

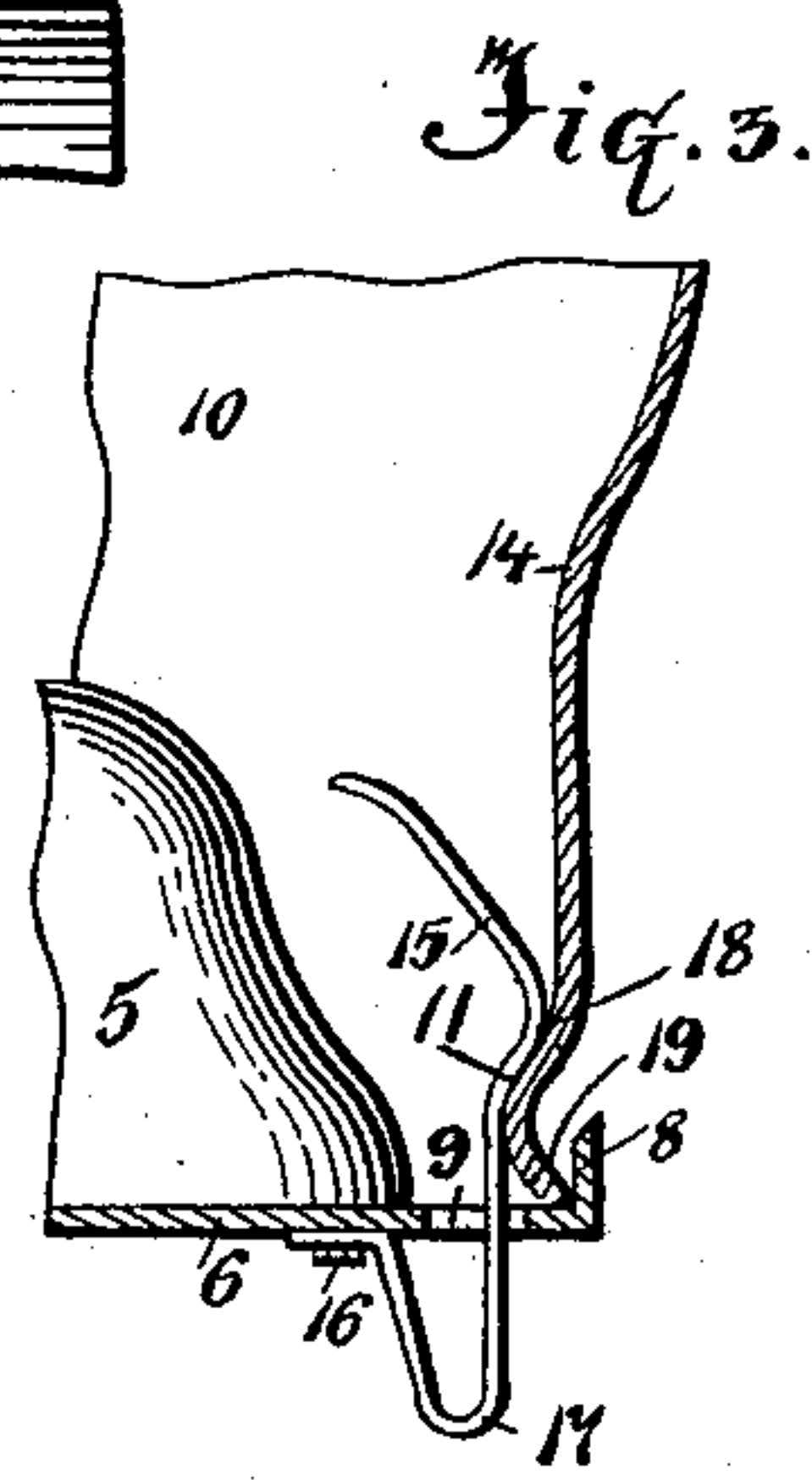
