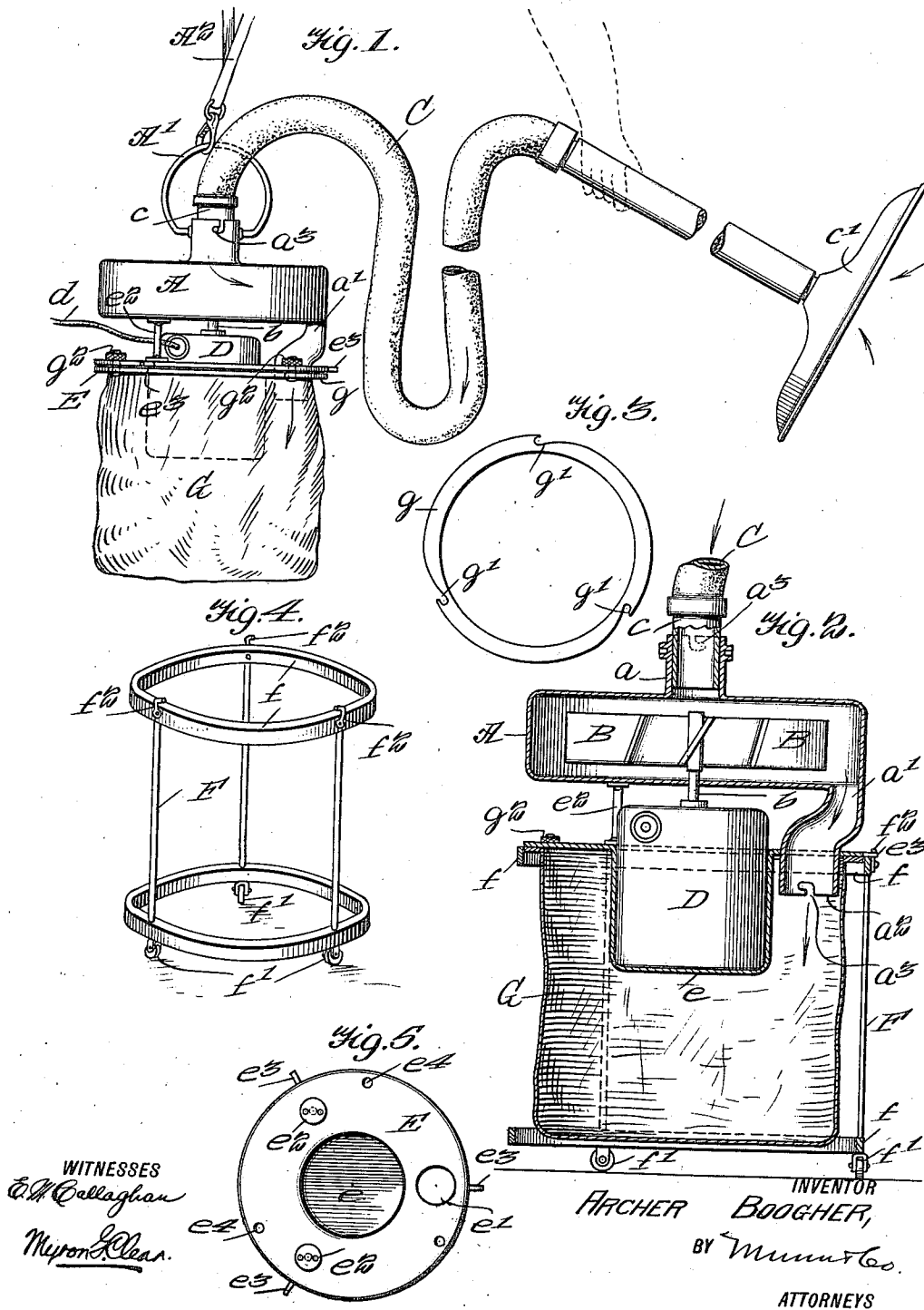


A. BOOGHER.
VACUUM CLEANER.
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ARCHER BOOGHER, OF ROANOKE, VIRGINIA.

VACUUM-CLEANER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known I, ARCHER BOOGHER, a citizen of the United States, and a resident of Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Vacuum-Cleaners, of which the following is a specification.

My present invention relates to vacuum cleaners, my object being to provide a device particularly adapted to ready and convenient handling and to obviate the difficulties incident to the machines now in use in cleaning ceilings and walls and ornaments thereon and small corners and other places where the machines cannot be taken.

Other objects and their resulting advantages will be apparent from the following description, in which reference is made to the accompanying drawing, forming a part of this specification and in which—

Figure 1 is an elevation illustrating the cleaner with the carrying devices attached, by which it may be raised and transported with the operator from place to place. Fig. 2 is a central vertical section through the cleaner illustrating the same in connection with its supporting frame. Fig. 3 is a plan view of the bag carrying ring. Fig. 4 is a perspective view of the supporting frame removed. Fig. 5 is a plan view of the bag carrying frame removed from the fan casing.

