

No. 697,690.

Patented Apr. 15, 1902.

T. STITES.  
BURNER.

(Application filed Sept. 26, 1901.)

(No Model.)

3 Sheets—Sheet 1.

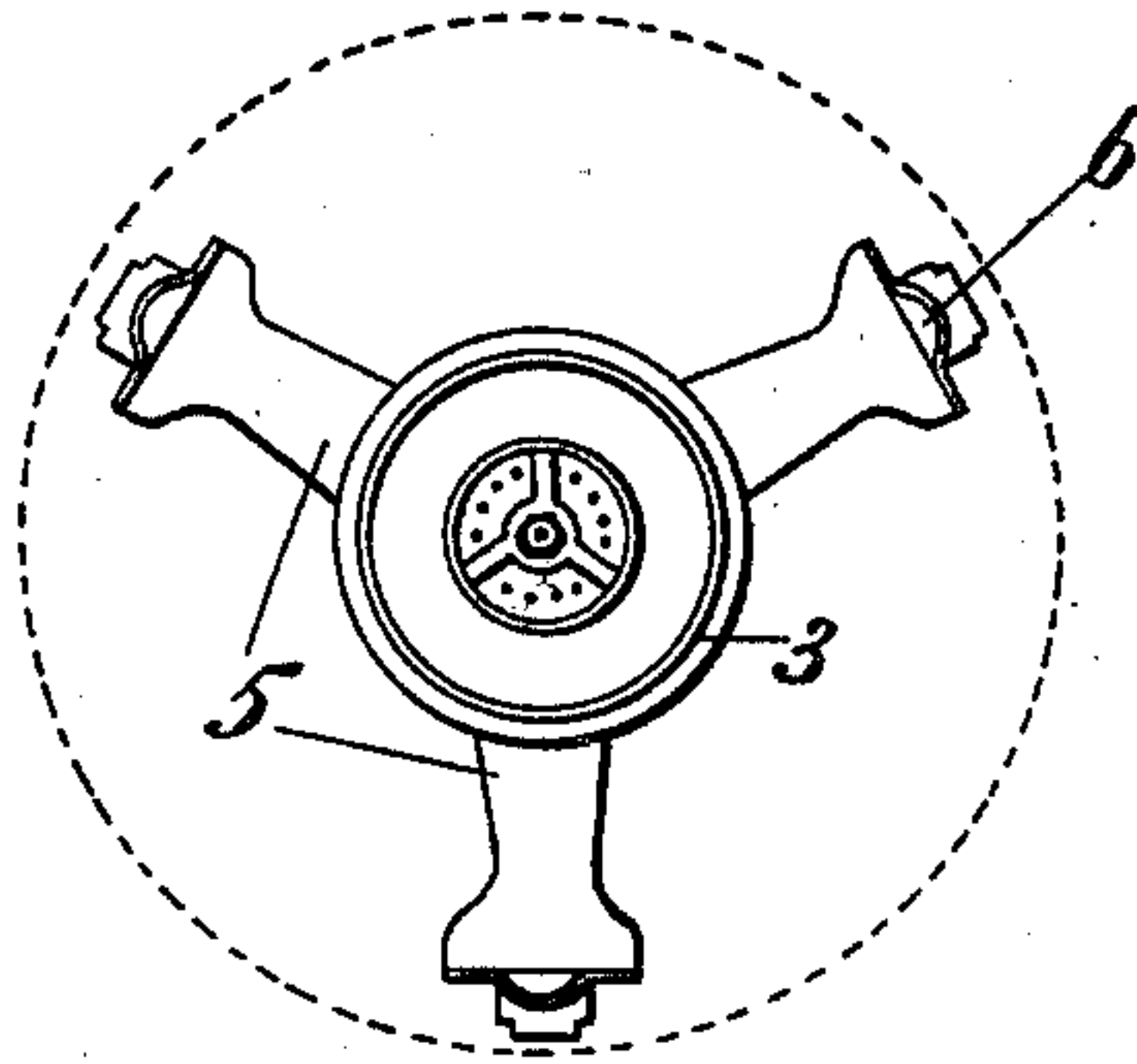
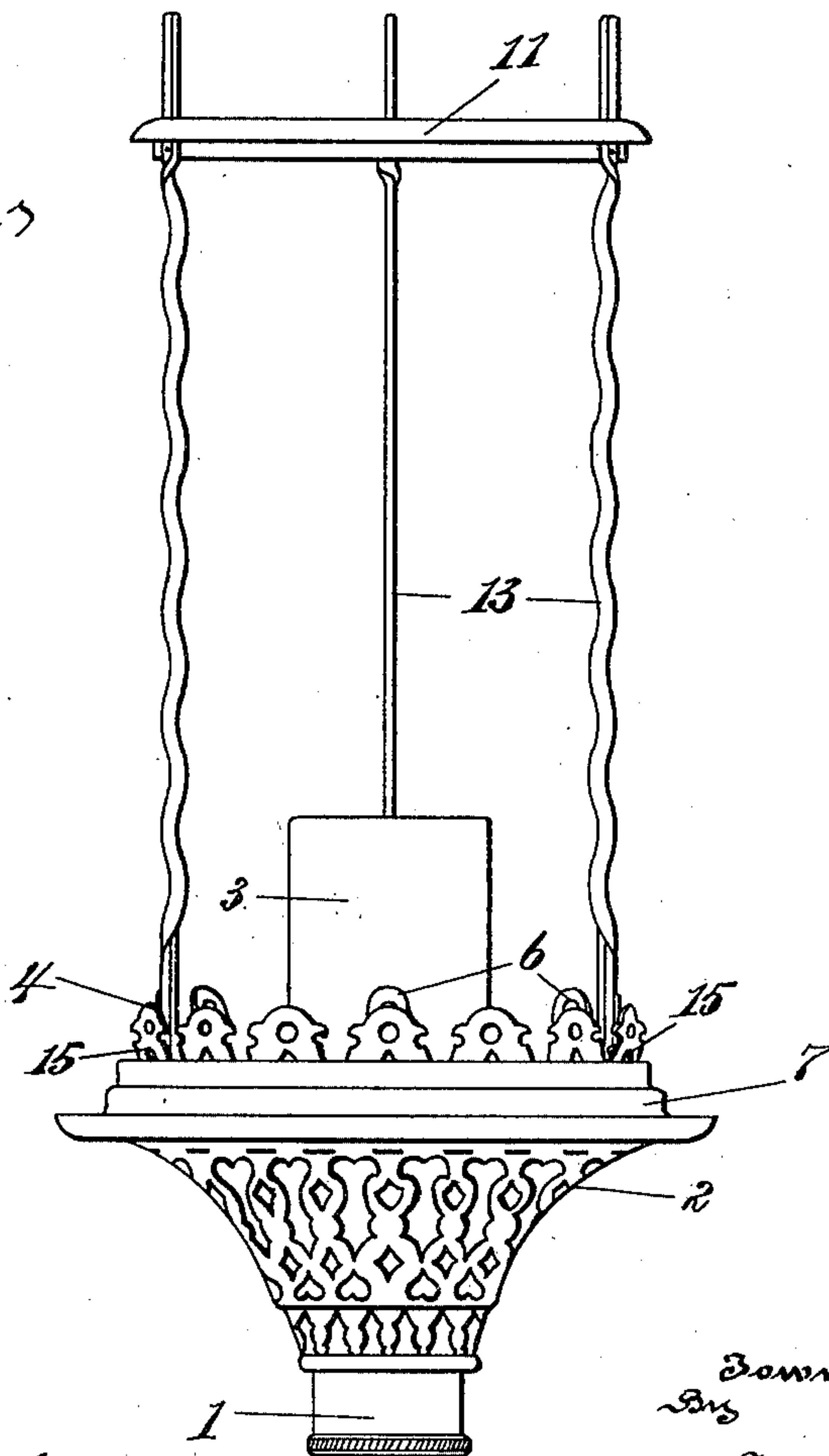