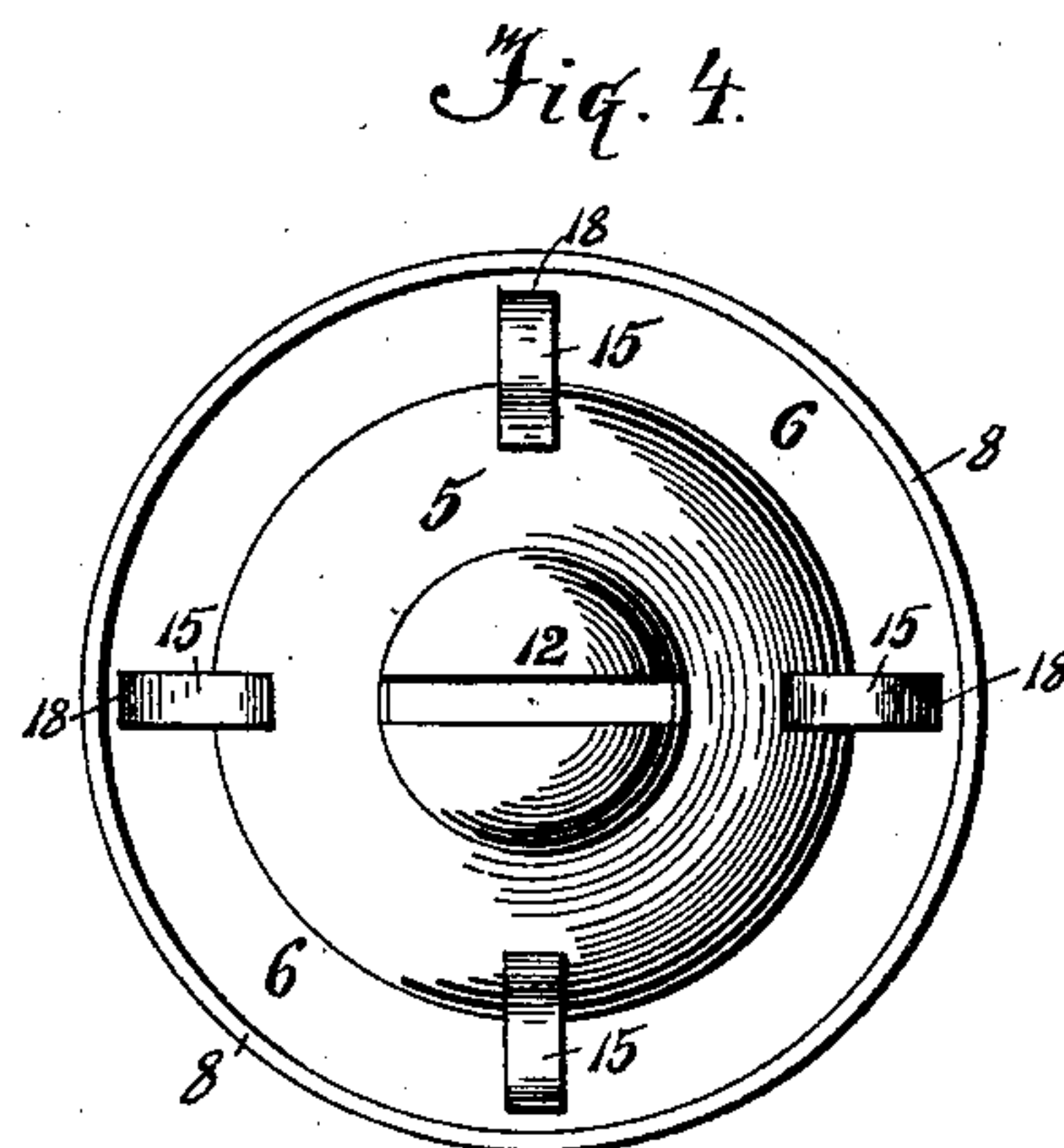
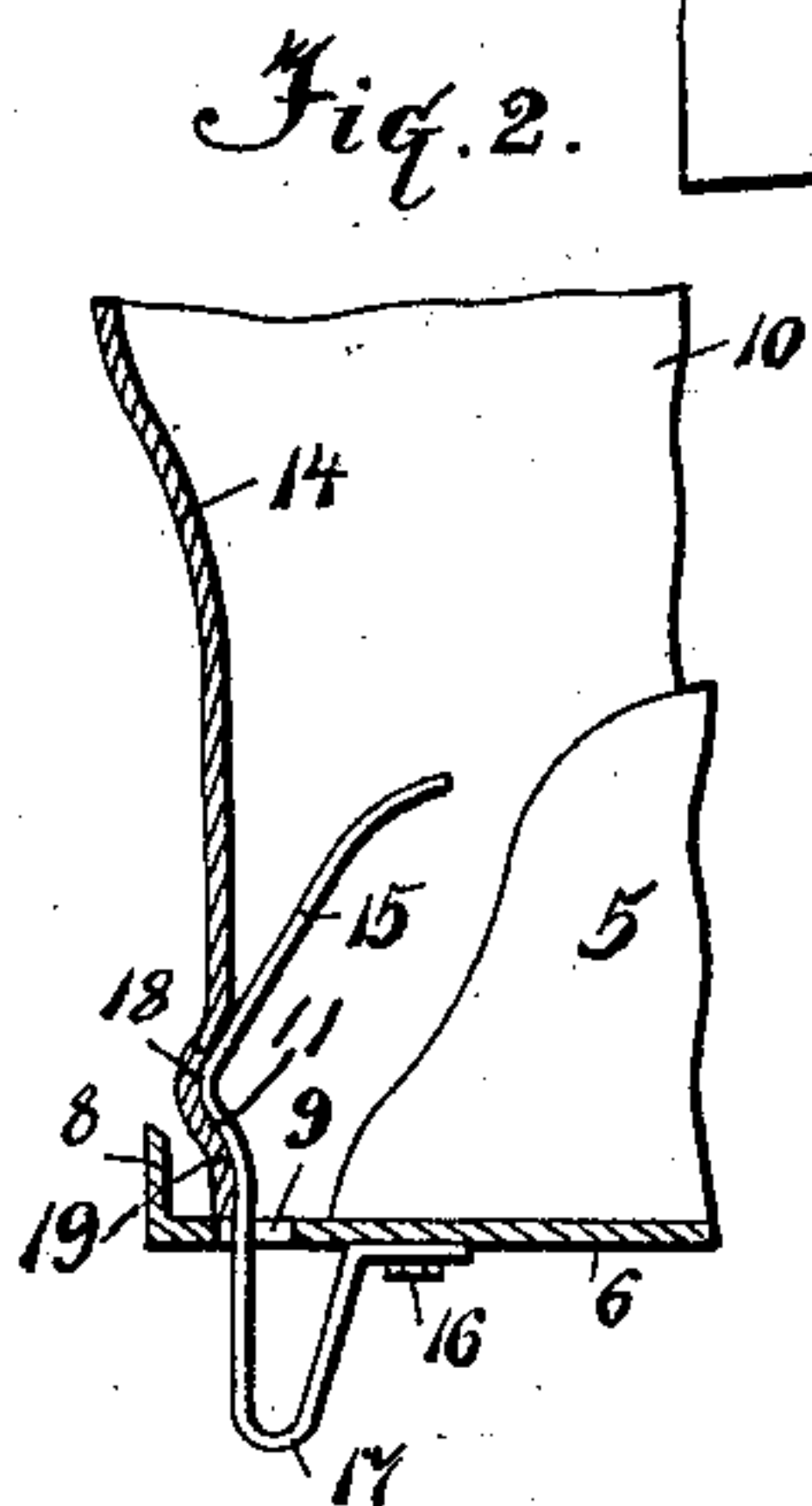