Referring to these figures, the fan casing indicated at A is substantially circular in form and disposed in a horizontal position. This casing is provided with a central upstanding inlet tube a and a depending side outlet a' terminating in a tubular extremity a^2 . Within the fan casing A is a horizontal fan B, so disposed as to create a suction through the inlet tube a and exhaust through the outlet a' .

The tubes a and a^2 are both provided with bayonet slots a^3 whereby the projections upon one end c of the suction tube C, the opposite end of which is provided with the usual suction nozzle c' , may engage and couple the suction tube upon either the inlet or outlet of the fan casing. In this manner either a suction or a blowing may be created through the tube C. Ordinarily, however, the parts are coupled as shown in Figs. 1 and 2 whereby to create a suction through the tube C and a delivery of dust and air through the outlet a' of the fan casing.

The shaft b of the fan depends centrally through the base of the fan casing as particularly shown in Fig. 2, and is connected with the motor D, the latter being disposed and supported within the centrally depressed portion e of a substantially circular plate E forming a bag carrying frame. This plate E, as shown in Fig. 5, is provided with a side opening e' through which the outlet tube a^2 extends and is also provided with upstanding brackets e^2 which are connected to the base of the fan casing A whereby to support these parts in properly spaced relation. As also indicated in Fig. 5, the bag frame E is provided either with outstanding pins or arms e^3 which, when desired, are adapted to rest upon the upper ring f of the supporting frame F which has lower rollers f' by which it may be conveniently moved over a floor.

The supporting frame F is particularly shown in Fig. 4 and it is provided upon its upper ring f with pivoted hooks f^2 which are adapted to engage the pins or arms e^3 of the bag carrying frame whereby to lock the latter and the fan casing against accidental displacement. The dust bag G is suitably secured to an upper bag ring g , having cut out portions g' at spaced points therearound, which are adapted to receive fastening bolts g^2 therethrough, these bolts passing also through openings e^4 of the bag carrying frame whereby to maintain the bag in operative position.

It will thus be seen that the parts, as described, are of extremely simple construction, such as to render the complete device comparatively inexpensive, and at the same time protect the several parts against undue wear. In this connection, it will be noted that the support of the motor D is extremely simple in its nature and at the same time maintains the motor away from the influence of the dust laden air being constantly carried through the machine.

With the cleaner parts in connection with the supporting frame A, the device as a whole may be readily transported by simply rolling the same across a floor, the operator guiding the suction nozzle with one hand and, with the other hand, gripping the suction hose at such a point as to barely permit the rollers to rest on the floor, thus keeping the cleaner close by the operator's side and allowing it to be slightly lifted when necessary as it moves back and forth. This

enables the nozzle to be used in corners and on the lower portions of walls; but, in view of the fact that an extremely lengthy suction hose will be required in order to permit of the cleaning of a ceiling or upper wall or to reach into small corners or others places where the machine cannot be rolled, I preferably provide the fan casing A, and particularly its upstanding inlet tube *a* with a bail A' to which a loop or strap A² may be connected and cast over the operator's shoulders. Thus by detaching the hooks *f*² from the frame projections *e*³, the fan casing, motor, bag carrying frame and bag may be lifted from the supporting frame F and the operator may thus conveniently ascend a ladder or reach far into an obscure corner with a comparatively short suction hose where he would not be otherwise permitted to do so. This provision is to give more freedom in every use of the cleaner where the weight of carrying the same is no objection.

It will thus be readily seen that my improved cleaner is adapted to give the operator perfect freedom in his work, to allow him to reach high or obscure places comfortably with one hand and to have the other hand free to either maintain himself in position or to take care of the electric cord *d* if the latter should get in the way.

My special construction further provides for a considerable reduction in weight over machines now in use and other advantages

in the ready access to the several parts for the purposes of cleaning and oiling.

I claim:

1. In a device of the character described, the combination of a dust collecting mechanism including suction producing means, a casing therefor, said casing being provided with an inlet tube and an outlet tube, and a bag carrying member provided about said outlet tube, said member having outstanding projections, and a support for said dust collecting mechanism having an upper ring on which the said bag carrying member is adapted to rest, provided with hooks for engagement with said outstanding projections whereby to removably lock the dust collecting mechanism on its said support.

2. In a device of the character described, the combination of a dust collecting mechanism including suction producing means, a casing for said means provided with an inlet tube and an outlet tube, a bag carrying member disposed around the outlet tube, and a support for said dust collecting mechanism having an upper ring on which the said bag carrying member is adapted to rest, said ring and said bag carrying member having relatively engaging means whereby to removably lock the dust collecting mechanism on its said support.

ARCHER BOOGHER.

Witnesses:

GEO. N. DICKINSON,
E. M. TINSLEY.