Fig. 2

Fig. 1



Witnesses:  
M. H. Adams  
Frank J. Kates

Inventor:  
Townsend Stites  
By  
Augustus B. Slaughter  
Attorney

No. 697,690.

Patented Apr. 15, 1902.

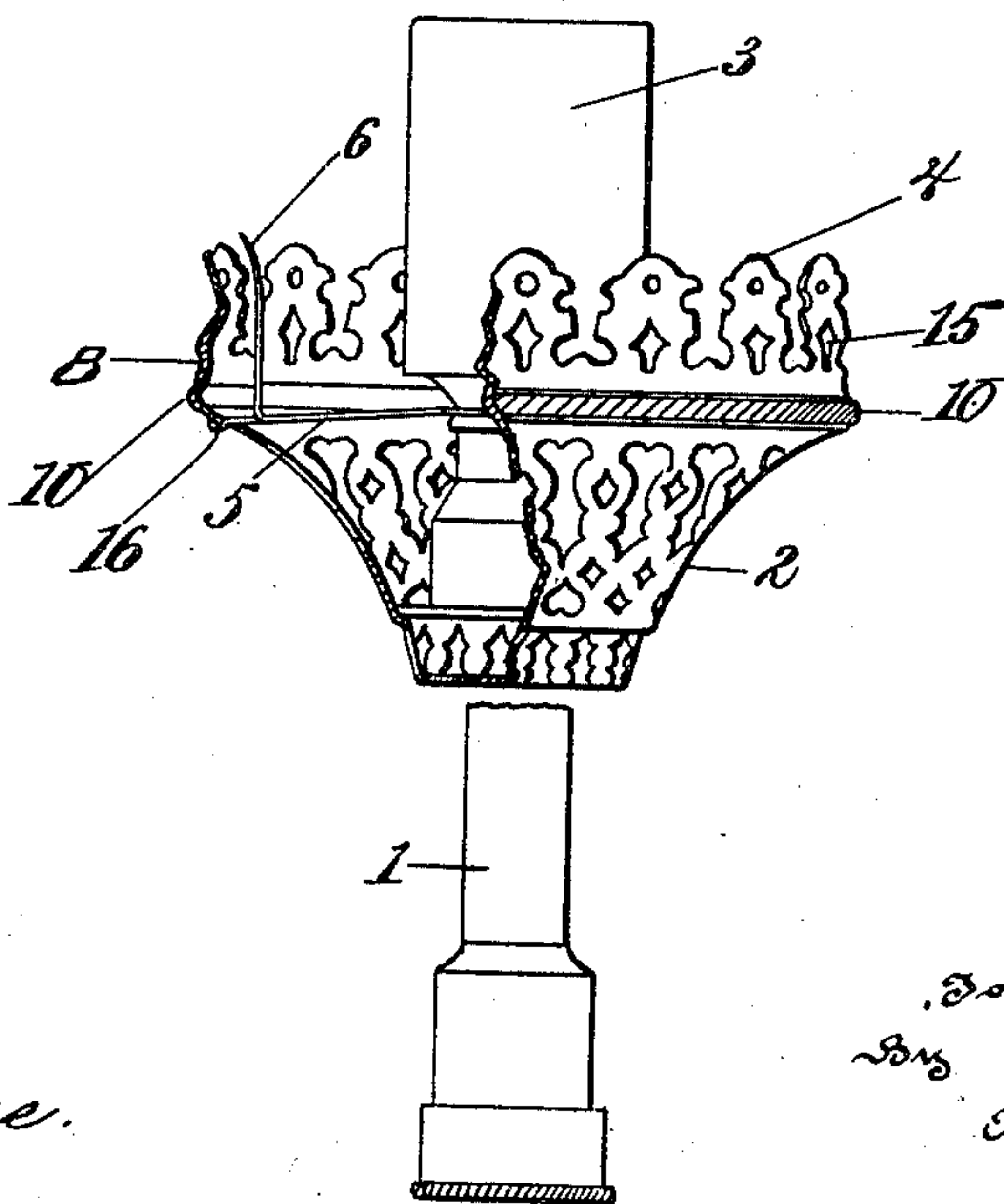
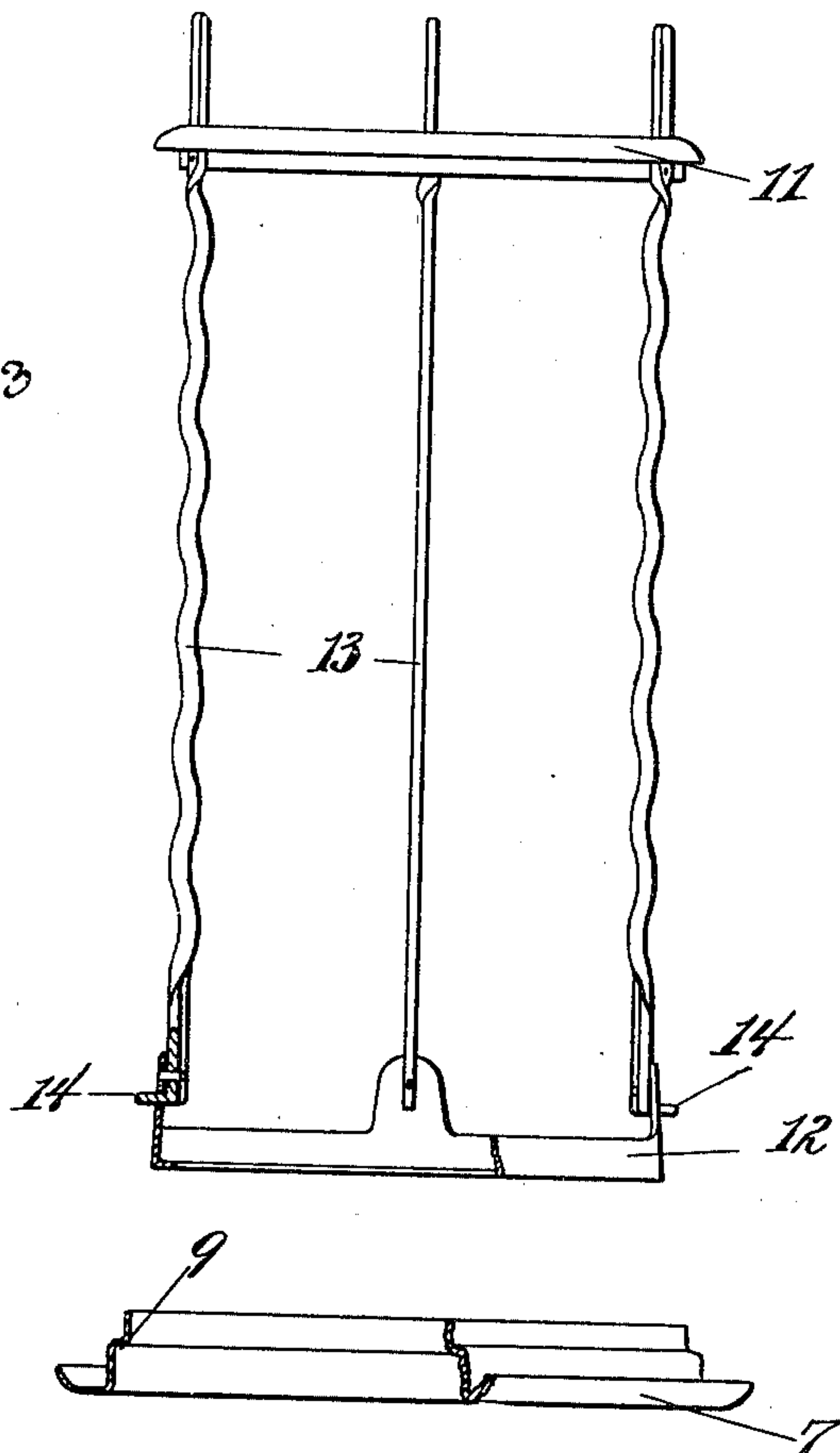
T. STITES.  
BURNER.

