March 26, 1940. H. J. McDEVITT 2,194,606

FILTERING UNIT CLEANER

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Fig. 1.

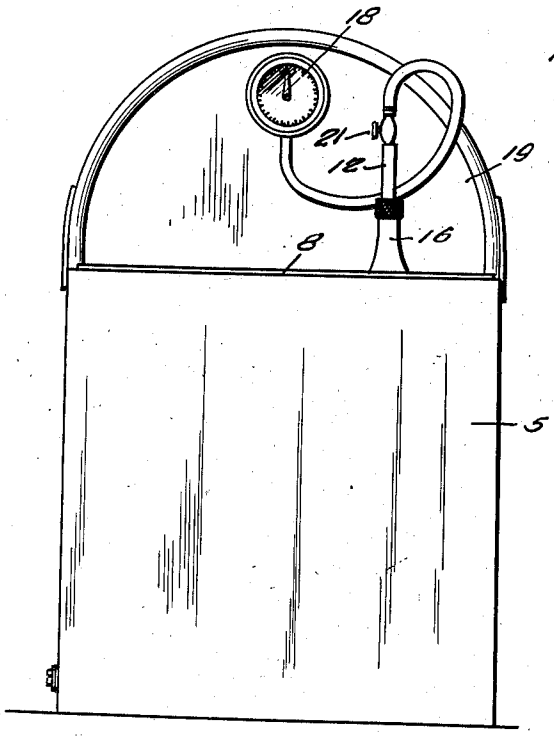
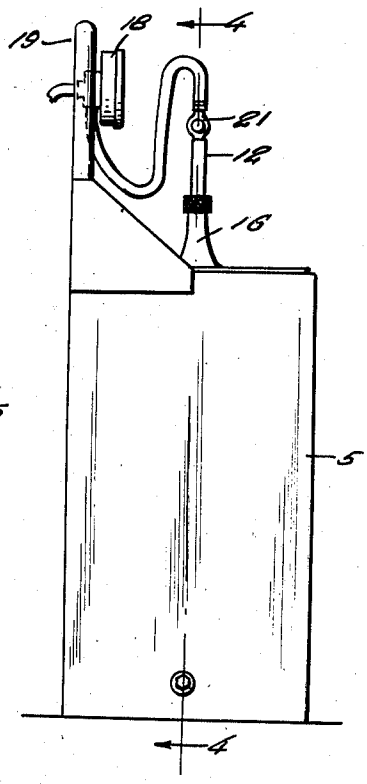


Fig. 2.



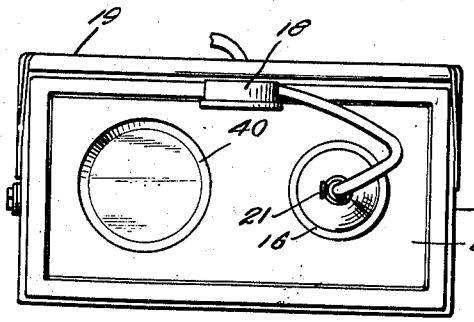


Fig. 3.

