March 17, 1931. J. W. ROSE ET AL 1,796,478

SEDIMENT REMOVER

Filed July 11, 1930

Fig. 1.

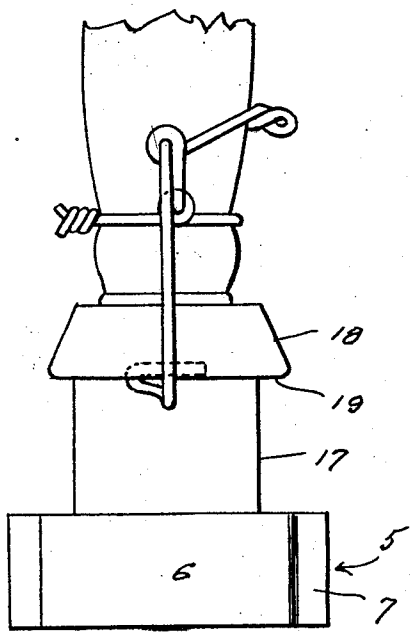


Fig. 2.

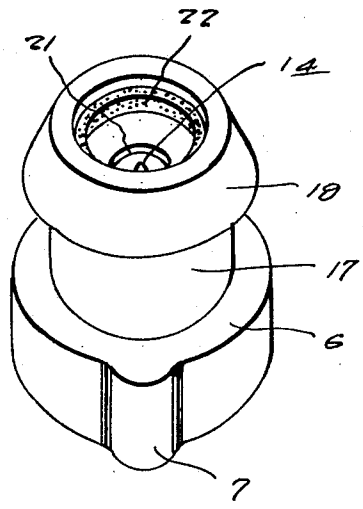
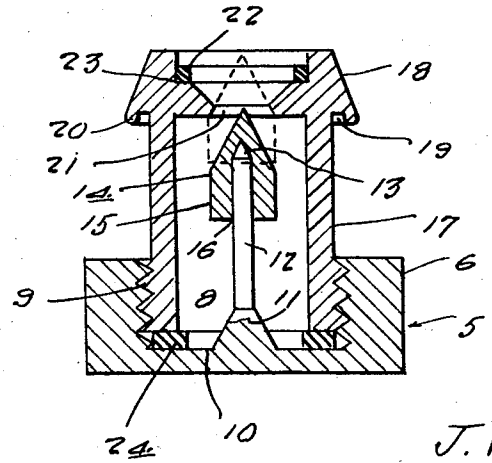


Fig. 3.



Inventors

J. W. Rose

Archield Costa

By Clarence O'Brien

Attorney

Patented Mar. 17, 1931 1,796,478

UNITED STATES PATENT OFFICE

JESSE WILLIAM ROSE AND ARCHIELD COSTA, OF NEW ORLEANS, LOUISIANA

SEDIMENT REMOVER

Application filed July 11, 1930. Serial No. 467,296.

This invention relates generally to devices for use in the chemical and brewing industry which have the function of clarifying liquids which have natively or otherwise a cloudiness or matter in suspension which after a time settle in the bottoms of the containers of the liquids and form "lees" of a sediment of an objectionable character which is apt to desirably cloud or impair the said liquids upon the disturbance of said liquids in pouring the same from the containers.

By the means provided by the invention undesired carbonation is eliminated and the process of siphoning or filtering otherwise required in general processes of the nature outlined are done away with.

The device provides means whereby the sediment having once come down from the liquid is completely and permanently separated therefrom so that disturbance of the liquid, or the capsizing or inversion of its container will no longer distribute said sediment again in suspension in said liquid.

It is an object of this invention to provide a device of this type which is of highly simple character, very effective, simple construction and which can be manufactured at a comparatively small cost, and which does not involve complicated and expensive structure.

The particular embodiment set out herein has relation to a device for removing the sediment from containers of the class employed in preparing concoction of the types frequently prepared in the homes for beverage and preserving purposes.

It is to be understood that we do not desire to limit the application of this invention to the particular embodiment set forth herein in illustration thereof, but any changes may be made in structure and material consistent with the spirit and scope of the invention as set out herein and limited by the claim.

The objects stated, and other and further objects of the invention, the nature thereof, its composition and arrangement and combination of parts by which said objects are attained, will be clear to any one conversant with the art to which this invention relates upon referring to the following description of the appended drawings, in which:—

Figure 1 illustrates a bottle in inverted position upon an embodiment of this invention.

Figure 2 is a perspective view of the device of the invention.

Figure 3 is a cross section in a central practical plane of Figure 2.

Referring in detail to the drawings it will be seen that we have provided a base member generally designated 5 which consists of a circular block 6 of fibre or other suitable material having a semi-cylindrical projection 7 and the circular recess 8 having the walls screw threaded as at 9. On the floor 10 of the recess 9 is a centrally located pyramidal projection 11 supporting a pin 12 having a conical tip 13 adapted to engage upon the point of said pin 12 in a clean manner, is a conical body 14 having a cylindrical portion 15 attached at the base of said conical portion. A cylindrical recess 16 in said body is to enable said body to be inserted freely over said pin 12 and freely accessible therefrom by gravity. A hollow cylindrical body 17 has its lower end screw threaded to the block 6 and has on its upper end a frusto-conical flanged portion 18 providing an undercut channel 19 having a retaining means 20. Formed in the upper end of said hollow cylindrical body is a bell piece 21 engageable by the conical face of the body 14, and the washer 22 retained in a seat 23 in said upper end, to contact in air tight manner the lip of a bottle in inverted position. The lower screw threaded end of a shoulder presses against the attaching washer 24 of the floor of the recess 8 to render the same air tight.

The undercut channel 19 is formed to receive a wire latching arm protruding from the cap locking mechanism of a bottle in order to press the lip of the bottle against the packing ring 22 to form an air tight connection between the device of the invention and the bottle.

It will be understood from the drawings that the bottle or like container is adapted to be intended to be inserted upon the devices and position shown in Figure 1 and the

same allowed to rest and cast down in the sediment into the recess 8, which is proportioned to the amount of sediment estimated in the particular liquid to be treated, and when the sediment has completely been cast down from the liquid the device and the bottle are inverted, the bell body 14 falls into engagement with the valve seat 21 thus shutting off escape of the sediment from the chamber 8 and preserving the liquid from contamination thereby.

The valve of the device is to prevent the escape of sediment into the bottle and to produce any undesirable contamination and recarbonation alluded to in the first part of this specification, the sediment being trapped in the chamber 8, the liquid having been inserted from the device for a sufficient length of time to cast down the entire sediment.

Thus it will be seen that we have provided a device of extremely simple and inexpensive construction which may be applied for the separation of sediment and collected foreign matter from liquid. It will also be evident that the device fills an urgent need for a means to accomplish this result which is inexpensive and easy to operate and of small size and adaptability to be manufactured and sold in large quantity at a small price. The device is adapted to be manufactured of a variety of material, which will be suited for the particular liquid in the chemical industry and when used as a home appliance.

We claim:—

In combination a bottle, a sediment collector mounted on the mouth of said bottle, comprising a circular block having a circular recess therein, a valve structure mounted on the floor of said recess, a cylindrical chamber secured in said recess and projecting from said block and surrounding said valve mechanism, a top portion on said cylindrical chamber adapted to contact the mouth of the bottle and form a valve seat for the valve mechanism, said valve adapted to operate upon inversion of said device, said device adapted to form a support for a bottle in inverted position.

In testimony whereof we affix our signatures.

JESSE WILLIAM ROSE.
ARCHIELD COSTA.