

**No. 713,200.**

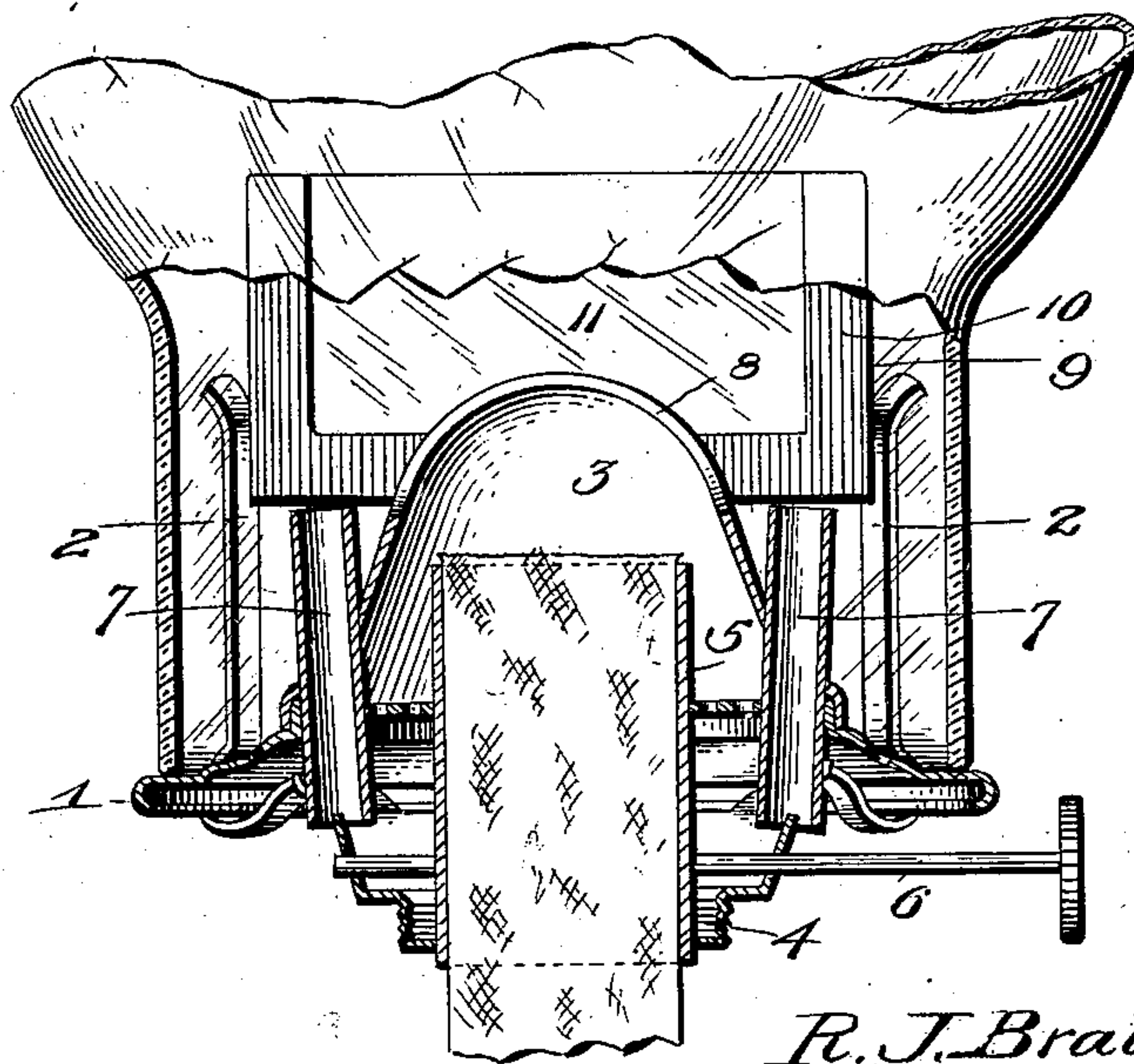
