

No. 632,497.

Patented Sept. 5, 1899.

A. KITSON.
MANTLE HOLDER.

(Application filed Mar. 6, 1899.)

(No Model.)

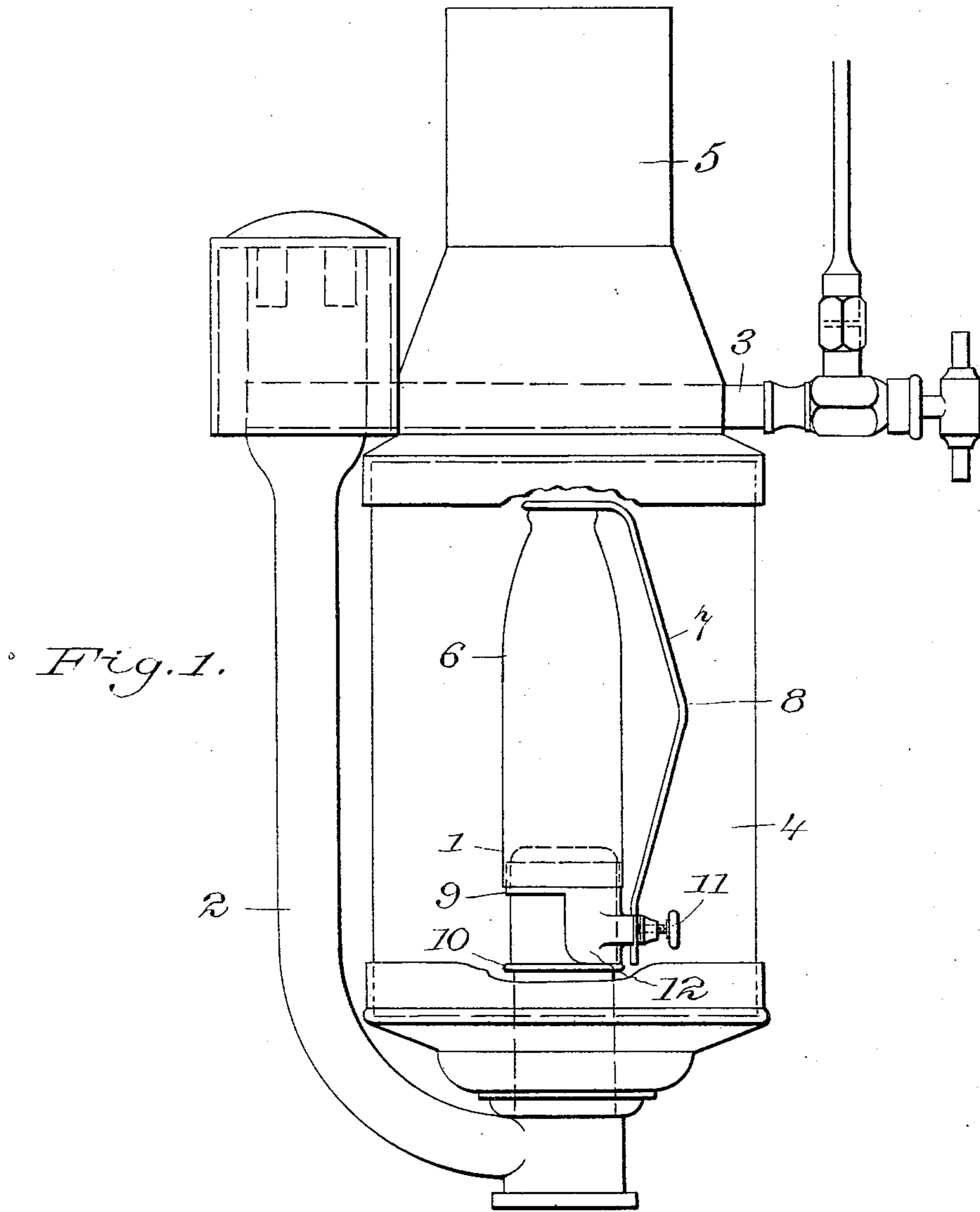
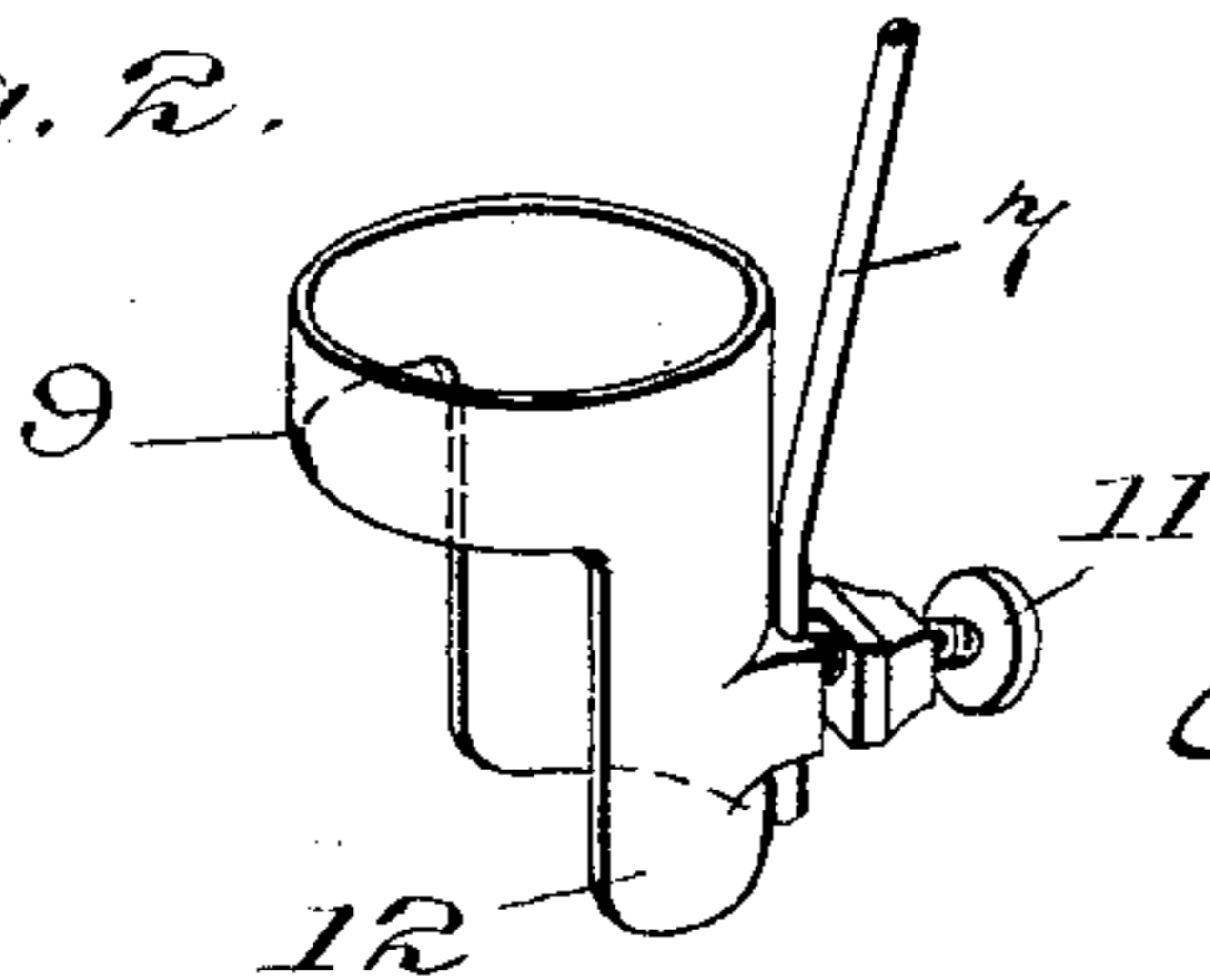