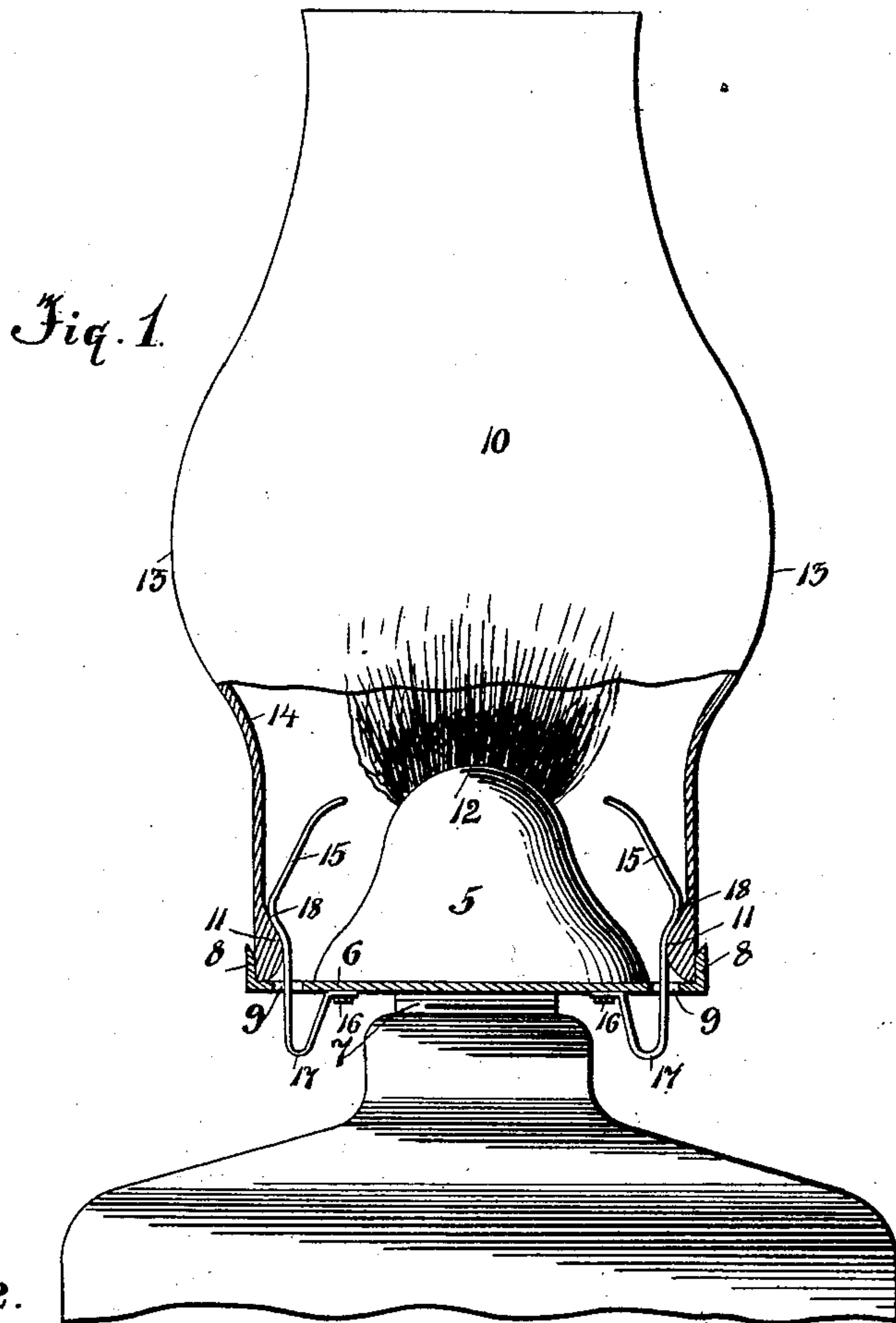
No. 606,850.