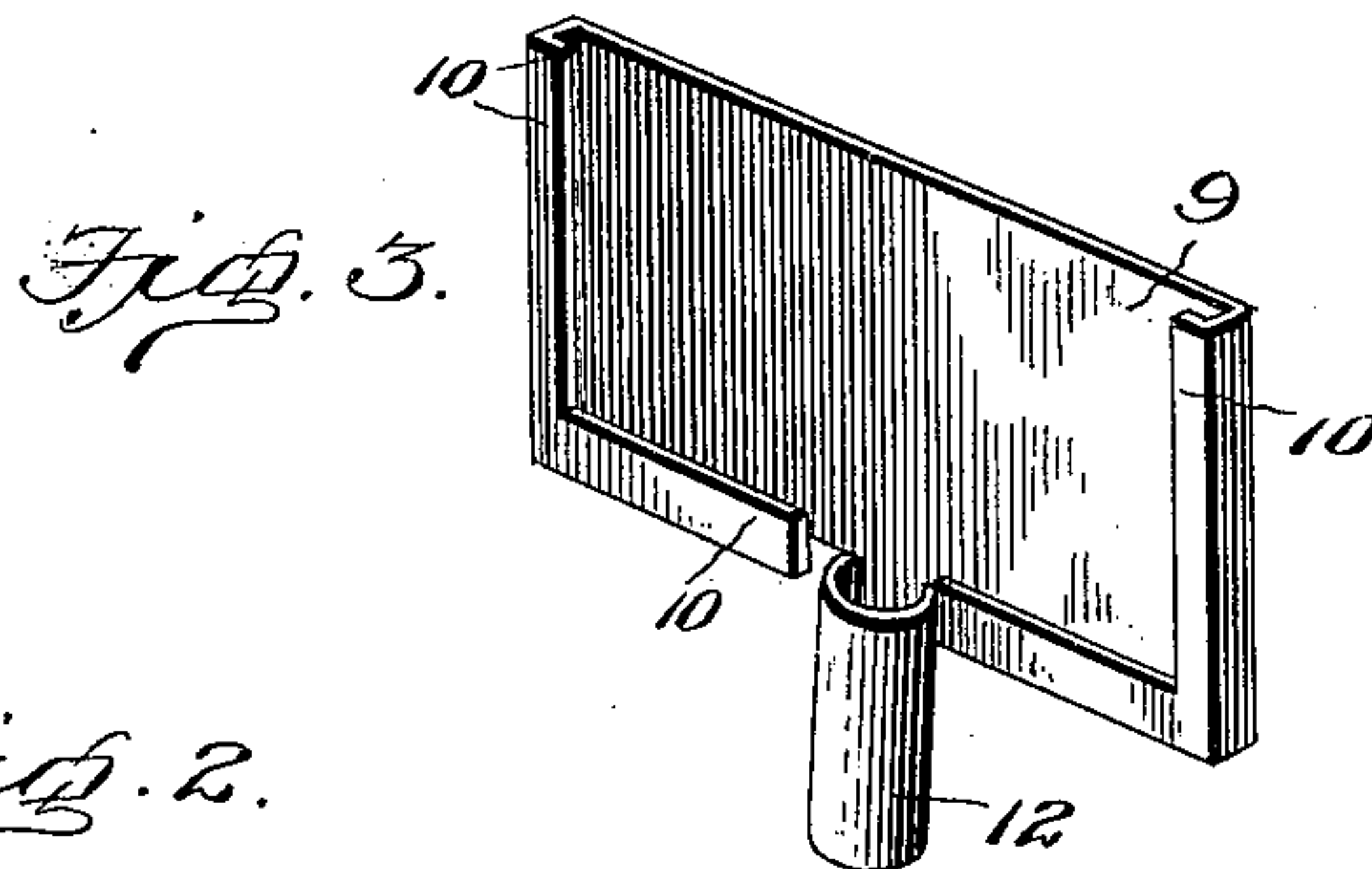
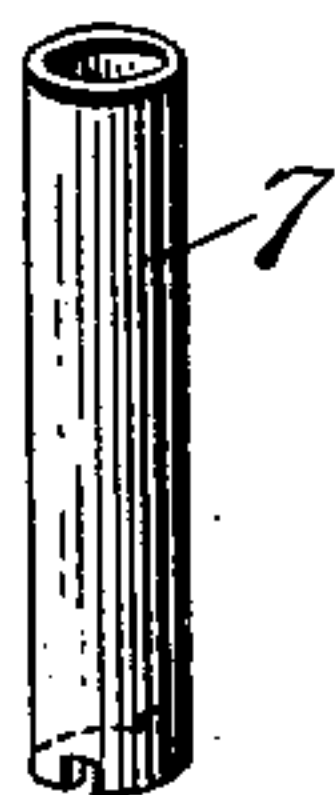
