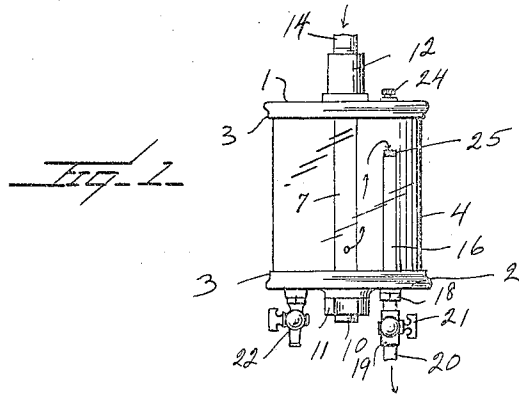
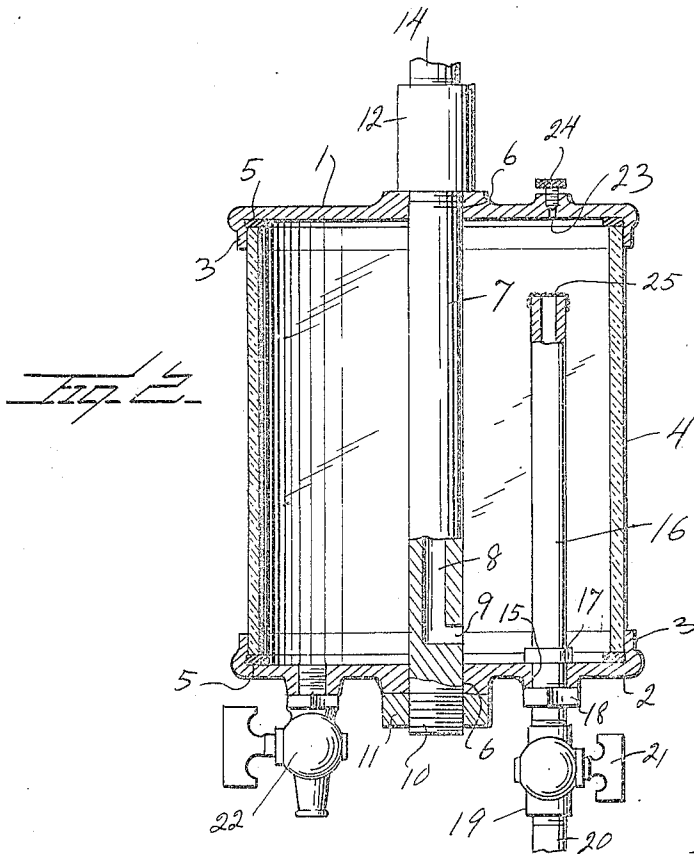


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SEPARATOR.

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To all whom it may concern:

Be it known that I, BERNARD F. RENN, a citizen of the United States, residing at Elston, in the county of Cole and State of Missouri, have invented certain new and useful Improvements in Separators, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain improvements in separators and has relation more particularly to a device of this general character especially designed and adapted for use in connection with liquid fuel for an internal combustion engine, and it is an object of the invention to provide a novel and improved device of this general character adapted to be interposed in the fuel line at a point in advance of the carbureter and which operates in a manner to separate from the liquid fuel water, dirt, or other foreign matter so that the fuel, when received in a carbureter, is substantially free of such foreign matter which would otherwise interfere with the efficiency of the carbureter.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved separator whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

40 Figure 1 is a view in elevation of a separator constructed in accordance with an embodiment of my invention; and

Fig. 2 is an enlarged view partly in section and partly in elevation, illustrating in detail the various parts of my improved separator as herein embodied.

As disclosed in the accompanying drawings, my improved separator comprises an upper head 1 and a lower head 2 circular in form and each having its marginal portion substantially defined by an inwardly disposed continuous flange 3. Interposed between the heads 1 and 2 is a cylindrical tubular body 4, preferably of glass, and which has its opposite end portions snugly fitting within the flanges 3. Interposed be-

tween the heads 1 and 2 and the adjacent ends of the body 4 are the gaskets 5 whereby the structure, when assembled, is effectually sealed. The central portions of the heads 1 and 2 are provided with the openings 6 through which extend the opposite end portions of a stem 7, said stem bridging the space between the heads 1 and 2 when the device is assembled. The stem 7 is provided with a bore 8 open at the upper end of the stem, and terminating in a laterally disposed extension 9 in communication with the chamber defined by the body 4. The portion of the stem below the extension 9 is solid and to the extended part of said solid portion 10 is threaded a nut 11, or the like, which provides means whereby the stem 7 is held in applied position and which at the same time serves to maintain the heads 1 and 2 and the body or member 4 in assembled relation. The upper end portion of the stem 7 has threaded thereon a sleeve or cylindrical coupling 12 which has firm contact with the outer face of the upper head 1 whereby the requisite maintenance of the various parts of the device in assembled relation is assured. Connected with the sleeve or coupling 12 is a pipe line 14 adapted to lead from the fuel tank or other suitable source of fuel supply. The lower head 2 to one side of the opening 6 is provided with a second opening 15 through which extends the lower end portion of a tubular stem or pipe 16. The pipe 16 is of a length to have its inserted end terminate at a point in close proximity to the upper head 1.

The lower portion of the pipe or stem 16 is defined by an outstanding flange or collar 17 which contacts with the inner face of the lower head 2 while an extended or exterior portion of the pipe or stem 16 has threaded thereon a clamping nut 18 co-acting with the adjacent face of the lower head 2 whereby the pipe or stem 16 is held in desired position. Threaded or otherwise secured to the extended or exterior portion of the pipe or stem 16 is a sleeve or coupling 19 with which is also operatively engaged a pipe line 20, adapted to lead to a carbureter. Interposed in the sleeve or coupling 19 is a valve 21 of a conventional type whereby the flow of the fluid out through the pipe or stem 16 may be regulated or controlled as occasions of practice may require. In communication with the interior of the chamber

or container, as provided by the assembled heads 1 and 2 and the body or member 4, through the bottom head 2 is a drain cock 22 of a conventional type. The upper head 1 is also provided with a vent opening 23 normally closed by the screw plug 24.

In practice, the fuel is delivered through the stem 7 to the bottom of the container or chamber and as said fuel rises therein, it passes out through the stem or pipe 16 and which flow of the fuel results in the water, dirt, and other foreign matter to be effectually separated from the fuel proper and collected at the bottom portion of the container. When it is desired to drain out the matter collected within the container, the plug 24 is removed and the pet cock 22 opened. Normally the pet cock 22 is closed as is the vent opening 23.

Disposed over the inner or entrance end of the pipe or stem 16 is a screening element 25, preferably a sheet of gauze or screen of a relatively fine mesh. This screening element serves to prevent any flat substances from passing down through the pipe or stem 16 into the carbureter.

From the foregoing description it is thought to be obvious that a separator constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification

without departing from the principles and spirit thereof, and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

A separator of the class described comprising a container including a cylindrical body and heads coacting with the opposite ends of said body, said heads being provided with aligned openings, a stem extending through the openings of said heads and through the body, members threaded upon the opposite end portions of the stem and engaging the outer surfaces of the heads to maintain the heads and body in assembled relation, said stem having a bore open at one end of the stem and in communication with the container adjacent the opposite end of the stem, the last named end of the stem being closed and a discharge pipe extending within the container and in communication therewith at a point remote from the point of communication between said chamber and the bore of the stem, the threaded member engaging the end of the stem through which said bore opens, constituting a coupling adapted for the reception of a feed conduit.

In testimony whereof I hereunto affix my signature.

BENNIE F. RENN.