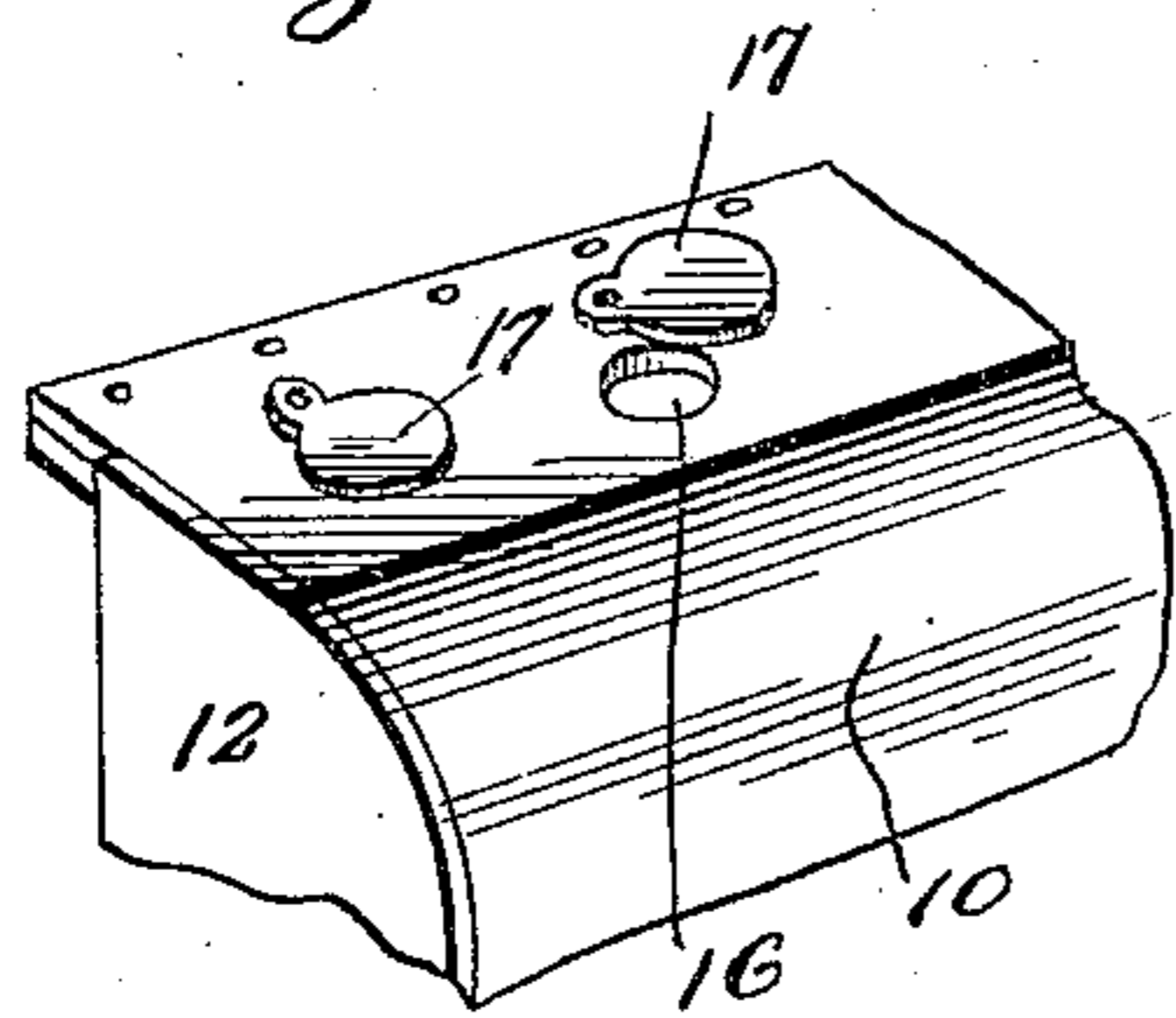