(Application filed Sept. 26, 1901.)

(No Model.)

3 Sheets—Sheet 2.

Fig. 3



*Witnesses:*  
*Frank J. Talae.*

*Inventor:*  
*Townsend Stites.*  
*By*  
*Augustus B. Stoughton*  
*Attorney.*

No. 697,690.

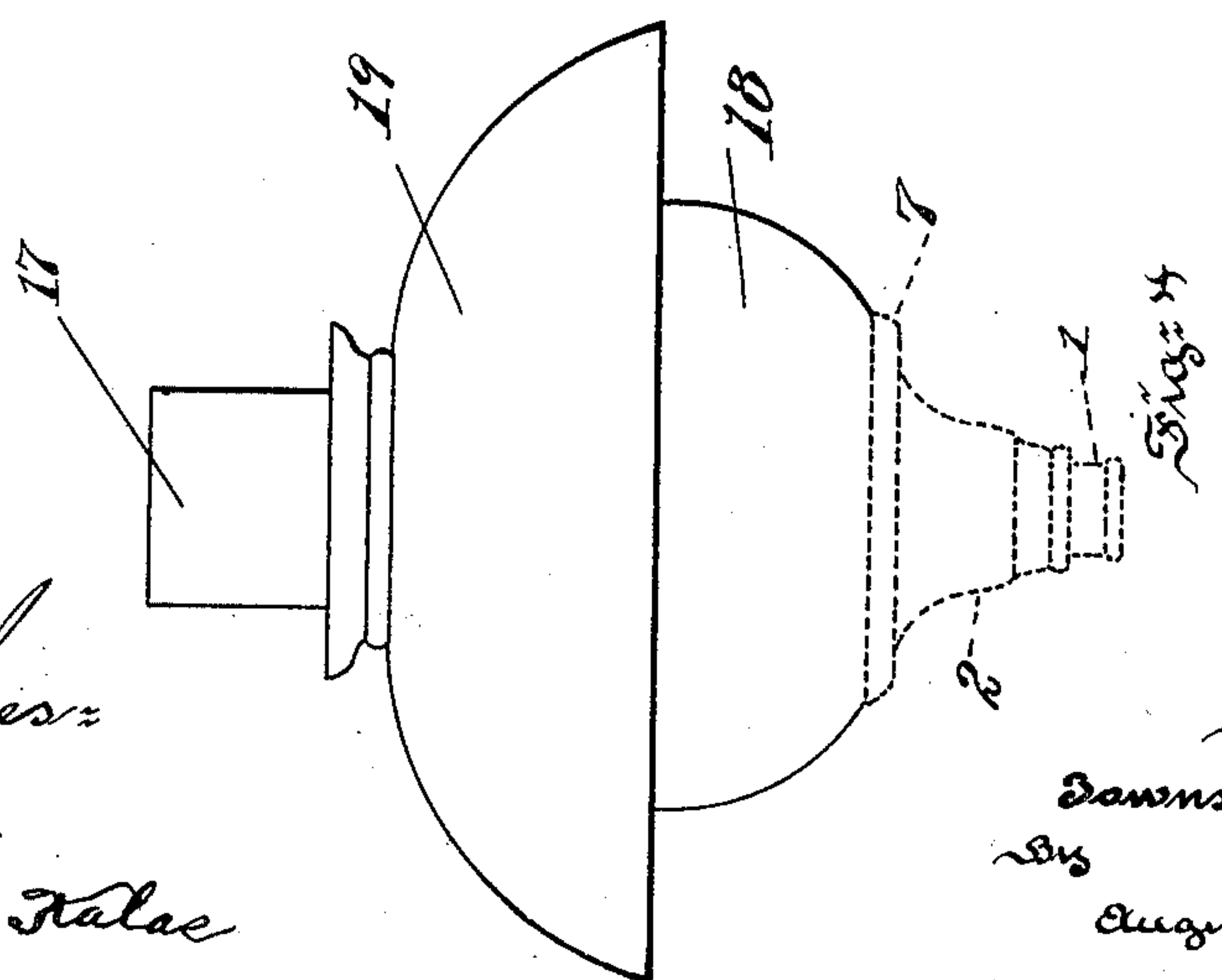