Inventor

H. J. McDevitt

By J. Lewis Kollin

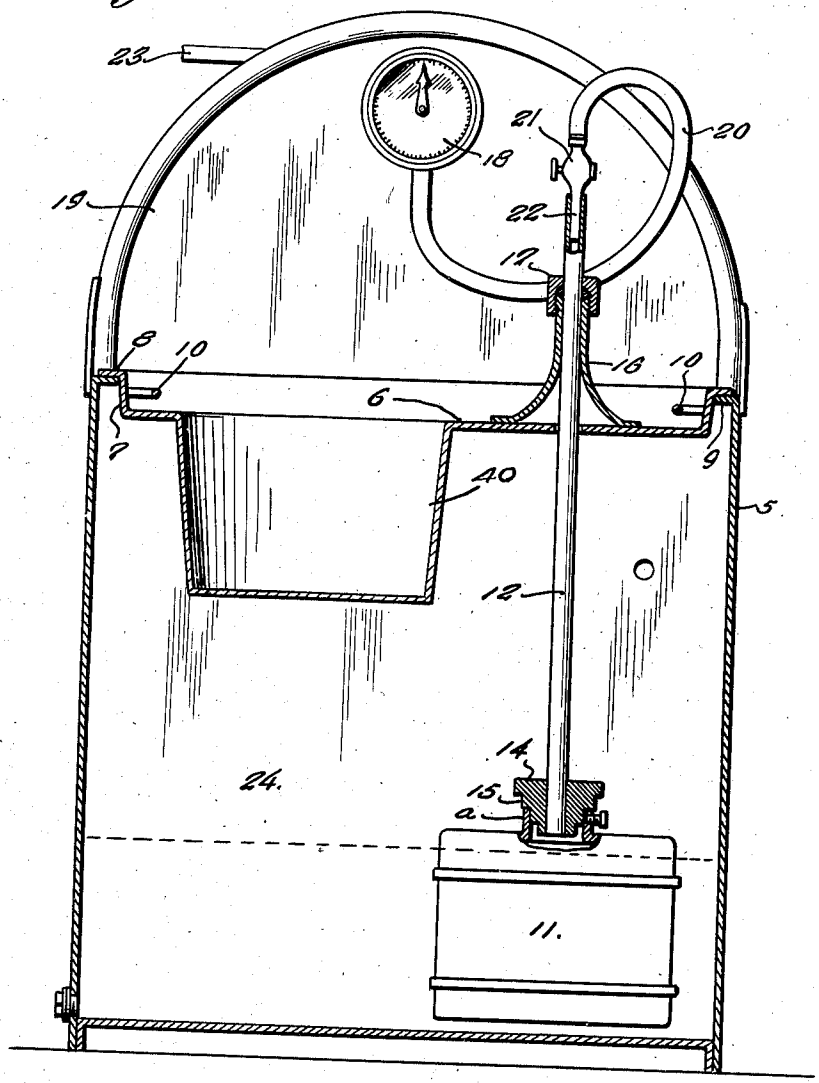
Attorney

March 26, 1940. H. J. McDEVITT 2,194,606

FILTERING UNIT CLEANER

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Fig. 4.



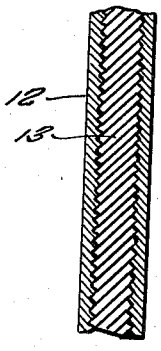


Fig. 5.

Inventor

H. J. McDevitt

By J. Lewis Kollin

Attorney

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UNITED STATES PATENT OFFICE

2,194,606

FILTERING UNIT CLEANER

Harry James McDevitt, Philadelphia, Pa., assignor to Gordon F. Milne, Rosemont, Pa.

Application March 24, 1937, Serial No. 132,853

1 Claim. (Cl. 141—1)

This invention appertains to new and useful improvements in apparatus for cleaning filtering units.

The principal object of the present invention is to provide a simple and inexpensive apparatus whereby the air filtering units such as are on downdraft carbureters and in fact filtering units of various other types can be conveniently and thoroughly cleaned in a few minutes time.

Another important object of the invention is to provide a cleaning apparatus of the character stated which is constructed in such a manner as to permit the parts thereof to be disconnected readily for the purpose of repair or replacement.

These and various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a front elevational view of the apparatus.

Figure 2 represents a side elevational view of the apparatus.

Figure 3 is a top plan view.

Figure 4 is an enlarged vertical sectional view taken substantially on the line 4—4 of Figure 2.

Figure 5 is a fragmentary longitudinal sectional view through the pipe.

Referring to the drawings wherein like numerals designate like parts, it can be seen that the apparatus consists of the tank 5 having the top wall 6, which top wall is provided with an upstanding flange 7 at its periphery and from which extends the outwardly disposed lip 8 for rest upon the ledge 9 of the upper portion of the tank 5. The top 6 can be provided with handles 10 whereby the top can be lifted when a filter unit 11 is to be applied or taken from the pipe 12. This pipe 12 as shown in Figure 5 is provided a spiral 13 so that as air passes downwardly through the pipe it is swirled and develops a turbulence in the unit 11 to be cleaned. Numeral 14 denotes a collar having step down portion 15 thereon so that the collar can be engaged into the neck portion *a* of a filtering unit of any size.

The upper portion of the pipe 12 extends through the neck structure 16 provided on the top 6 and this is provided with a packing gland 17. An air pressure gauge 18 is mounted on the back wall 19 and from this extends the hose connection 20 which has a button valve 21 therein and a nipple 22 projecting therefrom and into the upper end of the pipe 12. Numeral 23 represents the compressed air supply line to the gauge 18.

Thus air is supplied to the pipe 12 by way of the gauge 18 and is sent into the unit 11 attached to the pipe 12 in the form of a turbulence so as to thoroughly clean out the unit 11 as the solvent material 24 in the tank 5 permeates the unit and loosens the foreign matter therein. Obviously by lifting the lid 6, the unit 11 can be readily detached from the pipe 12.

As can be seen in Figure 4, the top wall 6 is provided with a well 40 in which a solvent can be placed and into which the air filter units can be primarily disposed to afford them a preliminary bath before attachment to the pipe 12.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

An apparatus for cleaning filtering units comprising a tank to receive a cleaning solution, a cover for said tank having a well to receive a solvent and support a filter unit, a pipe extending downwardly through the cover and adapted for connection with a source of compressed air, and a collar at the lower end of said pipe to fit the conventional tubular extension of a filter unit, the latter being suspended on said collar and detachably connected therewith by the same fastening device which secures the filtering unit in place on the air inlet pipe of a motor vehicle.

HARRY JAMES McDEVITT.