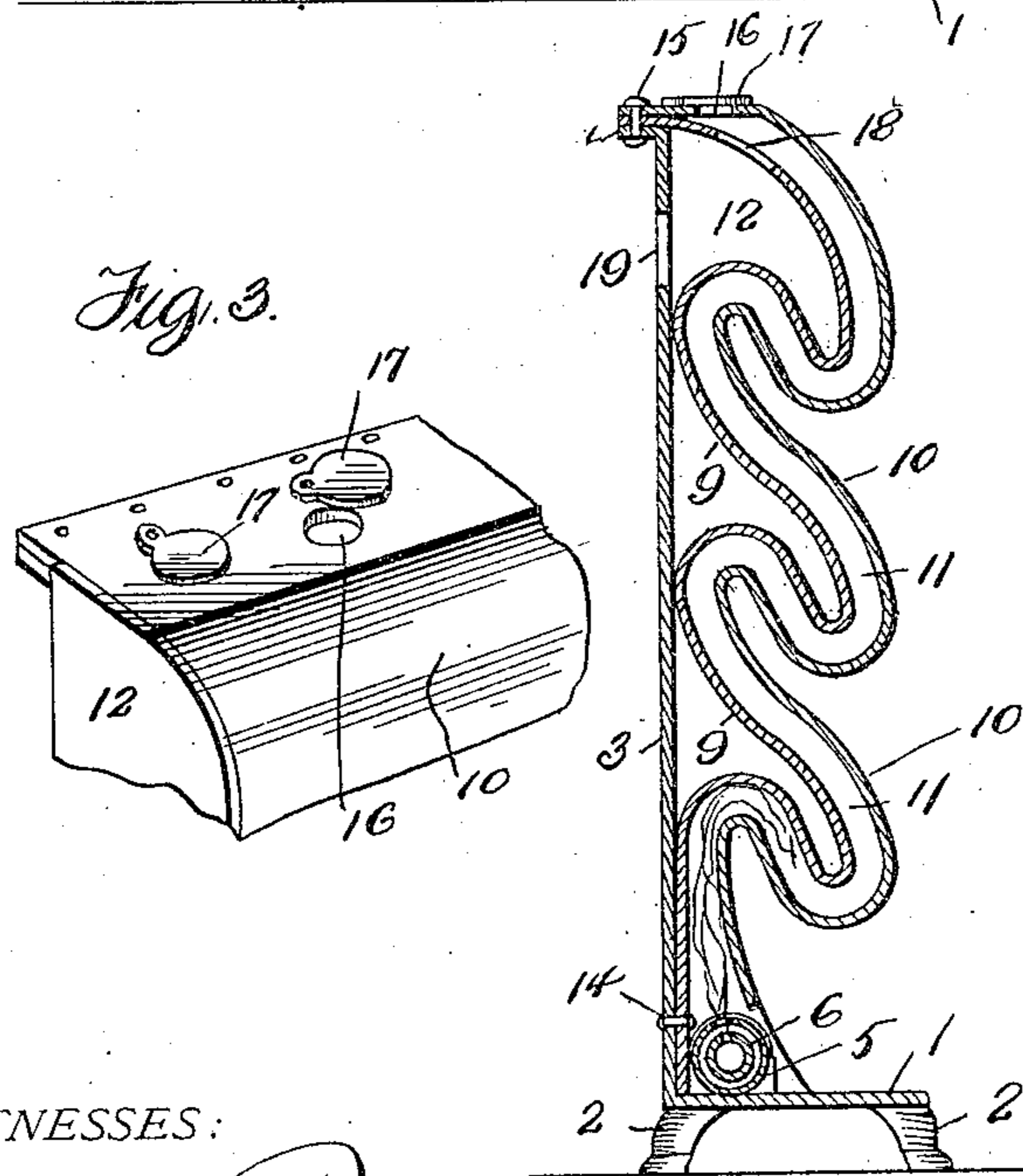
