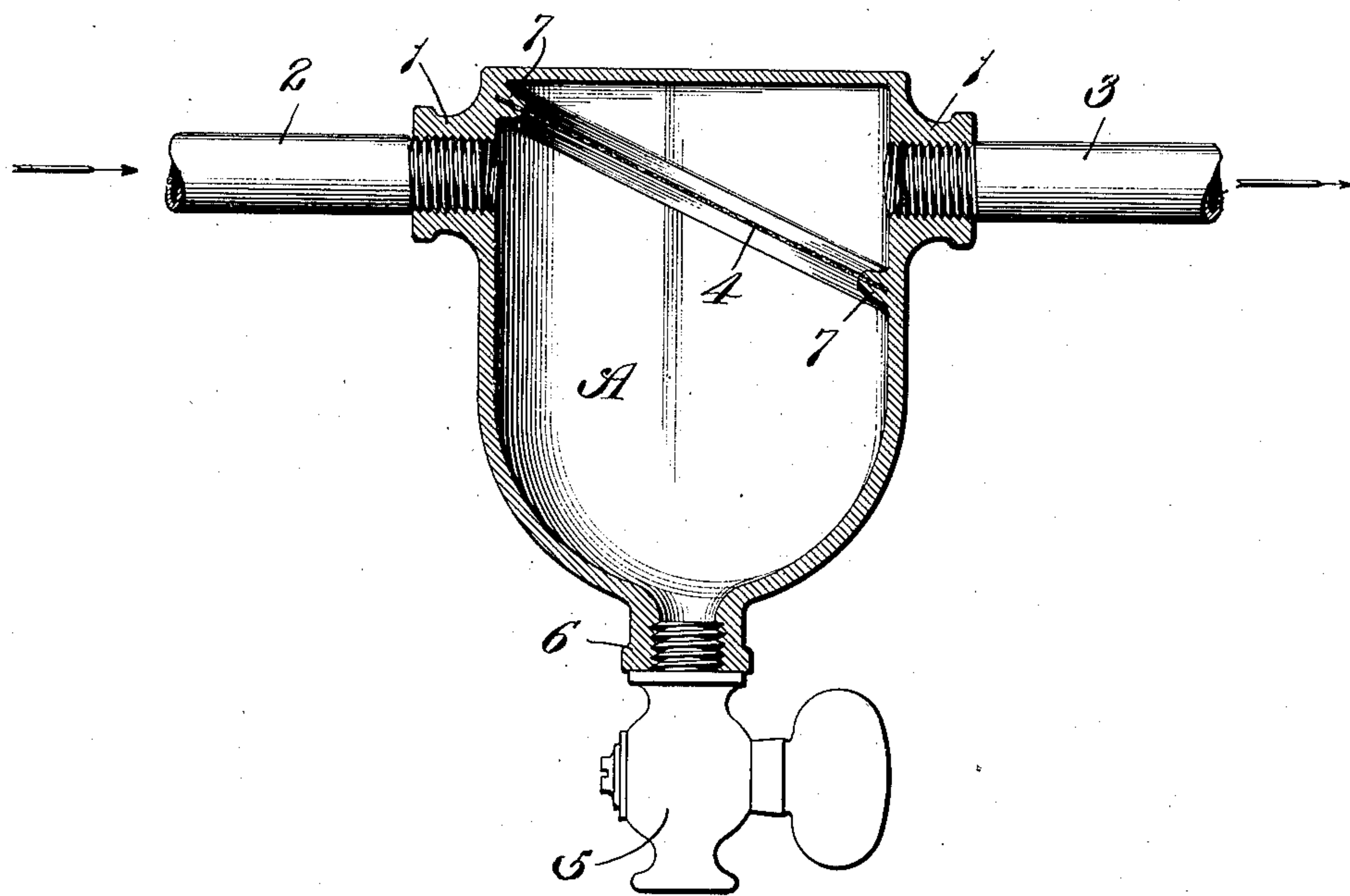


W. C. CARTER.
LIQUID FUEL STRAINER.
APPLICATION FILED JULY 23, 1909.

973,756.

Patented Oct. 25, 1910.



