

(No Model.)

2 Sheets—Sheet 1.

F. RHIND.  
BICYCLE LAMP.

No. 560,109.

Patented May 12, 1896.

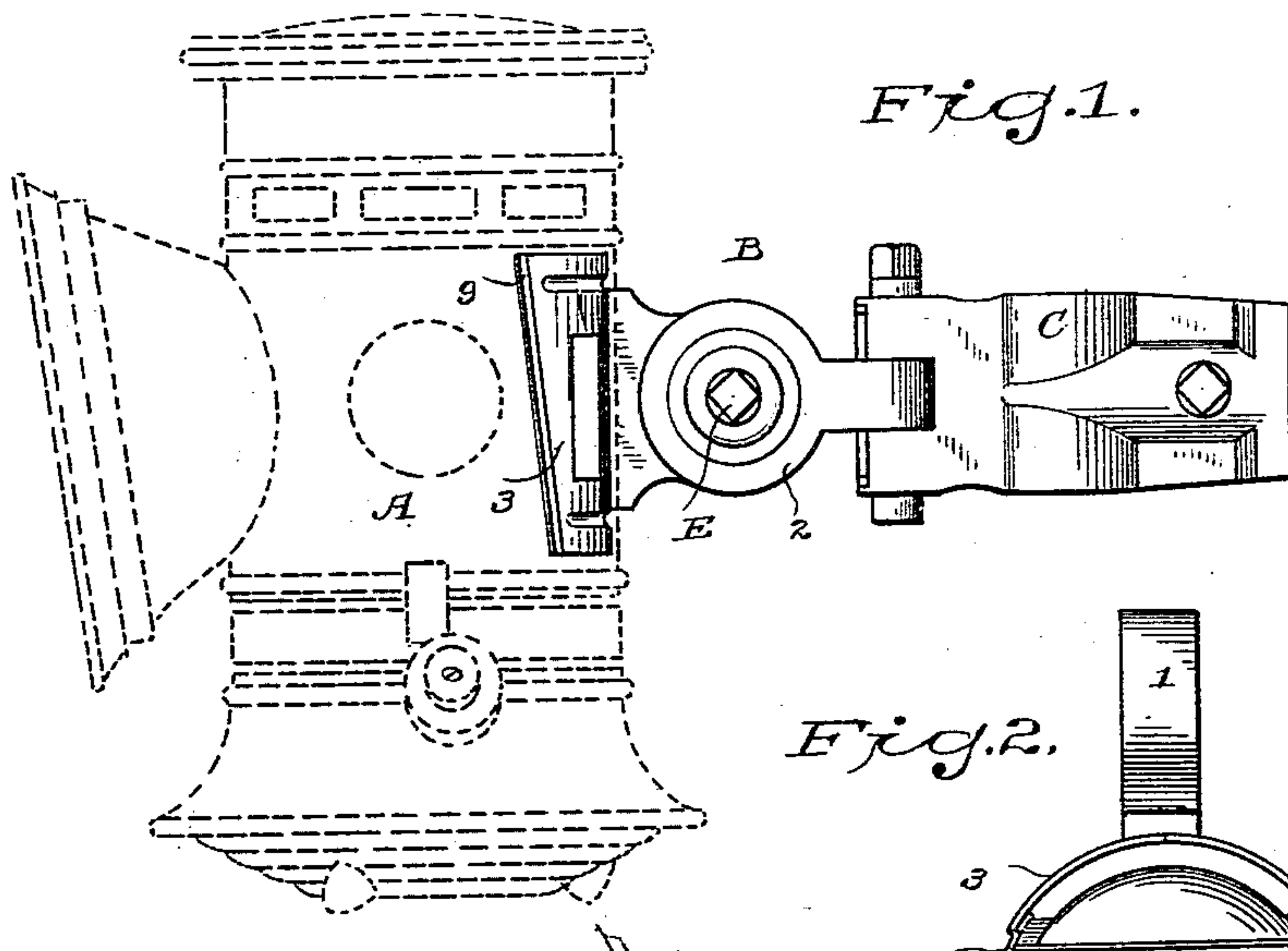


Fig. 1.