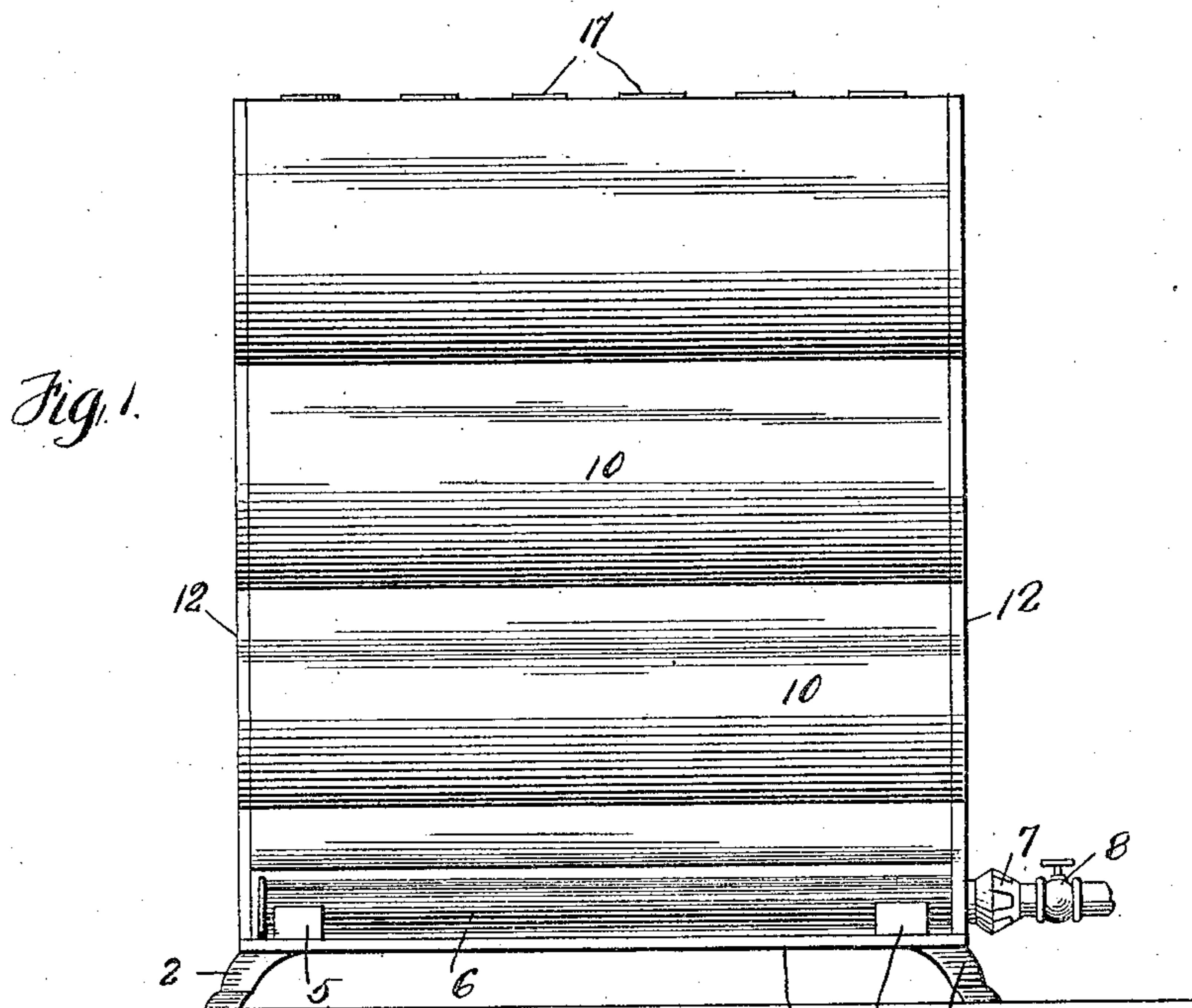


