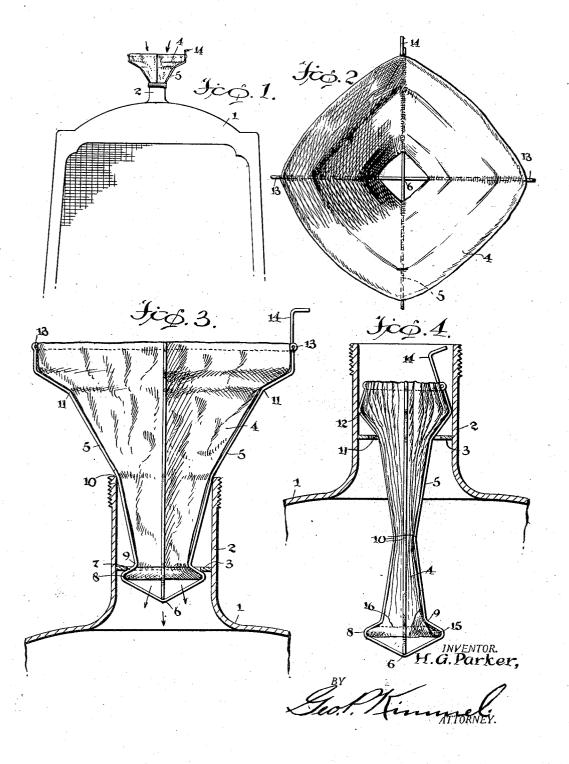
July 29, 1924.

H. G. PARKER FUNNEL 1,503,373

Filed June 30. 1923



## 1,503,373

# UNITED STATES PATENT OFFICE.

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#### FUNNEL.

Application filed June 30, 1923. Serial No. 648,819.

### To all whom it may concern:

Be it known that I, HERSCHEL G. PARKER, a citizen of the United States, residing at Philipsburg, in the county of Center and

State of Pennsylvania, have invented cer-tain new and useful Improvements in Funnels, of which the following is a specification.

This invention relates to filling devices 10 and more particularly to funnels, and has for its primary object the provision of a funnel adapted to be collapsed and retained in the filling spout of an automobile radiator or any other receptacle having a filling 15 spout, and having an inherent quality

- whereby upon receiving an initial impulse, it will spring upward, at the same time opening, into operative position.
- Another object is the provision of a funnel 20 which will be light, durable and inexpensive to manufacture.

Briefly, the device consists of two, sub-stantially V shaped spring wire members, positioned one within and at right angles 25 to the other and having a fabric body open at the upper and lower ends, the upper edge being secured to the ends of the four arms formed by the wire members, while

- the lower end is secured to a ring member 30 held in offset in the arms near their apices. These offsets also serve to secure the funnel against withdrawal from the spout, by abutting against the under edge of an annular flange secured therein. It will be seen that 35 upon compressing the spring arms at their upper ends, the funnel will be sufficiently compressed to allow it to be pressed down into the spout, and when it is desired to bring the funnel into operative position it
- 40 is lifted until the upper edge is above the edge of the spout, whereupon the tendency of the arms to spring outward will draw the funnel upward in open position.
- The invention will be best understood 45 from a consideration of the following detailed description taken in connection with the accompanying drawings forming part of this specification, with the understand-ing that the invention is not confined to 50 any strict conformity with the showing of the drawings, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention as expressed
- 55 in the appended claims.

In the drawings:---

Figure 1 is an elevation of an automobile radiator showing the funnel in operative position.

Fig. 2 is a top-plan view of the funnel. 60 Fig. 3 is a side elevation of the funnel upon in the radiator spout, the spout being in section, and

Fig. 4 is a side elevation of the funnel closed in the radiator spout, the spout being 65 in section.

In the drawings, wherein like reference numerals indicate corresponding parts throughout the several views of the drawing, 1 indicates an automobile radiator, having 70 the usual filling spout 2. Within this spout is fitted a ring 3, as shown, which ring serves to retain the funnel within the spout whether it is in open or closed position, as will become apparent further on. The 75 funnel comprises a body 4, which may be of canvas or other suitable fabric. A plurality of substantially V-shaped spring wire members 5, constitute the supporting frame for the body, one of these members being 80 positioned within and at right angles to the other, the point of the inner seating within the point of the outer, as at 6. Each of these members 5, have broadly pointed apices, each arm of each member having 85 a short portion 7, bent inward at 8 and outwardly at 9, thus causing the bottom to assume the shape of an arrow head. Slightly below midway of their ends the arms are again bent as at 10 and again sharply as at 90 11, and inwardly again at 12, thus forming, when released and allowed to spring outward, a funnel shaped frame for the fabric The upper end of each arm is looped body. as at 13, to which the upper edge of the 95 fabric body is secured. One of the arms is continued upward a short distance and bent outwardly to form a grasping member 14.

The lower edge of the fabric is turned 100 back over a ring 15 and stitched to the body as at 16 and this ring is held in the offsets formed by the inturned portion 7 thus the fabric body is held in position within the four arm members 5.

It will be readily seen that upon drawing the funnel upward until the bend 11, is above the edge of the spout 2, that the tendency of the arms 5 to spring outward will act to draw the funnel upward until the 110

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portion 7 abuts the under edge of the ring grasping member, extending from one of 3, thus stopping the upward movement. The bend 10, will then be at the edge of the spout 3. When the funnel is forced 5 back into the spout it is pressed downwardly until the portions between the bends 11 and 12 nearly contact with the upper inner edge of the ring 3, the spring tension of the arms against the interior of the spout serving to 10 hold the funnel in place, but should it slip downward through jarring of the vehicle the ring will prevent its escape into the interior of the radiator.

Having thus described the invention, 15 what is claimed as new is:-

1. A funnel adapted for use in a filling spout, comprising an expansible and contractile flaring frame, consisting of substantially V-shaped members, the apex of 20 one member within and resting upon the other at its apex and disposed transversely thereto, said frame being shiftable lengthwise of the filling spout for assuming its open or closed position, a body of compres- $\mathbf{25}$ sible material open at each end and surrounded by and connected to the frame, an annulus surrounding said frame and adapted to be secured within a filling spout, a shoulder formed in each arm of each frame 30 member adjacent the apex of each member for coacting with said annulus to prevent hereto. the withdrawal of the funnel from the spout when the funnel is in open position, and a

said arms above the upper edge of the fun- 35 nel.

2. A funnel adapted for use in a filling spout, comprising an expansible and contractile flaring frame, consisting of substantially V-shaped members, the apex of one 40 member within and resting upon the other at its apex and disposed transversely thereto, said frame being shiftable lengthwise of the filling spout for assuming its open or closed position, a body of compressible ma- 45 terial open at each end and surrounded by and connected at one end to the frame, an annulus surrounding said frame and adapted to be secured within a filling spout, a shoulder formed in each arm of each frame 50 member adjacent the apex of the member for coacting with said annulus to prevent the withdrawal of the funnel from the spout when the funnel is in open position, a ring member carried by said body material at its <sup>55</sup> lower end and positioned between the four arms provided by the V-shaped members, and adapted to bear against the under surface of said shoulders to retain the lower end of the material in position, and a grasp-60 ing member extending from one of said arms above the edge of the funnel.

In testimony whereof, I affix my signature

## HERSCHEL G. PARKER.