

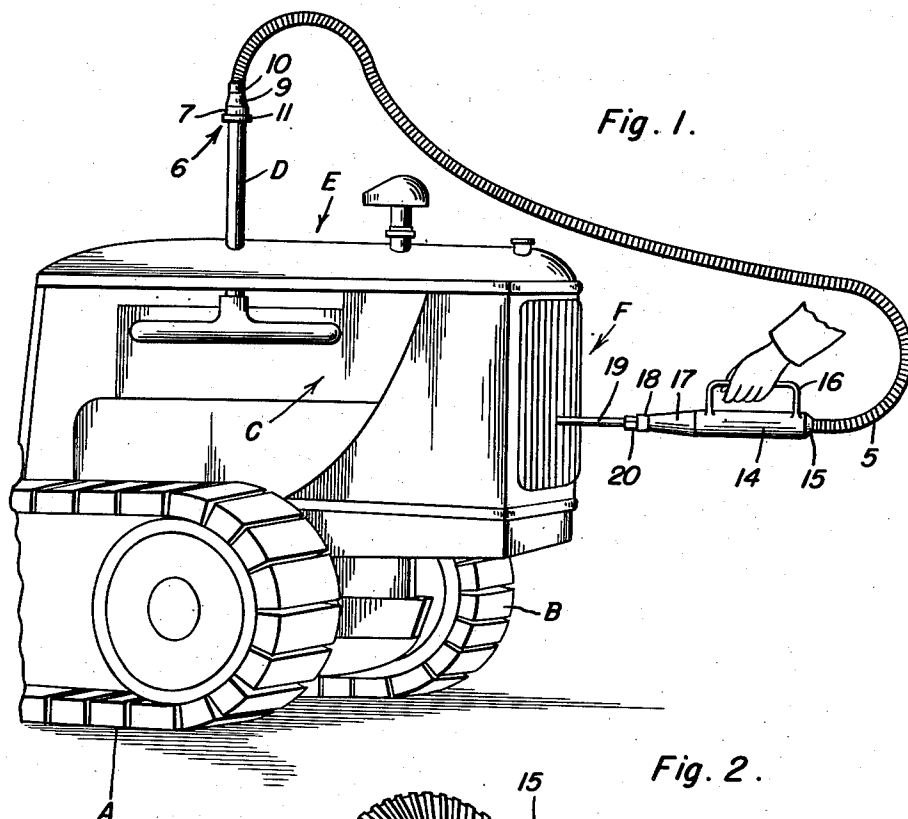
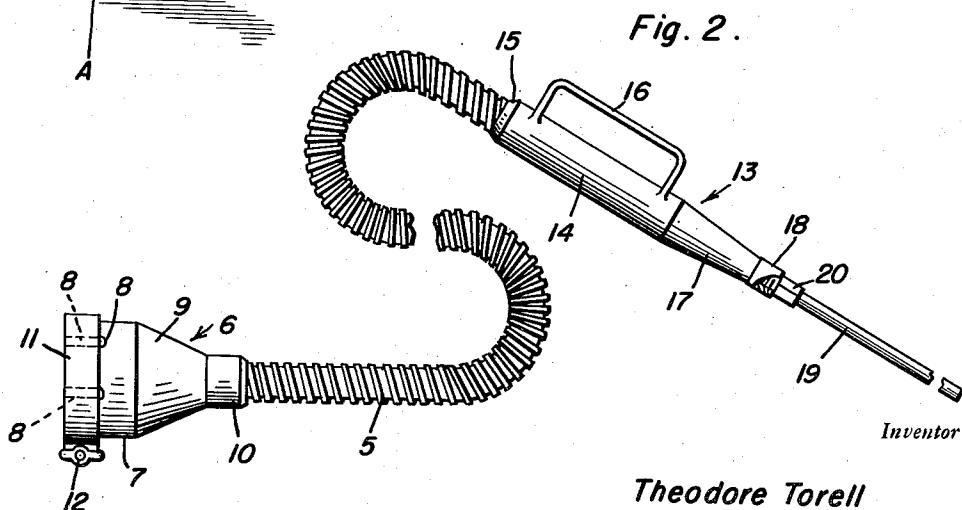
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T. TORELL

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DIESEL ENGINE EXHAUST BLOWER

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Inventor

Theodore Torell

By

Clarence A. O'Brien
and Harvey B. Jacobson
Attorneys

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DIESEL ENGINE EXHAUST BLOWER

Theodore Torell, Missoula, Mont.

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1 Claim. (Cl. 299—58)

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The invention herein shown and described appertains to a novel and improved attachment which is readily applicable to the discharge end of the exhaust pipe on a diesel engine, for example, the type used for powering caterpillar tractors, said attachment constituting a practical and ideal loose dirt and dust cleaner which serves admirably well in effectually dislodging and removing extraneous matter from available surfaces of the engine.