No. 879,762.

PATENTED FEB. 18, 1908.

T. H. GALLAGHER.
GAS STOVE.

APPLICATION FILED MAY 9, 1907.



WITNESSES:

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THOMAS H. GALLAGHER, OF INGRAM, PENNSYLVANIA.

GAS-STOVE.

No. 879,762.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed May 9, 1907. Serial No. 372,702.

To all whom it may concern:

Be it known that I, THOMAS H. GALLAGHER, a citizen of the United States of America, residing at Ingram, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Gas-Stoves, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to improvements in gas stoves, and the invention has for its object to provide a gas stove with a novel deflector for insuring a large radiation of the heat of the products of combustion before 15 their escape thus obtaining a high degree of efficiency from a burner or stove used for heating purposes.

Another object of this invention is to provide a burner and deflector particularly designed for fireplaces, although the burner and 20 deflector can be used as a stove for heating purposes.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts 25 to be hereinafter more fully described and then specifically pointed out in the appended claims.

Referring to the drawing forming part of 30 this specification, like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a front elevation of a stove constructed in accordance with my invention, 35 Fig. 2 is a vertical sectional view of the same, Fig. 3 is a perspective view of a portion of the stove.

To put my invention into practice, I construct a stove of a base 1 having supporting 40 legs 2. The base 1 is provided upon its rear edge with a vertically disposed rear plate 3 terminating in a flanged edge 4.

Upon the base 1 are arranged brackets 5 for a tubular burner 6, of a conventional 45 form, said burner being provided with a mixer 7 and a gas controlling valve 8. Above the burner 6 are arranged two parallel plates 9 and 10, said plates being bent to provide a sinuous passage 11 for the waste prod- 50 ucts of combustion from the burner 6. The

plates 9 and 10 correspond in width to the plate 3 and have their edges secured to end plates 12 cut on their front edges to conform to the sinuous arrangement of the plates 9 and 10. The plate 9 has its lower edge suit- 55 ably secured to the plate 3, as at 14, and its upper edge, together with the upper edge of the plate 10, being secured to the flanged edge 4 of the plate 3, as at 15. The plate 10 at the top of the stove or deflector is provided 60 with a plurality of openings 16 having pivoted shutters 17.

The plate 9 is provided with a central opening 18 near its upper edge, whereby when the shutters 17 are closed, the waste 65 products can escape through the opening 18 and through an opening 19 formed in the plate 3, to a suitable exhaust flue.

By the novel arrangement of the plates 9 and 10, the products of combustion or heat 70 units will be sufficiently retarded to insure a perfect heating of said plates, and as said plates have a large heating surface in proportion to the size of the stove, I obtain a maximum amount of heat from a minimum 75 expenditure of gas in the stove. I provide the openings 16 and shutters 17 whereby the heat units can pass directly into the compartment in which the stove is used.

It is obvious that such variations in the 80 size, proportion and minor details of construction, as are permissible by the appended claims, may be resorted to without departing from the spirit and scope of the invention.

What I claim and desire to secure by Let- 85 ters Patent, is:

1. A stove consisting of a base, a vertically disposed rear plate carried by said base, a burner arranged upon said base, plates supported above said burner and having a sinu- 90 ous arrangement for providing a sinuous passage, said plates having their upper edges secured to said vertically disposed plate, said plates having openings formed therein adjacent to their upper edges, shutters closing 95 some of said openings, said rear plate having an opening formed therein, and end plates supporting the side edges of said sinuously arranged plates.

2. In a gas stove, a base, a vertically-ex- 100

tending rear plate provided near its upper
edge with openings, a pair of plates sup-
ported on the base in front of the rear plate
being spaced apart and bent to form a sinu-
5 ous passage therebetween, the said plates at
their upper ends being projected rearwardly
and overlapped on the upper end of the rear
plate and secured thereto, each of said plates

being provided with openings adjacent their
upper ends.

10

In testimony whereof I affix my signature
in the presence of two witnesses.

THOMAS H. GALLAGHER.

Witnesses:

MAX H. SROLOVITZ,
WALTER L. DUNNY.