

C. M. RICE.
 FLUID HEATING DEVICE.
 APPLICATION FILED MAR. 21, 1910.

976,915.

Patented Nov. 29, 1910.

FIG. 1-

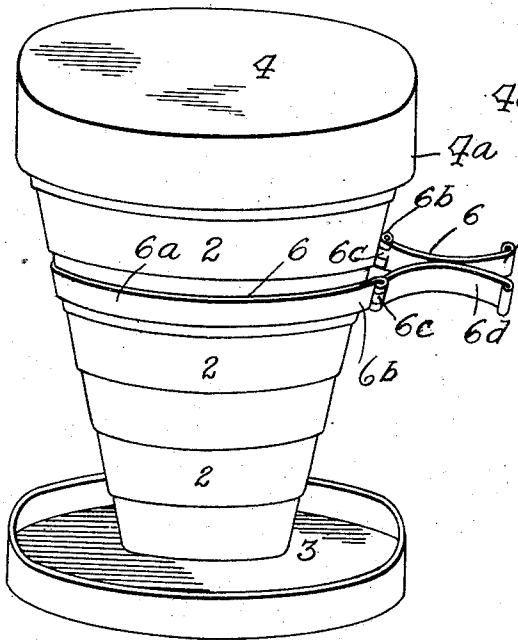


FIG. 2-

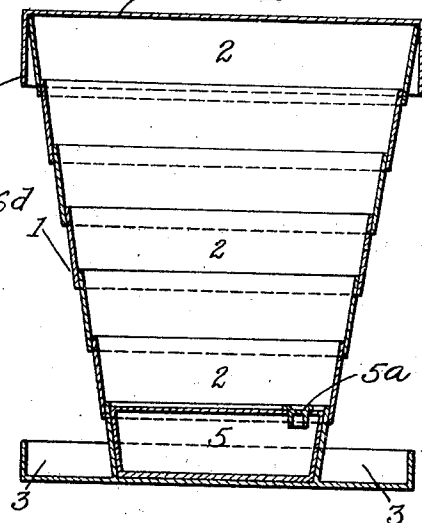


FIG. 4-

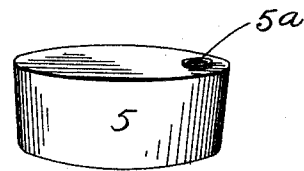


FIG. 3-

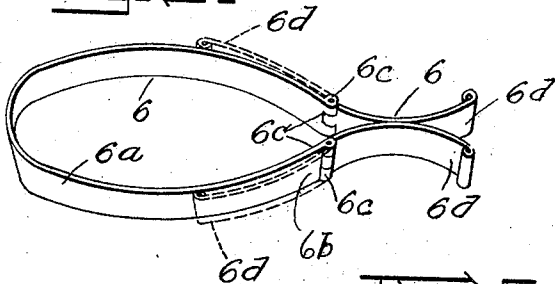
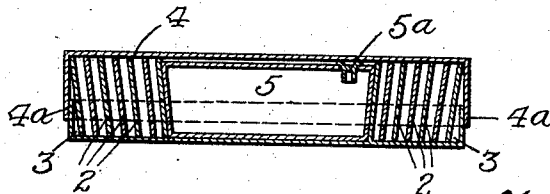


FIG. 5-



Witnesses:

Chas. A. Becker.
 Jas. K. Smith

Inventor:

Chas. M. Rice
 By Small, Small,
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UNITED STATES PATENT OFFICE.

CHARLES M. RICE, OF ST. LOUIS, MISSOURI.

FLUID-HEATING DEVICE.

976,915.

Specification of Letters Patent.

Patented Nov. 29, 1910.

Application filed March 21, 1910. Serial No. 550,789.

To all whom it may concern:

Be it known that I, CHARLES M. RICE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Fluid-Heating Device, of which the following is a specification.

This invention relates to improvements in portable devices primarily designed to heat fluids; and the objects of my improvement are to provide a simple, compact, and inexpensive utensil which may be accommodated, together with a detachable, adjustable, and folding handle, in small space and be of convenience to travelers and of value in emergencies. These desiderata I attain by the construction illustrated in the accompanying drawing, in which—

Figure 1 is a perspective of my device ready for use; Fig. 2 a vertical section of Fig. 1, with the exception of the detachable and adjustable handle; Fig. 3 depicts said handle in perspective; Fig. 4 is a perspective of a fuel tank hereinafter to be described; and Fig. 5 is a section of the completed device when collapsed.

Throughout the several views like numerals refer to like parts.

The device is herein presented in the form of a cup, although not necessarily restricted to such form, and comprises what shall be termed a body portion 1 formed of a plurality of telescoping concentric units 2, the lowest of which is firmly affixed to and closed by a reservoir-base 3, while a separable cap or lid 4 frictionally engages the uppermost of said units. When the device is not in use a fuel tank 5, having a vent 5^a, occupies the space inclosed by the lowest of said units and upon the collapse of said body portion lid 4 is disposed just above said tank, while its flange 4^a coöperates with the upturned rim of reservoir-base 3 to form a dust-proof closure. When it is desired to use the device cap 4 is removed, tank 5 abstracted from its aforesaid situation, units 2 are drawn upwardly, the liquid desired

heated placed in the cup thus provided, and the fuel poured from tank 5 into reservoir-base 3 and ignited, it being optional whether or not a wick or absorbent packing be placed in said reservoir. In order that the utensil may be held and manipulated when heated there is provided a detachable and adjustable handle 6 of peculiar construction, comprising a substantially annular portion 6^a whose opposite terminals 6^b hingedly engage at 6^c semi-elliptical arms 6^d. It is to be noted that, for the sake of compactness, said arms may be folded outwardly and thence inwardly so as to lie upon the convexity of said annular portion of said handle; that said annular portion, being preferably formed of spring steel or other resilient metal, the utensil is normally frictionally gripped thereby; and that by simply bringing arms 6^a forcibly together the handle is released from engagement with the cup or body portion.

What I claim as new and desire to secure by Letters-Patent, is:—

1. A device of the character described, comprising a collapsible receptacle, a base affixed thereto, and a handle, said handle being freely detachable from said receptacle and freely adjustable thereupon and adapted to fold and to conform with the external contour thereof, and said base adapted to retain a heating medium adjacent said receptacle.

2. A device of the character described, comprising a collapsible receptacle, a base affixed thereto, and a handle, said handle being freely detachable from said receptacle and freely adjustable thereupon and adapted to frictionally grip said receptacle and to fold and to conform with the external contour thereof, and said base adapted to retain a heating medium adjacent said receptacle.

CHARLES M. RICE.

Witnesses:

W. F. SMALL,
W. KEANE SMALL.