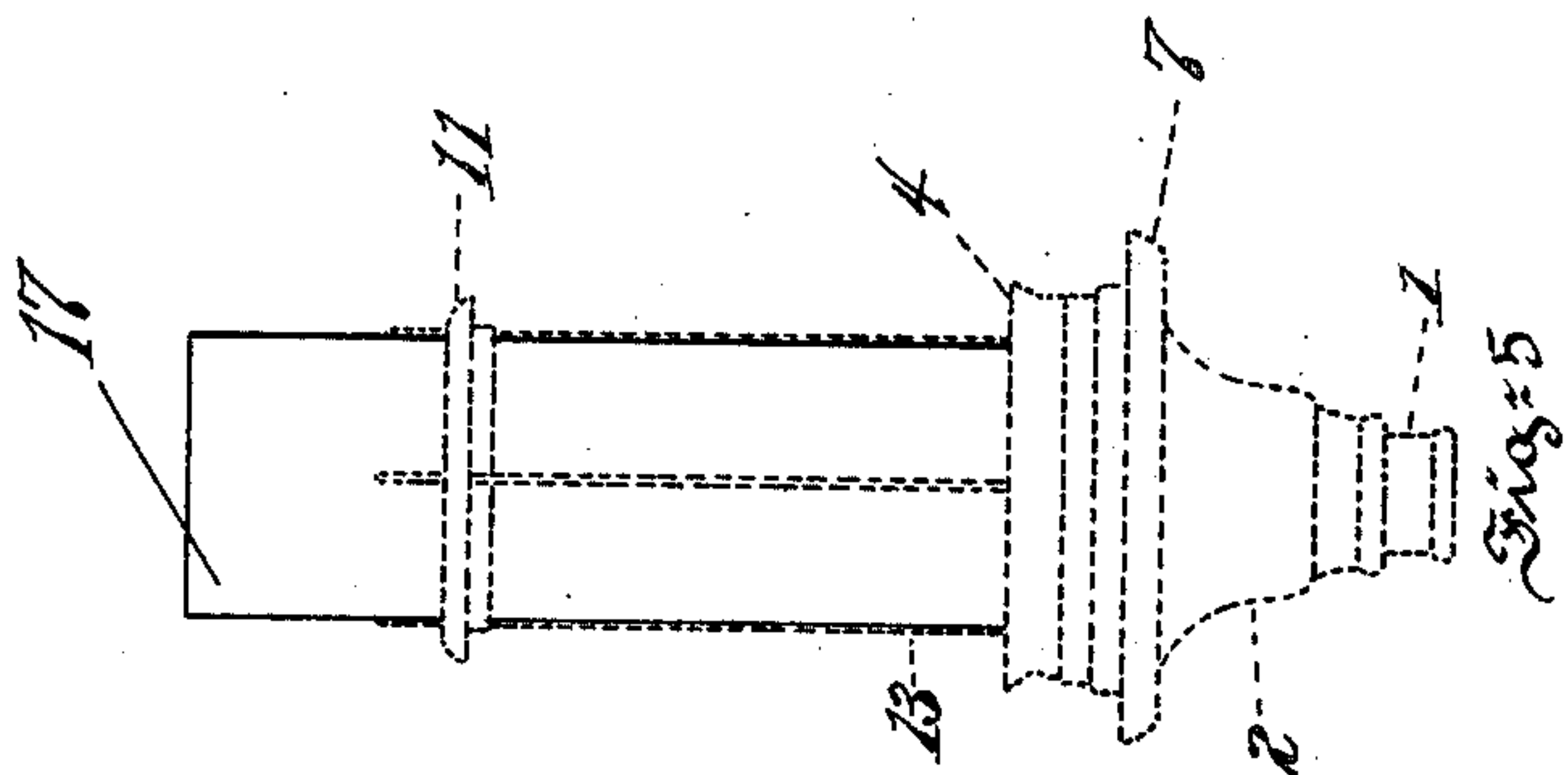
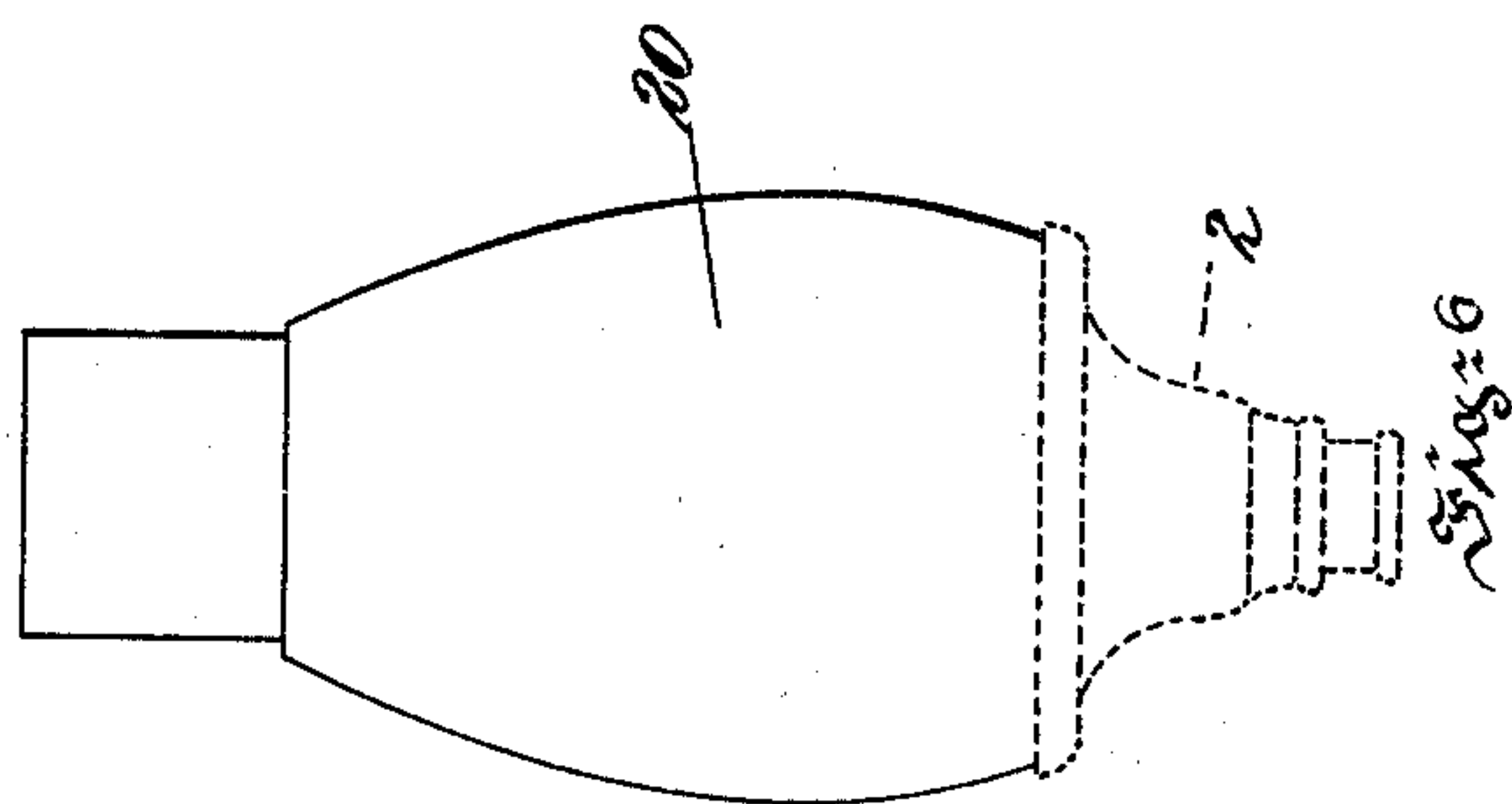
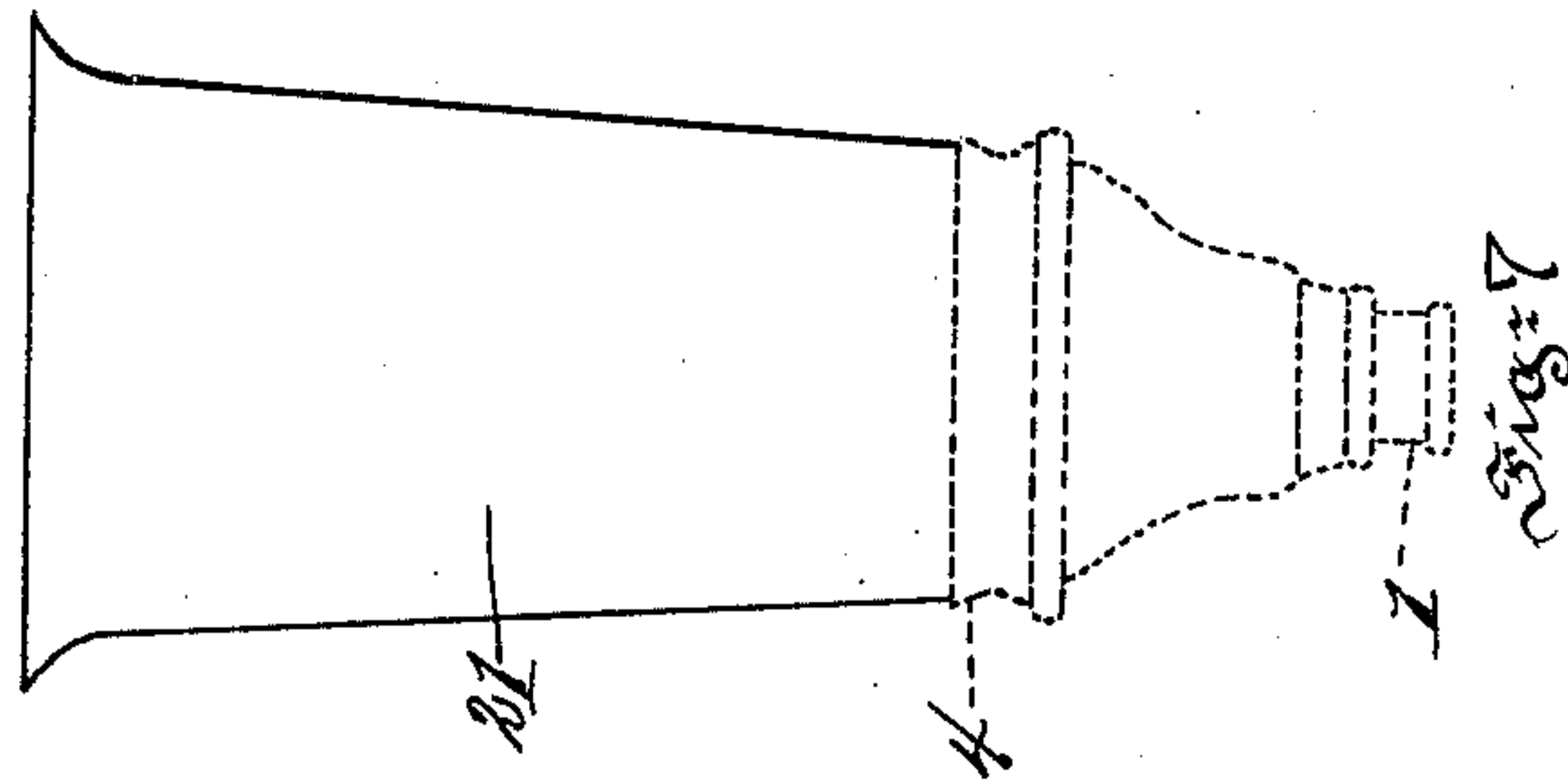
Patented Apr. 15, 1902.