Witnesses:

Geo. R. Radson.

Nells L. Church

Inventor:

William C. Carter.

By Paul Bakerwell

Atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. CARTER, OF ST. LOUIS, MISSOURI.

LIQUID-FUEL STRAINER.

973,756.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed July 23, 1909. Serial No. 509,202.

To all whom it may concern:

Be it known that I, WILLIAM C. CARTER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Liquid-Fuel Strainers, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to liquid fuel strainers, and particularly to strainers of that type which are used with internal combustion engines for removing the dirt and particles of foreign matter in the liquid fuel used in the engine.

The main object of my invention is to provide a strainer of this type that can be manufactured at a low cost.

Another object is to provide a strainer which is so constructed that the screen or gauze through which the liquid fuel flows can be cleaned easily.

Other objects and desirable features of my invention will be hereinafter pointed out.

The figure of the drawing is a vertical sectional view of a strainer constructed in accordance with my invention.

Referring to the drawing which illustrates the preferred form of my invention, A designates a hollow member which is adapted to be arranged in a line or pipe through which the liquid fuel to be strained flows. The strainer herein shown is intended to be used principally on automobiles and motor-boats, and the member A is provided adjacent its upper end with lugs or collars 1 having screw-threaded openings for receiving the pipes 2 and 3 that conduct the fuel from the supply tank to the carbureter. These collars or lugs are preferably arranged diametrically opposite each other, and a screening device, which preferably consists of a piece of wire screen 4 or gauze, is arranged inside of the hollow member A between the collars 1 so that the liquid fuel will pass through said screen before it reaches the carbureter. A drain cock 5 is tapped into a screw-threaded lug or collar 6 on the bottom of the member A so as to permit the sediment and dirt which collects in said member to drain out of same, and the screen 4 is preferably inclined or arranged at an angle instead of in a perfectly vertical plane so that the sediment

which collects on the under side of the screen can be flushed off of same by opening the cock 5 and thus permitting the liquid fuel to flow through said cock instead of through the pipe 3 that leads from the member A to the carbureter. I believe that a screen arranged in this manner is novel but the most important feature of my invention consists in the method of retaining the screen in position. In the gasoline strainers that have heretofore been used on automobiles and motor-boats the wire screen was retained in position by means of removable screw-threaded clamping devices that added greatly to the cost of manufacturing the strainer. In my improved construction the peripheral edge portion of the screen 4 is embedded in the material from which the member A is formed so that no separate fastening devices are required to retain the screen in position.

The member A is formed of cast metal and is closed on all sides except at the points where the cock 5 and pipes 2 and 3 are tapped into same. The collars 1 and 6 are formed integral with the member A, and the screen 4 is preferably embedded in an inwardly projecting flange or thickened portion 7 on the inner side of said member.

In manufacturing the strainer, the screen 4 is embedded in the core in such a manner that its peripheral edge projects slightly beyond the core and the molten metal is then run into the mold to form the member A and the lugs thereon, the molten metal flowing around the edge of the screen and thus securely connecting it to the member A.

A strainer of the construction above described can be produced at a very low cost because the only machine-work that is required is tapping the threads for the cock 5 and pipes 2 and 3. No separate fastening devices are required for retaining the screen in position for it is cast into the member A and as the screen is arranged at an angle to the supply pipe it can be cleaned easily by simply opening the cock 5 so that the liquid fuel will flush off the under side of the screen to which the sediment adheres. Another desirable feature of my strainer is that it is light and presents a neat and ornamental appearance, and as it is completely closed a person cannot try to adjust the screen and thus get the strainer out of order.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent is:

A liquid fuel strainer comprising a substantially cup-shaped member formed of
5 cast metal and provided with an integral top wall, said member being provided with a pair of oppositely disposed openings located adjacent to said top wall so as to permit the fuel to flow through said member, an
10 inclined screen arranged inside of said member between said openings, an integral flange on the interior of said member in which the

edge of said screen is permanently embedded during the process of casting said member, and a drain-cock at the lower end 15 of said member.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty-first day of July 1909.

WILLIAM C. CARTER.

Witnesses:

WELLS L. CHURCH,
GEORGE BAKEWELL.