Patented July 5, 1898.

J. H. WALLACE & A. G. HILTON.
CHIMNEY HOLDER.

(Application filed Sept. 20, 1897.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES H. WALLACE AND ARTHUR G. HILTON, OF FORT FAIRFIELD, MAINE.

CHIMNEY-HOLDER.

SPECIFICATION forming part of Letters Patent No. 606,850, dated July 5, 1898.

Application filed September 20, 1897. Serial No. 652,310. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. WALLACE and ARTHUR G. HILTON, citizens of the United States, residing at Fort Fairfield, in the county of Aroostook and State of Maine, have invented a new and useful Improvement in Chimney-Holders; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents in side elevation, partly in vertical section, a lamp burner and chimney with a chimney-holder according to our invention. Figs. 2 and 3 represent in vertical section portions of modifications of our chimney, and Fig. 4 is a plan or top view of a burner-gallery with chimney-retaining springs according to our invention.

This invention relates to that class of chimney-holders which are adapted for use with kerosene or coal-oil lamps to hold the glass chimneys upon the burners thereof; and its object is to hold the chimney securely in its position without danger of cracking the glass by contact with the holder, and yet to permit the chimney to be easily and quickly removed from the holder or returned thereto.

To this end our invention consists in the construction and combination of parts forming a chimney-holder hereinafter more fully described, and particularly pointed out in the claims.

5 represents a lamp-burner mounted upon a gallery 6 and provided with a screw-neck 7 to enter the top of a lamp. The gallery is provided with an upturned flange 8 and with two or more apertures 9 through its floor.

