March 5, 1940. W. LEATHERS 2,192,356

HOSE CASTER BRACKET FOR VACUUM CLEANERS

Filed Feb. 24, 1936

Fig. 1

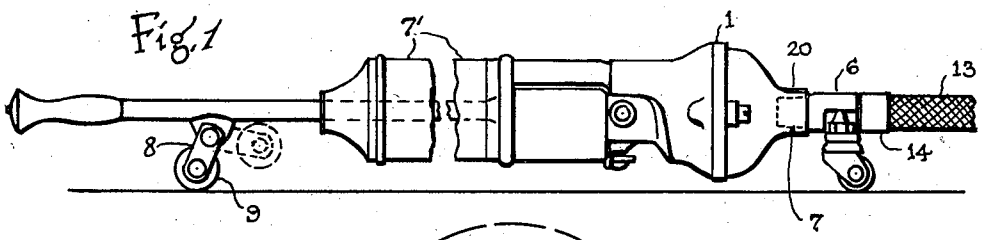


Fig. 2

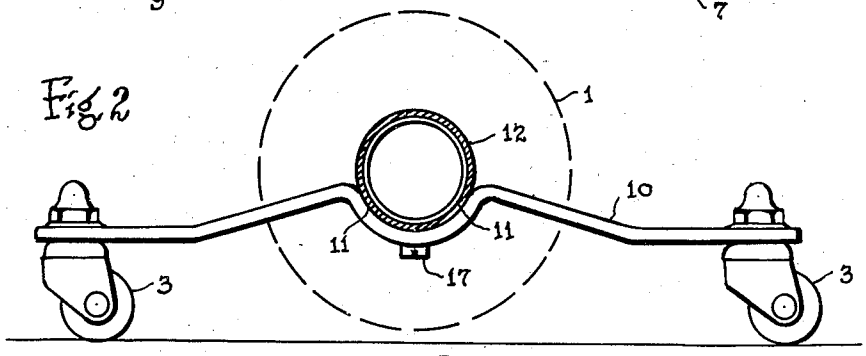


Fig. 3

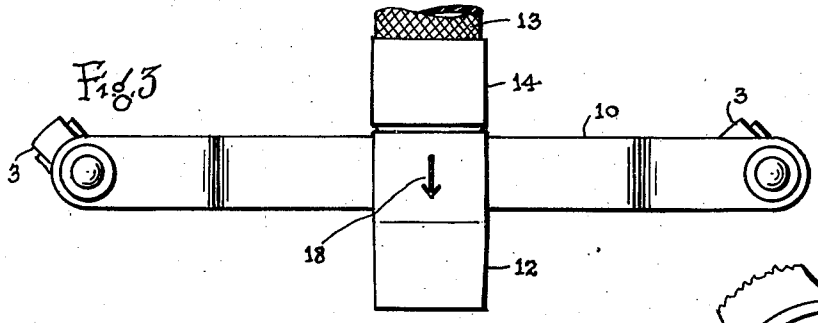


Fig. 4

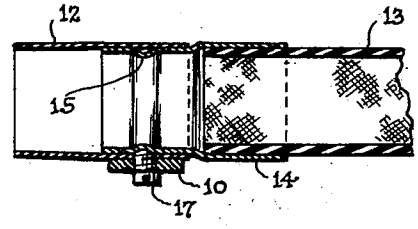
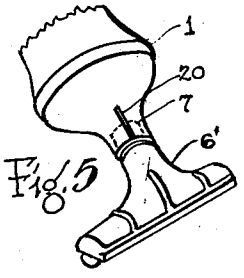


Fig. 5



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INVENTOR.

Patented Mar. 5, 1940 2,192,356

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HOSE CASTER BRACKET FOR VACUUM CLEANERS

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2 Claims. (Cl. 15—16)

The general object of my invention is to produce an improved, lightweight, suction cleaning device for vacuum cleaner purposes. It refers especially to the type of vacuum cleaner having a motor-suction-unit rigid with the handle thereof, and has to do particularly with the means of supporting same on the floor when a cleaning hose and attachments therefor are in use.

My many Letters Patent granted and applications pending pertaining to the type of suction cleaner above mentioned and herein illustrated indicate the many advantages of the present invention which enables the user of the above type of suction cleaner to adapt it for hose-cleaning in the simplest and most practical manner. This invention makes it possible to use such cleaner lying prone upon the floor, supported on wheels in such manner that it follows the user about, as the hose is being used for cleaning purposes.

In order to set forth my invention so that those familiar with these arts may understand, I have prepared this specification and appended drawing hereto of which:

Figure 1 is a side view of suction-cleaner supported on hose-caster-bracket and handle-floor-wheel.

