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GASOLINE SIPHON FOR AUTOMOBILES

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Fig. 1.

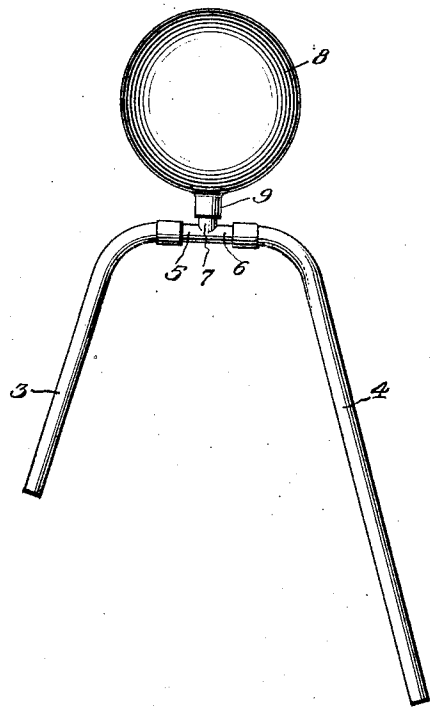
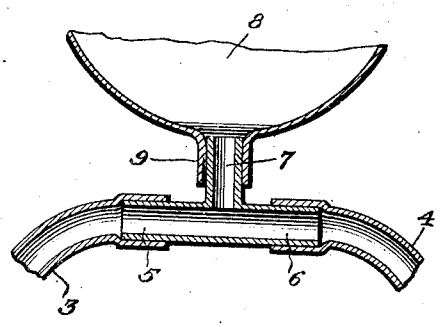


Fig. 2.



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GASOLINE SIPHON FOR AUTOMOBILES.

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The present invention relates to improvements in self starting gasoline siphons for automobiles and has for an object to provide a simple, compact and inexpensive device for withdrawing gasoline from the gasoline tank in which the well known action of the siphon is taken advantage of, and wherein an improved starting device for the siphon is provided in a peculiar relative arrangement with the siphon legs whereby certain new and important results are secured.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claim appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 shows the improved device in elevation, and

Figure 2 is a fragmentary section taken through the T coupling and connected parts.

Referring more particularly to the drawings 3 designates the short and 4 the long legs of the siphon. These legs are preferably of flexible rubber or other hose to admit of folding and placing the device in the tool box or side door pocket of the automobile. The upper ends of both legs are attached to the coaxial or lateral branches 5 and 6 of the T coupling, which is provided with the further or third branch 7 extending upwardly from substantially a central point with respect to the lower or coaxial branches 5 and 6. These latter branches 5 and 6 extend in a straight line or in other words are coaxial, and the branch 7 is disposed at right angles to the common axis of the branches 5 and 6. The internal diameter of the upper branch 7 is preferably considerably smaller than the internal diameter of the coaxial branches and the legs 3 and 4. This serves the purpose of insuring a steady flow of gasoline through the coaxial branches 5 and 6, without interference by air from the bulb 8. The function of the upper branch 7 is to enable the rubber bulb 8, by its expanding action, to withdraw the air from all other portions of the siphon leaving those portions filled with gasoline. A small portion of gasoline will also enter the bulb 8 since the cubic contents of the bulb is greater than the cubic contents of all other portions of the siphon combined. The internal diameter of the upper branch 7 is only sufficiently large to insure that it will not become clogged by any small particles of matter which may be contained in the gasoline. The external diameter of the branches 5 and 6 is preferably slightly larger than the internal diameter of the legs to permit of stretching of the rubber over the branches to insure a tight fit, and leaving the internal diameter of 5 and 6 the same as the internal diameter of the legs 3 and 4. The overlapping parts of the legs may be cemented to the branches of the T or they may be bound thereon in any appropriate way. The upper branch 7 connects with a starting bulb 8, of rubber or other material suitable for the purpose, having the nipple 9 to extend about the upper branch 7. This nipple is cemented or bound on the branch in any convenient manner and is preferably stretched over the branch, so as to tightly fit the same. The joints at the various parts will be tight to avoid leakage of gasoline or air.

In the use of the device the short leg 3 is inserted through the filling neck into the gasoline tank until the lower end thereof is immersed in the liquid body of gasoline. The bulb 8 is squeezed in the hand expelling the air therefrom. The outer free end of the longer leg 4 is now closed as by inserting the finger thereover and the bulb is then released. Such bulb will tend to regain its normal expanded condition and in doing so will draw up the gasoline in the short leg 3, through the T and into the longer leg 4. The cubic contents of the bulb 8 will be greater than the cubic contents of the remaining portion of the siphon. After the bulb has regained its expanded condition, the air from the two legs and the T will be contained in the bulb 8, leaving the remaining portions of the siphon (the two legs and the T) filled with gasoline. The finger is now released from the end of the leg 4 and the gasoline will immediately begin to flow from the end of the longer leg 4. The device will be found useful for withdrawing small quantities of gasoline from the gasoline tank to replenish the vacuum tank in case of trouble encountered in the gasoline system of the automobile, to prime the cylinders in case of difficulty in starting the car, or to remove grease from the hands. The device may be equally well used to withdraw large quantities of gasoline from the tank

of one vehicle to replenish the empty tank of a stalled automobile. It is important to have a siphon device that will operate readily. Many drivers of vehicles, unacquainted with the principles of the siphon will fail to compress the bulb 8 completely and thus fail to draw up a sufficient quantity of gasoline from the tank to fill the legs 3 and 4 and the T, if the bulb 8 is not considerably larger in contents than the remainder of the siphon. The device as presently arranged will operate with only a small compression of the bulb 8 by reason of the fact that the combined capacity of the legs 3 and 4 plus the capacity of the T, is considerably less than the capacity of the bulb. In other words if the bulb is compressed sufficiently to draw up sufficient gasoline through the short leg 3 to fill both legs, this gasoline will rapidly pass over through the straight line branches 5 and 6 to the tube 4 and will start the siphon going. The bulb as shown is of considerably larger capacity than the capacity of the legs 3 and 4 plus the branches 5 and 6, and consequently there will be small opportunity for poor results even with the most inexperienced user. Where rubber is used for the bulb and legs, these parts may be slipped over the branches of the T without employing any cement or other fastening and the device may be quickly dismembered for purposes of cleaning the branches of the T, the legs and the bulb. The device is foldable into small compass and is easily carried about the person or in the vehicle.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claim.

What is claimed is:—

A gasoline siphon for automobiles comprising a T having branches extending in axial alinement and a third branch rising at right angles from the intermediate portion of said first mentioned branches, the said third branch being reduced in internal diameter compared with the coaxial branches to a size sufficiently large only to prevent clogging of same by small particles contained in the gasoline, flexible legs of unequal length to extend over the end of each of said coaxial branches, and a bulb of resilient material having a nipple to engage the end of said third branch.

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