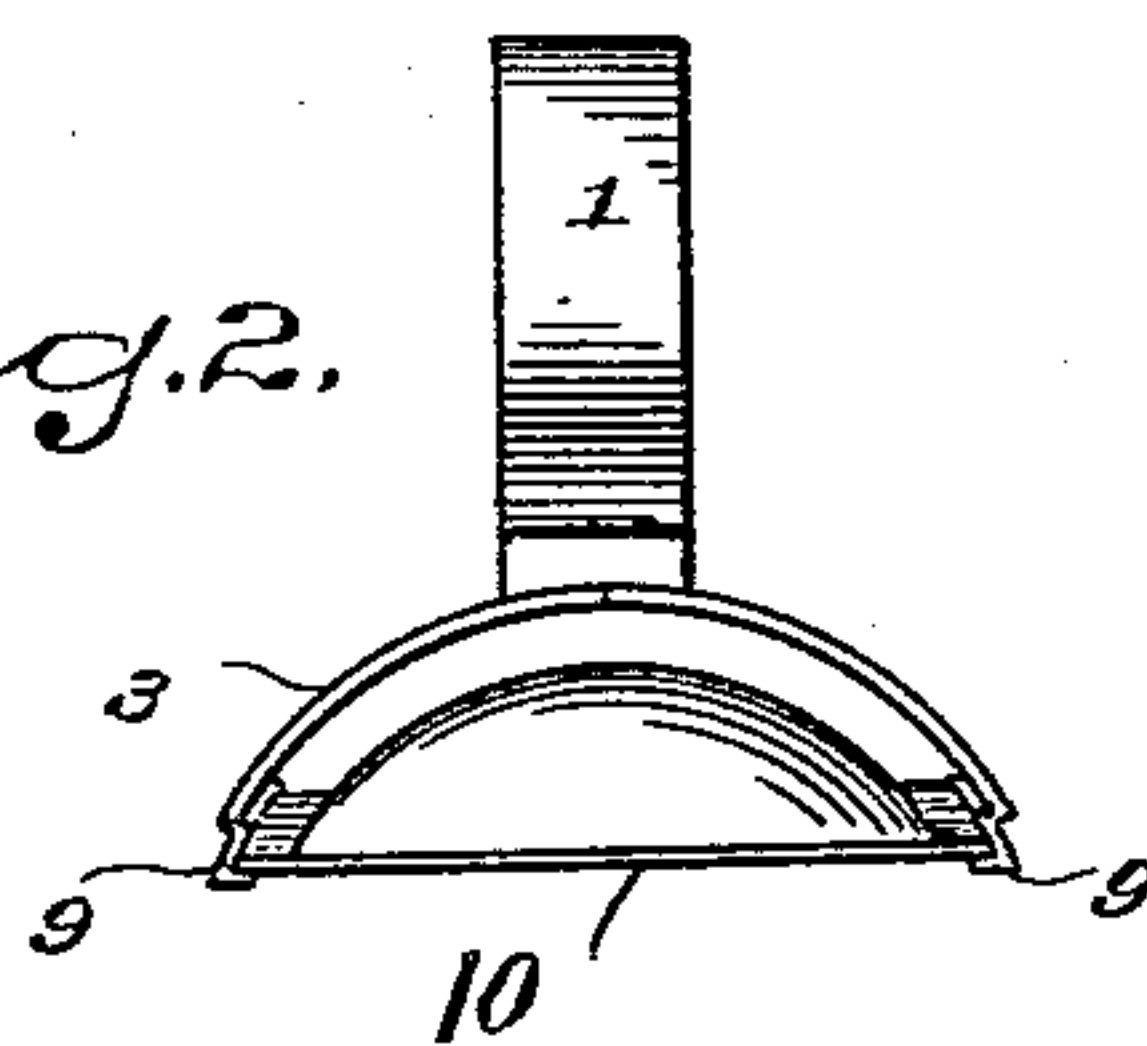


Fig. 2.

Fig. 4.