T. STITES.  
BURNER.

(Application filed Sept. 26, 1901.)

(No Model.)

3 Sheets—Sheet 3.



Witnesses:  
*W. H. Mason*  
*Frank J. Stiles*

Inventor:  
*Damson Stiles*  
By  
*Augustus B. Daughton*  
Attorney.



# UNITED STATES PATENT OFFICE.

TOWNSEND STITES, OF GLOUCESTER CITY, NEW JERSEY, ASSIGNOR TO  
WELSBACH LIGHT COMPANY, OF GLOUCESTER CITY, NEW JERSEY, A  
CORPORATION OF NEW JERSEY.

## BURNER.

SPECIFICATION forming part of Letters Patent No. 697,690, dated April 15, 1902.

Application filed September 26, 1901. Serial No. 76,598. (No model.)

*To all whom it may concern:*

Be it known that I, TOWNSEND STITES, a citizen of the United States, residing at Gloucester City, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Burners, of which the following is a specification.

In the use of lights, and perhaps more particularly so-called "incandescent" lights, there has arisen a demand for a variety of styles and shapes of glassware—such as chimneys, shades, bobaches, and the like—each of which required the employment of a different kind or type of burner or fixture.

It is one object of the present invention to provide a type of fixture or burner which can be adapted for use with any or all of the desirable types of glassware.

Another object of the invention is to provide a burner capable of use in connection with such different types of glassware and at the same time of neat and attractive appearance and of simple, durable, and comparatively inexpensive construction.

To these and other ends hereinafter set forth the invention, stated in general terms, comprises a burner or fixture having a gallery and a detachable globe-ring and a detachable chimney-guide, whereby it may be used in connection with any one or all of the most desirable types of glassware.

