 1 is a side elevation, partly in section, of a machine constructed in accordance with the invention;

Fig. 2 is a plan view of the machine shown in Fig. 1; and

Fig. 3 is a partial side elevation showing the outer bag or container open.

In the particular embodiment of the invention illustrated, the machine consists of a casing or housing **10** for a suction fan, it being noted in Fig. 2 that the discharge spout **11** of the fan is disposed tangent to or offset from the axis of the fan. The fan casing has a wide-mouthed inlet nozzle **12** at the front thereof which is open to admit litter, such as paper plates, cans, cartons, and similar litter which is found on the streets or in parks and playgrounds.

The housing or casing **10** is mounted on wheels **13**, **13** and handles **14** and **15** extend rearwardly from the housing, as shown in Figs. 1 and 2.

A porous bag **20** is secured by tying the open front end of the bag, as shown at **21**, to the discharge spout **11**.

The porous bag **20**, because of its porosity and open mesh, permits air, dust, dirt, etc. to pass therethrough, and the problem which has been solved in the present machine is to direct this dust and dirt away from the operator and to the rear of the machine. This is accomplished by enclosing the porous bag **20** in an envelope or container **22** which extends rearwardly at an angle to the path of movement of the machine and away from the handle **15** at one side of the machine. The rear end of the envelope is tubular in shape, as shown at **23**, the tube being open at the rear end, as shown at **24**.

The envelope or container **22** is supported by a ring **25** mounted on the handle **15**, and the rearwardly extending portion of the envelope or container is supported by an extensible bar **26** connected to the handle **15** at **27**. A loop **28** on the envelope encircles the inner end portion of the bar and the outer end is supported by a ring **29** engaging a member on the bar. The porous bag **20** is

supported by a ring **30** on the envelope or container **22** engaging a member on the bag.

The envelope and bag are further supported by a cradle **31**, which is supported at its front end by a chain **32** connected to the handle **15**. A rod **33** at the rear end of the cradle is supported by a connection (not shown) to the underside of a cross bar **34** between the handles **14** and **15**.

In order to facilitate the removal of and emptying of the bag **20**, the envelope **22** is slitted rearwardly from the front end, the slit being closed by a zipper connection **35**. The front end of the envelope is secured around the front end of the bag **20** and around the discharge spout **11** by a spring **36**.

From the foregoing description it will be evident that the dust, dirt, and other fine material which has passed through the wall of the container **20** will be directed rearwardly and laterally of the path of movement of the cleaning machine and will be discharged through the discharge spout **23** of the outer envelope, thus being directed away from and in back of the operator of the machine who directs the movement of the machine by the handles **14** and **15**.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claims.

What I claim is:

1. In a litter suction cleaner, a wide-mouth suction opening for receiving the litter and other material and dirt and dust, a suction fan casing, a fan mounted therein, said casing having a discharge spout offset from the center of rotation of the fan, a porous bag secured around said spout, said porous bag permitting the passage of dust and dirt but collecting the litter and other material, a second non-porous bag secured around the spout and having a free discharge spout at the rear end thereof for discharging dust and dirt, handles operatively coupled to the casing for propelling the cleaner, means secured to the handles supporting the bags at an angle to the path of travel of the cleaner, the discharge spout of the outer bag extending away from and to the rear of the handles.

2. In a litter suction cleaner, a wide-mouth suction opening for receiving the litter and other material and dirt and dust, a suction fan casing, a fan mounted therein, said casing having a discharge spout offset from the center of rotation of the fan, a porous bag secured around said spout, said porous bag permitting the passage of dust and dirt but collecting the litter and other material, a second non-porous bag secured around the spout and having a free discharge spout at the rear end thereof for discharging dust and dirt, handles operatively coupled to the casing for propelling the cleaner, and means secured to the handles supporting the bags at an angle to the path of travel of the cleaner, the discharge spout of the outer bag extending away from and to the rear of the handles, said outer bag being slit and having a closure for the slit adapted to be opened to permit the removal of the inner bag.

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