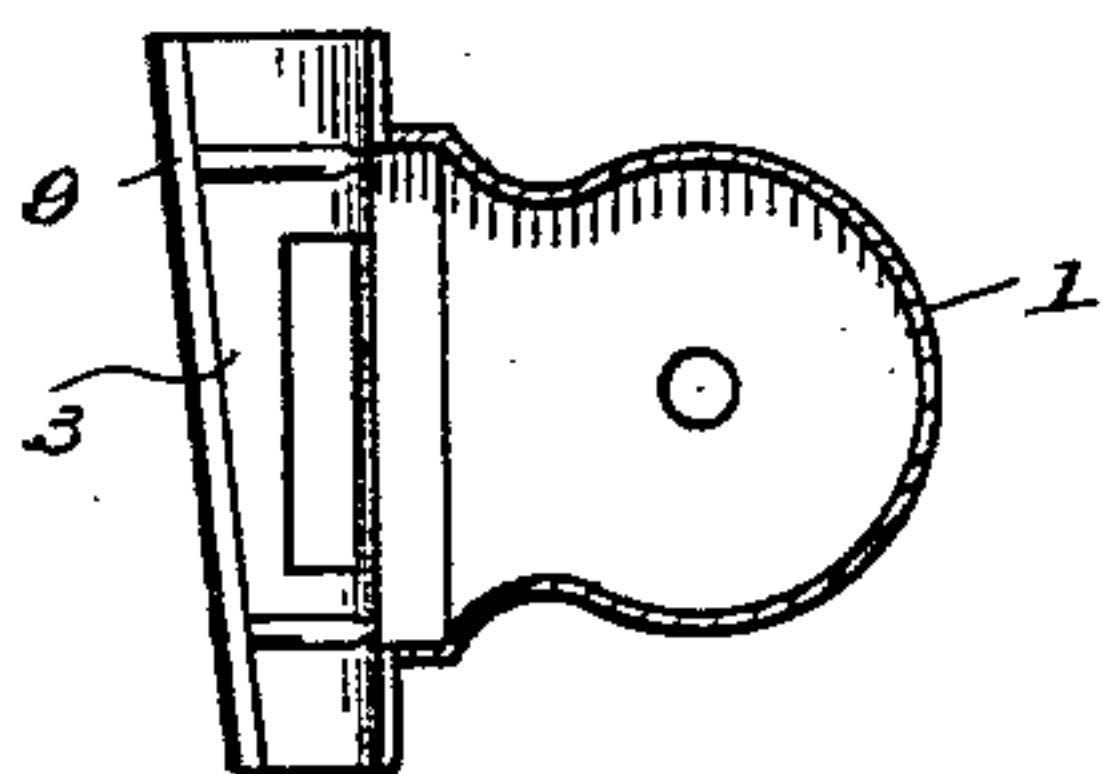


Fig. 3.