The invention further comprises the improvements hereinafter described and claimed.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is an elevational view of a burner or fixture embodying features of the invention and showing both the globe-ring and chimney-guide in place on the gallery. Fig. 2 is a top or plan view showing the chimney arms or supports and indicating by dotted lines the rim of the gallery. Fig. 3 is a view, partly in elevation and partly in section, illustrating the parts of the burner or fixture in detached position; and Figs. 4 to 7 are largely

diagrammatic views illustrating the use of the fixture or burner in connection with a variety of glassware.

In the drawings, 1 is the Bunsen or mixing tube, which is usually attached to the gas-pipe and which constitutes the support for the gallery and its connected parts. 2 is the gallery, which is fitted with a burner-head 3, which, together with its lower or shank portion, fits onto the Bunsen tube 1. The gallery is equipped with holders 4, and the arms 5 radiate from the base of the burner-head and are fitted with chimney holders or supports 6. The holders 4 are somewhat springy or flexible, and the flanged globe-ring 7 may be fitted on or off over the holders 4. The shanks 8 of the holders 4 engage the lip 9 on the ring 7, so that the ring 7 can be pushed down over the holders 4, so as to seat itself on the rim 10 of the gallery, and the shanks 8 of the holders by springing outward lock it in that position against accidental detachment. However, the globe-ring 7 can be easily pulled off the gallery, and in doing so the shanks 8 of the holders yield slightly in order to let the lip 9 pass over them. The chimney-guide consists of two rings 11 and 12, connected together by suitable rods or standards 13. The ring 12 is flanged and is adapted to seat itself upon the gallery 2, and there may be locking devices 14, which serve to hold the chimney-guide against accidental detachment from the gallery. As shown, the ends of the rods 13 penetrate ears on the ring 12 and form projections, which take into suitable openings, as 15, in the gallery or rather in the holders 4 thereof. The chimney-guide may thus be applied to or removed from the gallery, and the described locking devices when present serve to prevent its accidental detachment. As shown, the ring 12 seats itself on the arms 5 outside of the chimney-supports 6. The latter are formed, as shown in the drawings, by stamping them up from the arms. The ends of the latter are secured through suitable openings in the gallery. The parts 6, which project upward, have the ends 16 of the arms punched out of them. In use both the globe-ring 7



and the chimney-guide may be placed upon the gallery, which in its turn is placed upon the Bunsen tube. Such an arrangement is shown in Fig. 5. In that case the chimney 5 17 is held inside of the chimney-supports 6. A bobache 18, Fig. 4, may then be placed upon the globe-ring 7, and a shade 19 may then be applied and supported in the usual way from the tops of the rods 13. This is 10 merely descriptive of one way of using the fixture or burner. If desired, another kind of glassware—for example, that indicated at 20 in Fig. 6—may be employed and mounted on the globe-ring. In Fig. 7 another use of 15 the fixture or burner is illustrated, and in that figure both the globe-ring and the chimney-guide are removed in the manner described and a type of glassware 21 is employed, and it is held by the holders 4.

20 From the foregoing it is obvious that the described burner or fixture may be employed by removing or adding either or both the globe-ring and chimney-guide in the manner described in connection with the variety of 25 glassware which is most admired and useful.

It will be obvious to those skilled in the art to which the invention relates that modifications may be made in details without departing from the spirit thereof. Hence I do not 30 limit myself to the precise construction and arrangement of parts hereinabove set forth and illustrated in the accompanying drawings; but,

Having thus described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A burner provided with a gallery, a detachable chimney-guide provided with a base-ring adapted to the gallery, and locking devices 40 between the gallery and base-ring, substantially as described.

2. A burner provided with a gallery having holders, a globe-ring detachably fitted outside of the holders, and a chimney-guide de-

tachably fitted inside of the holders, substantially as described. 45

3. A burner provided with a gallery having chimney-supports and having holders, a removable globe-ring detachably fitted to said holders, and a removable chimney-guide de- 50 tachably fitted to said holders, substantially as described.

4. A burner provided with a gallery, a removable chimney-guide consisting of top and bottom rings, and arms arranged between 55 said rings with their ends projecting through the bottom ring and said projecting ends constructed and arranged to cooperate with openings in the gallery, substantially as described.

5. A burner comprising a gallery provided 60 with arms radiating from the burner-head and with openings in its rim arranged opposite said arms, each arm having an upwardly-projecting bifurcated chimney-support of which the legs join the arm intermediate of 65 its length and having a tongue-like end on the arm that extends beyond and between the legs of the chimney-support and engages said openings, substantially as described.

6. A burner provided with two sets of concentric arms and having three seats, one seat 70 between the sets of arms and a second seat inside of the inner set of arms and a third seat outside of the outer set of arms, substantially as described. 75

7. A burner provided with a gallery, a removable globe-ring and a removable chimney-guide, each constructed for engagement with and disengagement from said gallery and to be held thereby, substantially as de- 80 scribed.

In testimony whereof I have hereunto signed my name.

TOWNSEND STITES.

In presence of—

L. THATCHER,  
W. J. JACKSON.