Figure 2 is a partial cross-section of my hose-caster-bracket.

Figure 3 is a plan view of my hose-caster-bracket.

Figure 4 is a longitudinal cross-section of my hose-caster-bracket and swivel.

Figure 5 is a perspective view of a removable nozzle on a vacuum cleaner.

In one form of my invention, I have provided a portable and manually removable caster bracket which may be attached to the inlet end of the motor-suction-unit 1. It comprises a cross member 10 having swivel casters 3 attached to the ends thereof. This device holds the motor-suction-unit free from the floor, allowing the upper end of the cleaner to rest on the floor.

A preferable form of my invention, however, is to make the caster-bracket unitary with the cleaning-hose, and to swivel it on the end thereof. When the suction cleaner of the type described (see Figure 1) lies prone upon the floor the hose-caster-bracket generally indicated by the numeral 6 may be attached at the inlet to the blower in similar manner to the attachment of a floor cleaning nozzle 6' (see Fig. 5) or other cleaning nozzle 6' (see Fig. 5) or other cleaning attachment, preferably by a taper-cone-connection (as shown at 7). Toward the upper end of the cleaner, preferably at a suitable location on the handle surrounded by a filter 7', a wheel bracket 8 may be provided rotatably supporting a wheel 9. The bracket may be turned outward from the handle for use and turned to an out-of-the-way position when not in use (as shown in dotted lines).

A simple form of hose-caster-bracket may consist of a stamped or otherwise fabricated cross-member 10 (see Figures 2 and 3), such member may suitably be joined, as by spot-welding (at 11) to a cylindrical cone-ending attachment-part 12. The cross-member is preferably provided with swivel casters 3. When so devised, the hose-caster-bracket, when in use on the cleaner, is of sufficient height to hold the cleaner free from the floor and of sufficient width to keep the cleaner from turning over when the cleaning-hose is in use. Or preferably the cleaning-hose 13 may be joined to a swivel sleeve 14 in similar manner and the swivel piece rotatably joined to the cone-connector 12. Many means of making such hose swivels are available but I prefer to use a simple method which consists of an annular groove 15 into which a retaining piece 17 may be set. Such retaining piece may conveniently consist of a round-nose set-screw 17 tightly screwed into the bracket 10 but with the round nose in free engagement with the grooove 15.

A marker 18 on the top center of the cone-connector 12 and another marker, as indicated by a raised line at 20 on the blower case, serves as a convenience in attaching my caster-bracket to the cleaner in such manner that the upper handle wheel 8 may ride vertically on the floor.

Obviously, the flexible cleaner hose 13 is provided at its other end with means of attaching thereto, any type of cleaning tool desired.

Having set forth my invention in a form reduced to one mechanical practice, it should be understood that there are many forms of bracket, many types of casters or gliders, and many types of connections to the motor-suction-unit which fall within the broad spirit of my invention which consists of the objects above stated.

I claim:

1. A vacuum cleaner having an elongated cylindrical form comprising a motor-suction-unit having a suction fan and a suction inlet at the end of said form said inlet communicating directly and axially with the eye of said fan, an outwardly extending operator's handle joined to the other end of said cleaner, and a substantially cylindrical filter adapted to receive the dirt-laden air from said motor-unit, all said elements

being substantially annular and in co-axial arrangement, a cleaning hose detachably secured to the said air inlet, a transversely disposed caster-bracket joined to the said hose adjacent its secured end, swivelled casters disposed on the ends of said bracket and supporting the suction-unit-end of the cleaner on the floor while the hose is so secured, and a floor-wheel supported on the cleaner adjacent the upper end of said filter and disposed at such angle radial to the axis of the cleaner that it holds the said handle free from the floor while said caster-bracket is in use and the cleaner is being used in a position substantially horizontal with the floor.

2. A vacuum cleaner having an elongated cylindrical form comprising a motor-suction-unit having a suction fan and a suction inlet at the end of said form said inlet communicating directly and axially with the eye of said fan, an outwardly extending operator's handle joined to the other end of said cleaner, and a substantially cylindrical filter adapted to receive the dirt-laden air from said motor-unit, all said elements being substantially annular and in co-axial arrangement, a cleaning hose detachably secured to the said air inlet, a transversely disposed caster-bracket joined to the said hose adjacent its secured end, swivelled casters disposed on the ends of said bracket and supporting the suction-unit-end of the cleaner on the floor while the hose is so secured, and means of supporting the upper end of the cleaner for locomotive purposes on the floor, said means disposed adjacent the upper end of said filter and at such angle radially to the axis of the cleaner that it holds the said handle free from the floor while the caster-bracket is in use and the cleaner is being used in a position substantially horizontal with the floor.

WARD LEATHERS.