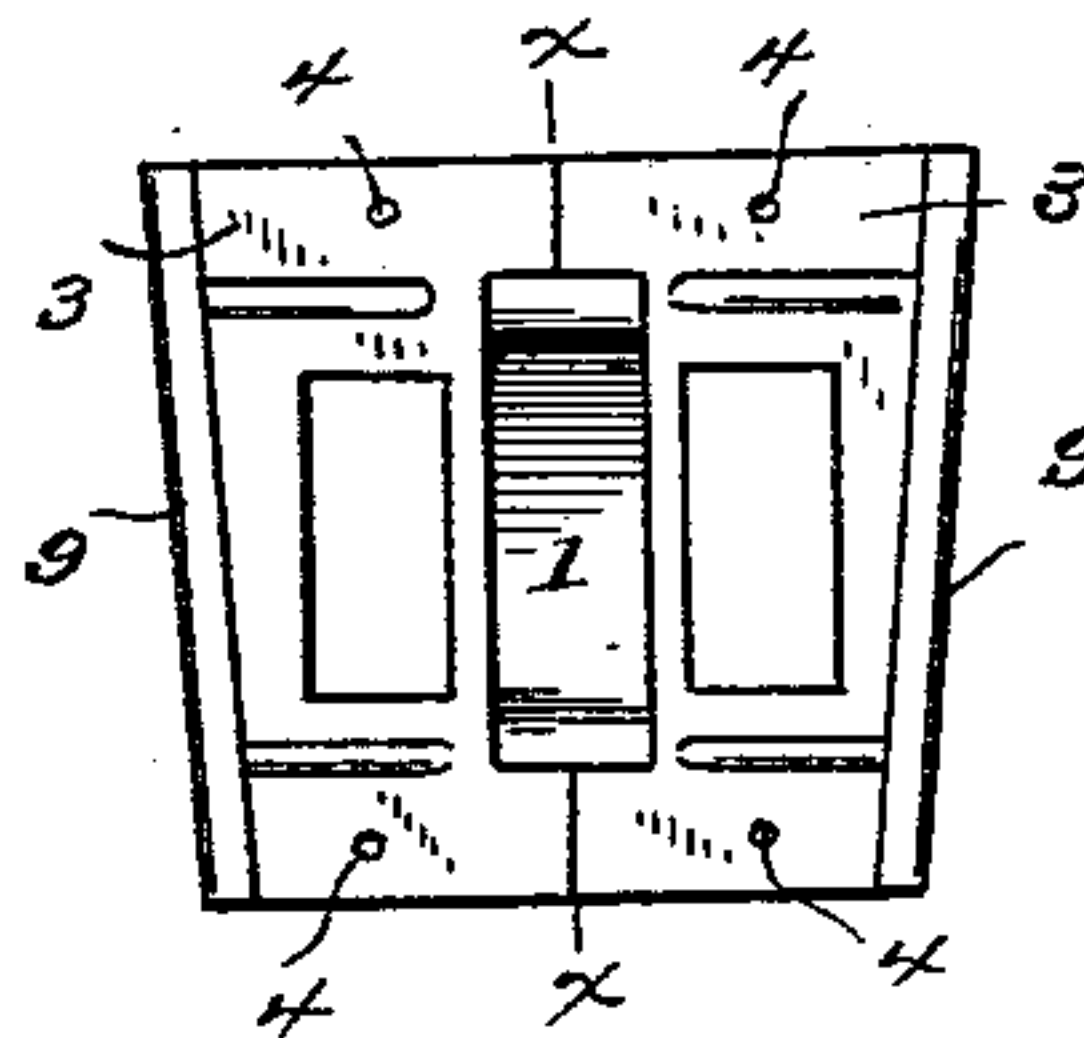


Fig. 7.

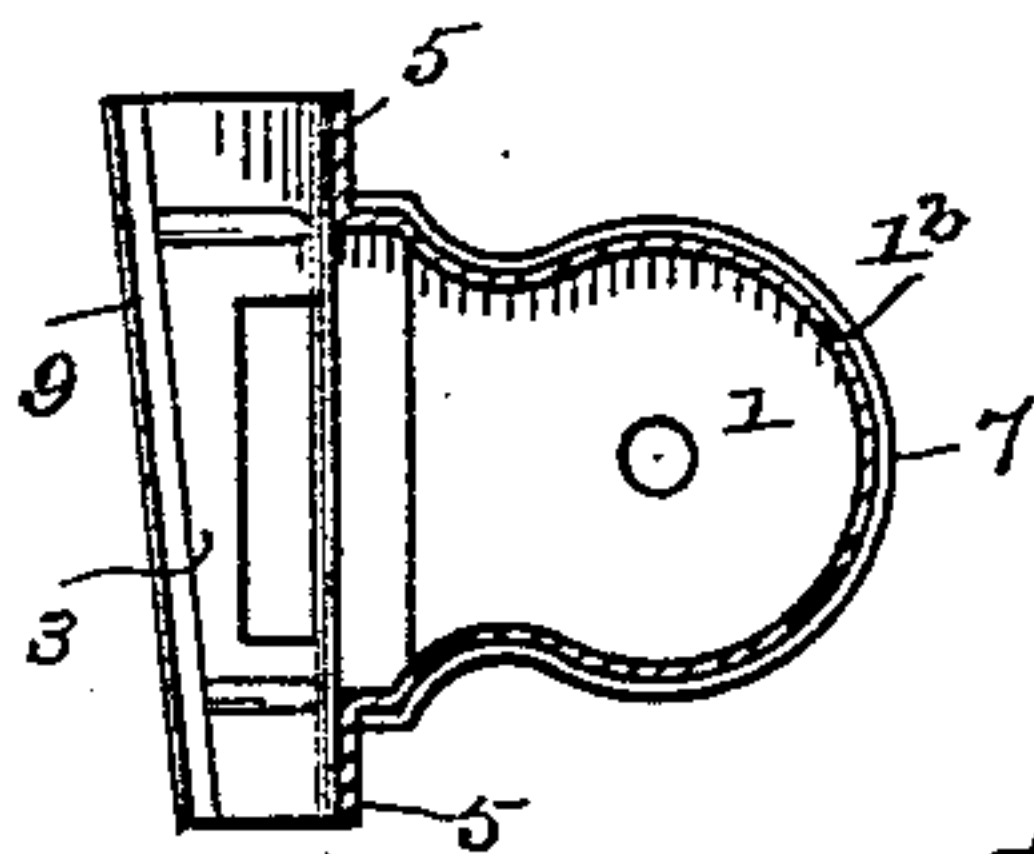


Fig. 5.