10 represents a glass chimney which we provide with an internal upward-facing shoulder 11, located a little above the lower end of the chimney, but to a considerable distance below the top 12 of the burner, from which top the flame of light and heat is emitted when the lamp is in service.

To increase the spread and light-giving qualities of the flame and to avoid being cracked by too close proximity to the flame, glass chimneys are sometimes formed with an outward bulge 13, starting to spread at a shoulder 14 about on a level with the top 12 of the burner; but our shoulder 11 is located far

below this shoulder 14 to serve as a point or ring for engagement by a series of spring-fingers 15. These fingers are secured at 16 to the floor of the gallery and depend therefrom to a return-bend 17, from which each spring rises through one of the apertures 9, and is provided with an offset projection 18 to rest closely, by the action of the spring, upon the shoulder 11. Each finger is inclined considerably toward the center, so that the tops of opposite springs are much nearer together than the interior diameter of the lower end of the chimney, and yet their location is so much below the level of the light-emitting portion of the flame from this burner, that these spring-fingers do not cast any material shadow from the light.

It is well known that the breakage of glass chimneys is generally due to the sudden cooling of some part after being heated and very seldom from the act of being heated. We have therefore located our retaining-fingers within the chimney and near enough to the flame to compensate for being below it to cause them to be heated as fast or a little faster than the chimney is, so that no matter whether the chimney be suddenly taken off or put onto the burner these fingers will never chill it and cause a crack. This permits common low grades of glass to be used and cheap chimneys to take the place of expensive ones. The inward slant of the tops of the fingers offers a cone of small diameter to readily enter the chimney, so that the chimney may be returned to place almost as readily in the dark as in the light. If fingers placed outside the chimney were to be spread at their upper ends to form a receiving-mouth as much greater than the chimney as the top of the cone of our fingers is less than the size of the chimney, such fingers would frequently get caught, to the great danger of the lamp and chimney, and the fingers would get bent, so as to be useless, while our spring-fingers are inside of the chimney, wholly out of danger, and their edges being close to the sides of the apertures in the floor of the gallery they are permanently guarded and held in their proper position. The downward-projecting return-bend of the springs not only adds much to their resilience, but it presents a handle which,

being pressed by a person's fingers inward, releases the spring-pressure in the chimney.

To form the shoulder 11, the glass of the chimney may be thickened, as in Fig. 1, or be merely creased on the outside, so as to leave the flange 19 of the same diameter as the chimney-body, to engage the upturned flange 8 of the gallery, or it may be formed as an inner crease, as shown in Fig. 2, leaving a short portion of the body of the chimney of full size below the crease. Then the offset projection 18 of the spring will engage the crease.

Part of the advantage of our invention would be attained if the spring-fingers were secured upon the gallery-floor without the downward projection, whose return-bend is at 17, and the upward flange 8 is not absolutely necessary, because with three or more fingers located in a circle the chimney would be very well held by its internal shoulder.

Having thus fully described our invention, what we believe to be new, and desire to secure by Letters Patent, is the following:

1. In chimney-holders, a burner, a gallery around the burner and having a circumferential upturned flange to receive the base of the chimney; and two or more spring-fingers, one end of each secured to the floor of the gallery and depending below the same and formed with a compressing-handle consisting of a return-bend from which each finger rises freely through an aperture in the gallery-

floor, each finger being shaped with an outward-projecting offset above which the fingers converge in slanting positions toward the common center, and below the top of the burner; substantially as described.

2. In chimney-holders, a burner mounted upon a gallery-floor having two or more apertures through it and two or more spring-fingers each secured to the floor and projecting downward and having a compressing-handle consisting of a return-bend from which each finger rises through one of the said apertures in the gallery-floor and is shaped with an outward offset to engage a shoulder of the chimney and terminates upward with an inward slant, the said offset in each finger being located below the level of the burner; substantially as described.

3. In chimney-holders a burner having a gallery with two or more apertures through the floor and spring-fingers depending from the floor and having each a compressing-handle consisting of a return-bend, the free end of the finger passing up through the floor and adapted to engage a chimney on the inner side thereof; substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES H. WALLACE.
ARTHUR G. HILTON.

Witnesses:

KATHARINE WRIGHT,
WALTER F. CROWELL.