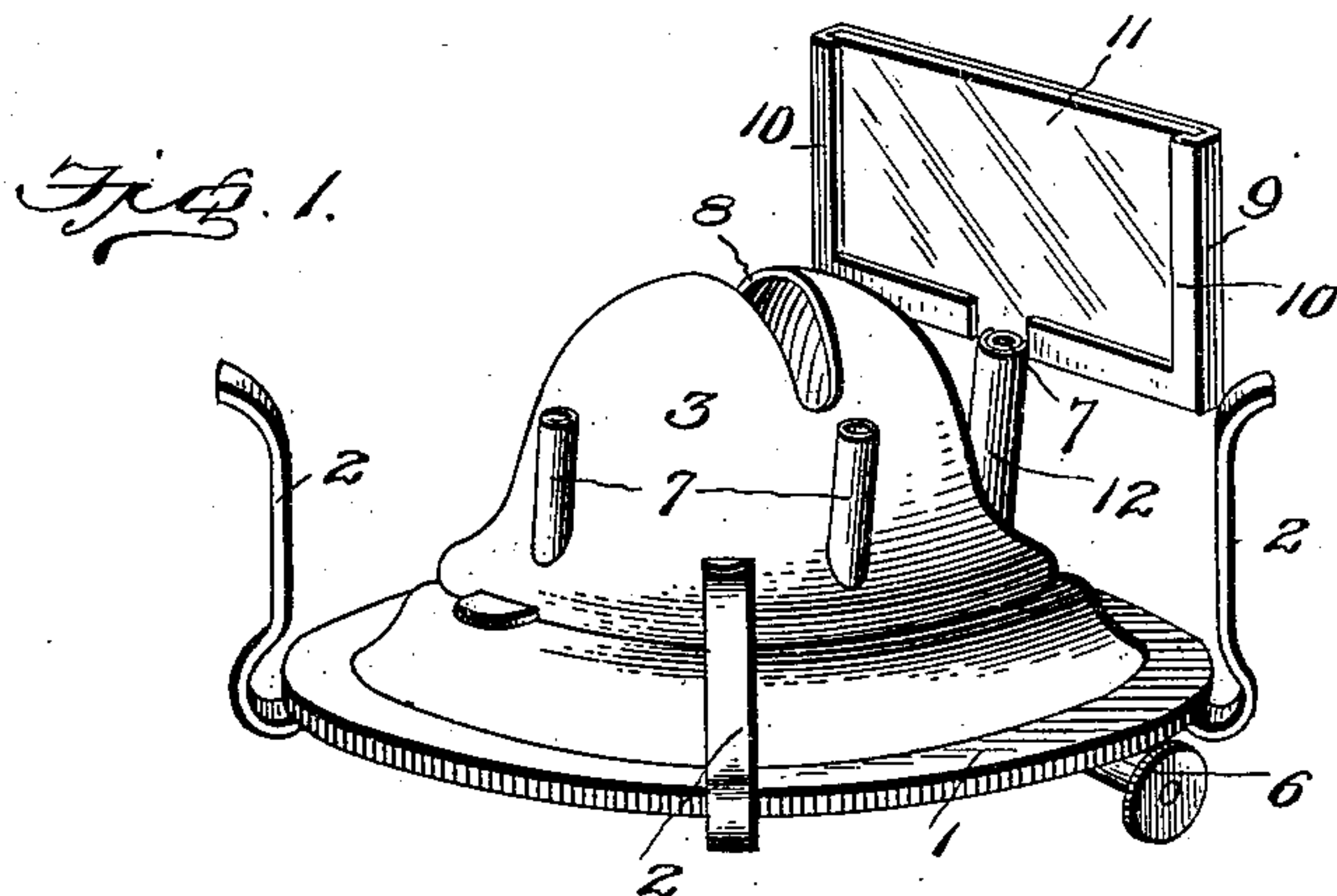
Patented Nov. 11, 1902.