There has been a long felt need, experience proves, for a simple handily usable accessory for cleaning surface deposits from available parts of the engine, radiator and hood and complementary structures and in reducing to practice the principles of the present invention I have evolved and produced a simple, economical and expedient contrivance which works on a pressure principle and obtains the needed blowing pressure from the discharge end of the usual upstanding exhaust pipe on the stated tractor. I am not unmindful that exhaust pipes are employed to accommodate suction pipe cleaners. In fact, there are many and varied forms of these suction cleaners for removing dust and dirt particles. However, so far as I have been able to ascertain, they are used only in connection with internal combustion engines of types employed on automobiles, trucks and the like.

In carrying out the principles of the instant invention, I provide a tried and successfully workable attachment which employs a blowing action, same being characterized by a relatively long flexible conduit, a coupling at the intake end of the conduit for attachment to the discharge end of the aforementioned exhaust pipe, the opposite maneuverable end of the conduit having a handle equipped nozzle suitable for effectively blowing and removing dirt and dust from the surfaces against which the nozzle is held.

More specifically, the preferred embodiment of the attachment comprises a flexible reach-type conduit, the stated coupling being like a funnel and being adapted to hood over and fasten on the discharge end of the exhaust pipe, the nozzle structure at the opposite end comprising a hand-grip equipped cylinder, a reducer terminating in a neck, and said neck being adapted to accommodate detachable nozzles of different lengths and sizes depending on the job to be undertaken.

Other objects and advantages will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are

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employed to designate like parts throughout the views:

Figure 1 is a fragmentary perspective view of the stated caterpillar tractor showing the diesel engine, the upstanding exhaust pipe and my improved cleaner attachment attached to said exhaust pipe and further showing the manner in which the nozzle is employed.

Figure 2 is an elevational view of the attachment per se.

Referring to Figure 1 the tractor is shown as embodying caterpillar tracks A and B, a diesel-type engine C including a vertical upstanding exhaust pipe D projecting through the bonnet or hood E, the latter provided with the usual radiator grille F.

The blower-type cleaner attachment comprises, as before mentioned, a flexible conduit or hose 5. This is of appropriate dimensions and is twelve feet more-or-less in length. The coupling means 6 comprises a cylindrical member 7 with expansion and contraction notches 8 and a conical or funnel-shaped portion 9 with a neck 10 welded or otherwise attached to the intake end of the conduit. A clamping band or collar is provided at 11 and this surrounds the part 7 and is provided with a nut equipped clamping bolt 12 for securely maintaining the coupling capped over the discharge end of the exhaust pipe D. The nozzle equipped head means at the opposite end is denoted by the numeral 13 and comprises an elongated cylinder 14 having one end welded or otherwise attached at 15 to the coacting end of the conduit, said cylinder being provided with a bail-like hand-grip 16. The cylinder terminates in a tapered reducer 17 having a neck 18 which is internally screw-threaded, if desired, to accommodate a screw-threaded end of the elongated nozzle 19. The latter is of any appropriate length and size and provided with a tool-grip 20 to facilitate attaching and removing same. It is my intention to make the fittings between the reducer and nozzle such that different sizes of nozzles may be employed, depending on the job to be performed.

The cap-like coupling means is applied in position on the exhaust pipe D as shown in Figure 1 and the hose or conduit reaches to the place of use. In Figure 1 I show the nozzle employed in the manner for removing dust and dirt from the radiator grille F. It is understood, of course, that the nozzle may be piloted to any position wanted for blowing dust and dirt from surfaces of the engine, the exhaust manifold, from other adjacent parts of the mechanism or for blowing dirt from

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surfaces between the caterpillar traction tracks and operating drums or, in fact, in any desired manner. Manifestly, there are many many uses to which the contrivance may be put and it is, of course, unnecessary to list all of them here.

While the description tends to imply the usefulness of my invention in connection with tractors, it is clear that it may be equally well used on all diesel engine stationary units, road graders and so on and so forth.

Changes in shape, size, materials and rearrangement of details and parts may be resorted to in actual practice, so long as they do not depart from the spirit of the invention or the scope of the appended claim, as is well understood.

Having described the invention, what is claimed as new is:

A blower-type dust cleaner attachment for use on the exhaust pipe of a diesel engine comprising a funnel-shaped coupling adapted to be adjustably and detachably mounted on said exhaust pipe, said coupling having a clamping and retaining band, an elongated flexible armored conduit connected at one end to said coupling, an elongated cylinder communicatively connected to the opposite end of said conduit and having a reduced conical discharge end terminating in an internally screw-threaded cylindrical discharge neck, a hand-grip mounted rigidly on said cylinder, and a

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reduced elongated nozzle having a screw-threaded tip screwed into the screw-threaded portion of said neck.

THEODORE TORELL.

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