Fig. 2.



~~WITNESSES:~~

WITNESSES:
Gustafson

W. H. Humphrey.

INVENTOR

INVENTOR
Arthur Kelson

BY

BY *J. H. Richmond*

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UNITED STATES PATENT OFFICE.

ARTHUR KITSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
KITSON HYDROCARBON HEATING AND INCANDESCENT LIGHTING COM-
PANY, OF SAME PLACE AND CHARLESTON, WEST VIRGINIA.

MANTLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 632,497, dated September 5, 1899.

Application filed March 6, 1899. Serial No. 708,022. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR KITSON, a sub-
ject of the Queen of Great Britain, and a resi-
dent of Philadelphia, county of Philadelphia,
5 State of Pennsylvania, have invented certain
new and useful Improvements in Mantle-
Holders, of which the following is a specifica-
tion.

My invention relates in general to burners
10 employing incandescent mantles, and is more
specifically designed to provide a convenient
form of mantle-holder to be used with vapor-
burning lamps. In such vapor-burning lamps
the necessity for removing the mantle for
15 cleaning or replacing parts of the burner and
similar purposes arises more frequently than
is the case with burners using ordinary illu-
minating-gas, and it becomes desirable to have
means for readily removing and replacing the
20 mantle without danger of breakage. The
preferred form of apparatus for accomplish-
ing this result is illustrated in the accompa-
nying sheet of drawings, in which—

Figure 1 is a side elevation of a vapor-burner
25 and its connections with my improved mantle-
holder in position. Fig. 2 is a detail view of
the mantle-holder.

Throughout the drawings like reference-
figures refer to like parts.

30 The parts of the vapor-burning apparatus
illustrated are of familiar type, consisting of
the burner 1, the mixing-tube 2, the vaporiz-
ing-tube 3, the globe 4, and chimney 5. The
incandescent mantle 6 is sustained by a wire
35 7; but this wire 7 I prefer to bend away from
the mantle in a bow shape, so that the cen-
tral portion 8 opposite the central portion of
the mantle is farthest away from said mantle.
The lower end of the wire support or mantle-
40 holder 7, instead of being stepped in a lug
permanently fastened to the burner 1, as in
the usual construction, is stepped in a ring 9,
which fits loosely over the burner 1 and has
its lower projecting part 12 resting on a head
45 or shoulder 10 or other projection formed on
said burner at the proper elevation. A fur-
ther adjustment may be obtained by having
the wire 7 movable in the ring 9 by a set-screw
11 and held in the proper position for any

given length of mantle. The ring-shaped 50
portion 9 just slips over the top of the burner,
embracing the same and holding the appara-
tus in position, but has to be lifted up only a
little way to enable it to clear the burner,
thus providing for the easy and safe removal 55
of the mantle from lamps where the vapor-
tube is only a short distance above the top of
the mantle.

The mode of operation of my invention is
as follows: The lamp-trimmer removes the 60
ring 9 and attached mantle-holder to mount
a new mantle. He is thus able to work at
ease without danger of knocking the mantle
against the other parts of the lamp. When
the mantle is supplied by the manufacturer 65
already mounted on the wire 7, the same may
be inserted in the ring 9 and clamped by the
set-screw 11. The ring 9 may then be slipped
over the burner 1 and brought to a bearing
on the shoulder 10. The operator has to use 70
only one hand in doing this, the other being
free to steady the lamp. After the mantle
has been used awhile it becomes excessively
fragile, and with the ordinary form of holder
it is almost impossible to remove for any pur- 75
pose without breaking it. With my inven-
tion, however, the mantle may be removed
without jarring it by simply lifting off the
ring 9.

The advantages of my invention reside in 80
the convenience of manipulation and saving
of mantles above described, while at the same
time the projecting portion 12 of the ring acts
to hold the mantle-supporting wire securely
85 in an upright position.

It is evident that various changes could be
made in the details of construction above de-
scribed without departing from the spirit and
scope of my invention. Other means of sup-
porting the ring than that shown might be 90
employed, other loosely-fitting forms of appa-
ratus might be substituted for those illus-
trated, or the supporting-wire might be bent
in different shapes and clamped in different
ways; but all these and similar variations I 95
consider changes of form and not in sub-
stance and still within the limits of my in-
vention.

Having therefore described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The combination of the burner provided
5 with a shoulder, a ring loosely fitting over said burner, and having a downward projection which rests on said shoulder, and a mantleholder mounted on said ring.

2. The combination of the burner provided
10 with a shoulder, a ring loosely fitting over said

burner, and having a downward projection which rests on said shoulder, and a mantleholder adjustably mounted in said ring.

Signed by me at Philadelphia, Pennsylvania, this 24th day of February, 1899.

ARTHUR KITSON.

Witnesses:

J. W. RICH,

LOUIS R. BAKER.