**R. J. BRATTON.**

**LAMP BURNER.**

(Application filed Aug. 5, 1901.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

ROBERT J. BRATTON, OF RIDGEFARM, ILLINOIS.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 713,200, dated November 11, 1902.

Application filed August 5, 1901. Serial No. 70,967. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT J. BRATTON, a citizen of the United States, residing at Ridgefarm, in the county of Vermilion and State of Illinois, have invented a new and useful Lamp-Burner, of which the following is a specification.

My invention is an improved lamp-burner; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

One object of my invention is to combine with a lamp-burner an attachment which may be used both as a reflector and as a shade.

A further object of my invention is to effect improvements in the construction of a lamp-burner whereby the air which is drawn into the burner by the draft is supplied to the flame at a point near the base of the flame to promote combustion and secure a steady even flame of increased illuminating power.

In the accompanying drawings, Figure 1 is a perspective view of a lamp-burner embodying my improvements and showing the combined reflector and shade attached thereto. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail perspective view of the reflector-frame attachment, which also forms the shade. Fig. 4 is a detail perspective view of one of the air-intake tubes.

The gallery 1, with the spring-arm 2 for holding the chimney, the cone 3, the collar 4, the wick-tube 5, and the wick-raiser 6 of the burner are of the usual form.

In carrying out my improvements I provide a series of air-intake tubes 7. As here shown, I employ four of these tubes, and the same extend through the base of the burner and through the cone near the base of the latter, the upper ends of the said air-intake tubes being disposed in a common plane somewhat above the upper end of the wick-tube, two of the said air-intake tubes being disposed opposite the ends of the slot 8 in the cone and the other air-intake tubes being disposed at right angles to the said slot. The said air-intake tubes supply the air directly to the flame and cause the same to burn more evenly and steadily than heretofore in burners of this class and increase the brilliancy and illuminating power of the flame. The lower ends of the air-intake tubes are slotted, as

shown in Figs. 2 and 4, and the slots therein are engaged by the upstanding flange of the collar 4, as shown in Fig. 2, and hence said air-intake tubes are firmly supported at their lower ends and prevent the cone and gallery from being displaced when in use.

In combination with my improved lamp-burner I employ a combined reflector and shade which is adapted to be attached to the lamp-burner at a point within the chimney. In the embodiment of my improved combined reflector and shade I make a frame 9, which is formed from a single piece of sheet metal and is preferably of the form shown in the drawings, the said plate having its vertical ends and its lower edge struck up to form retaining-flanges 10, which are adapted to engage the ends and lower side of a reflector 11, which may be either of glass or of some suitable highly-polished metal. Formed with the frame 9, at the lower side thereof at the center, is a tube 12, which is adapted to be telescopically fitted on one of the air-intake tubes 7 of the burner in order to support the reflector in a position on one side of and opposite the flame.

It will be understood that the reflector is efficient to concentrate the light on one side of the burner and to cut off the light from the flame on the other side of the burner, and hence my improved reflector forms also a shade, and will be found of great utility in concentrating the light for reading, writing, sewing, and other purposes and for cutting off the light on one side of the burner where it is desirable so to do, as when the burner is in use on a lamp in a sick-room. It will be also understood that since the reflector is supported by one of the air-intake tubes at the upper end thereof the air admitted by said tube and which is comparatively cool as it emerges from the upper end of the said tube will be interposed between the reflector and the flame and a constant current of comparatively cool air maintained between the reflector and the flame to prevent the former from being injured by the heat of the latter.

Having thus described my invention, I claim—

1. A lamp-burner having a gallery to support the chimney, a cone on the gallery, a collar with an upstanding flange, a wick-tube

extending through the collar and gallery into the cone, and upwardly-extending air-intake tubes disposed in openings in the cone and gallery, and having their lower ends engaged  
5 with and supported on the upstanding flange of the collar, substantially as described.

2. A lamp-burner having an upwardly-extending air-intake tube with its upper end proximate to the upper end of the wick-tube  
10 to supply air to the flame and a reflector supported at the upper end of said air-intake tube between the latter and the inner side of

the lamp-chimney, whereby the current of air admitted to the flame within the chimney will pass between the flame and the reflector, 15 for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT J. BRATTON.

Witnesses:

PERCY RATLIFF,  
M. F. CARMAN.