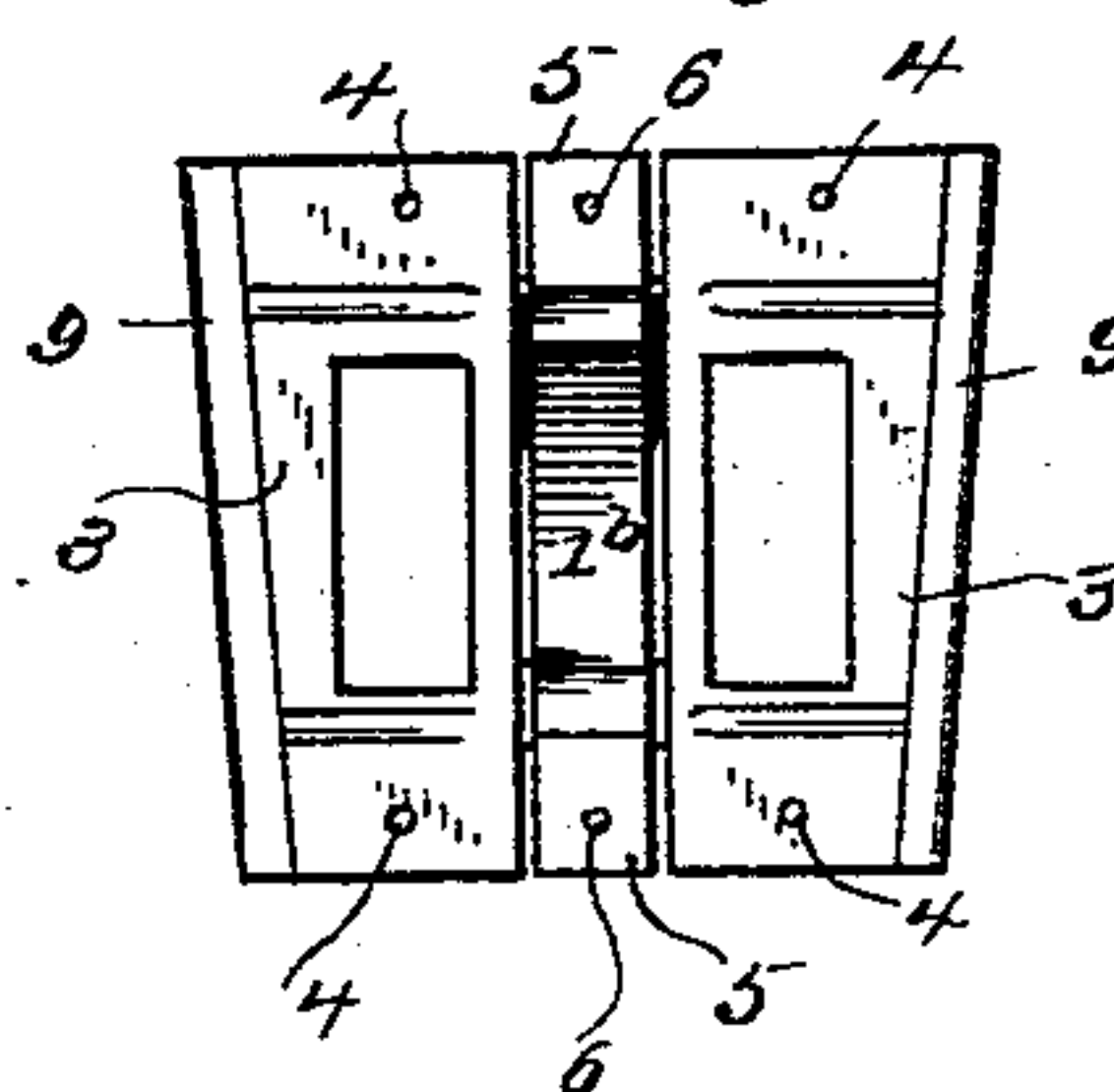
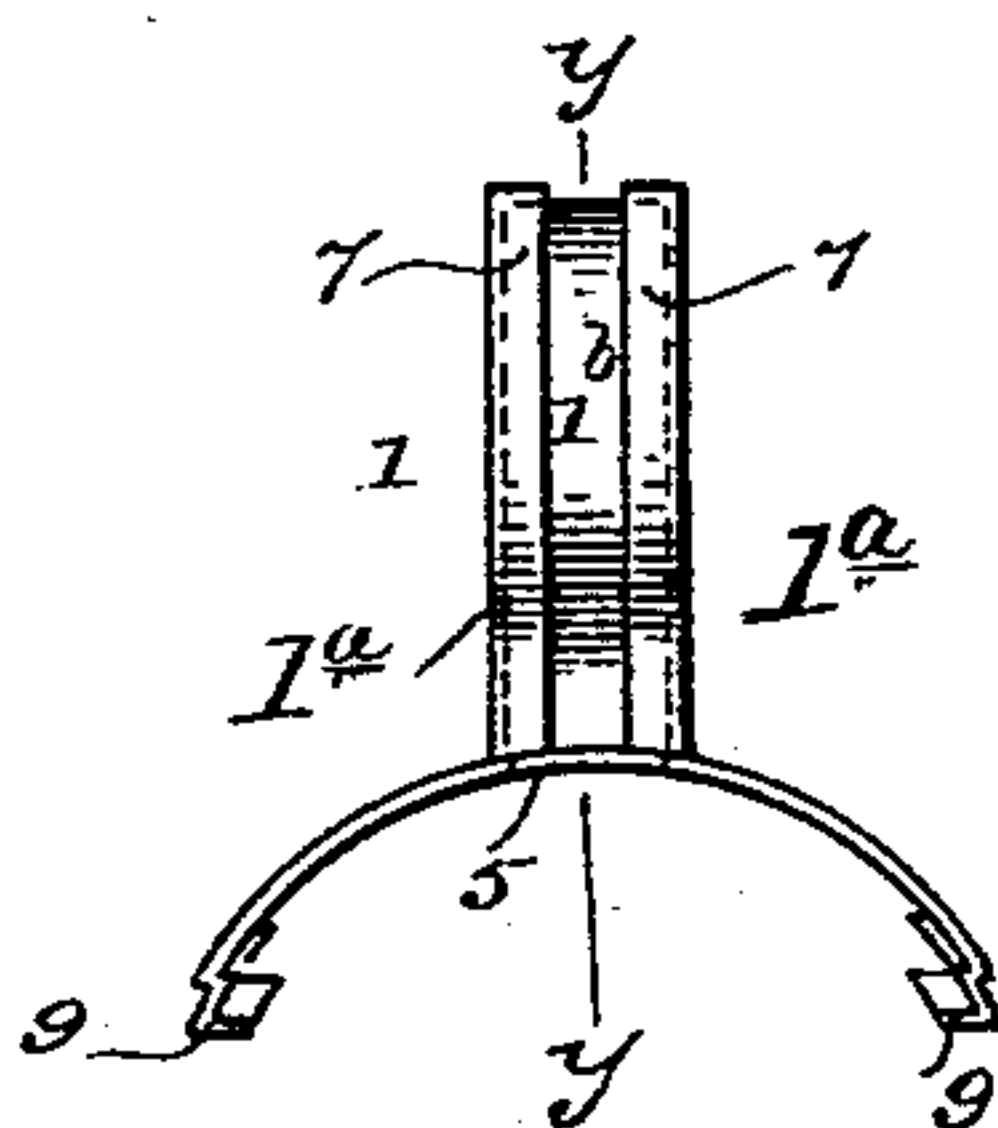


Fig. 6.



WITNESSES

H. A. Lamb,  
H. Sincereaux.

INVENTOR

Frank Rhind  
By  
A. M. Wooster  
Atty.

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Fig. 8.

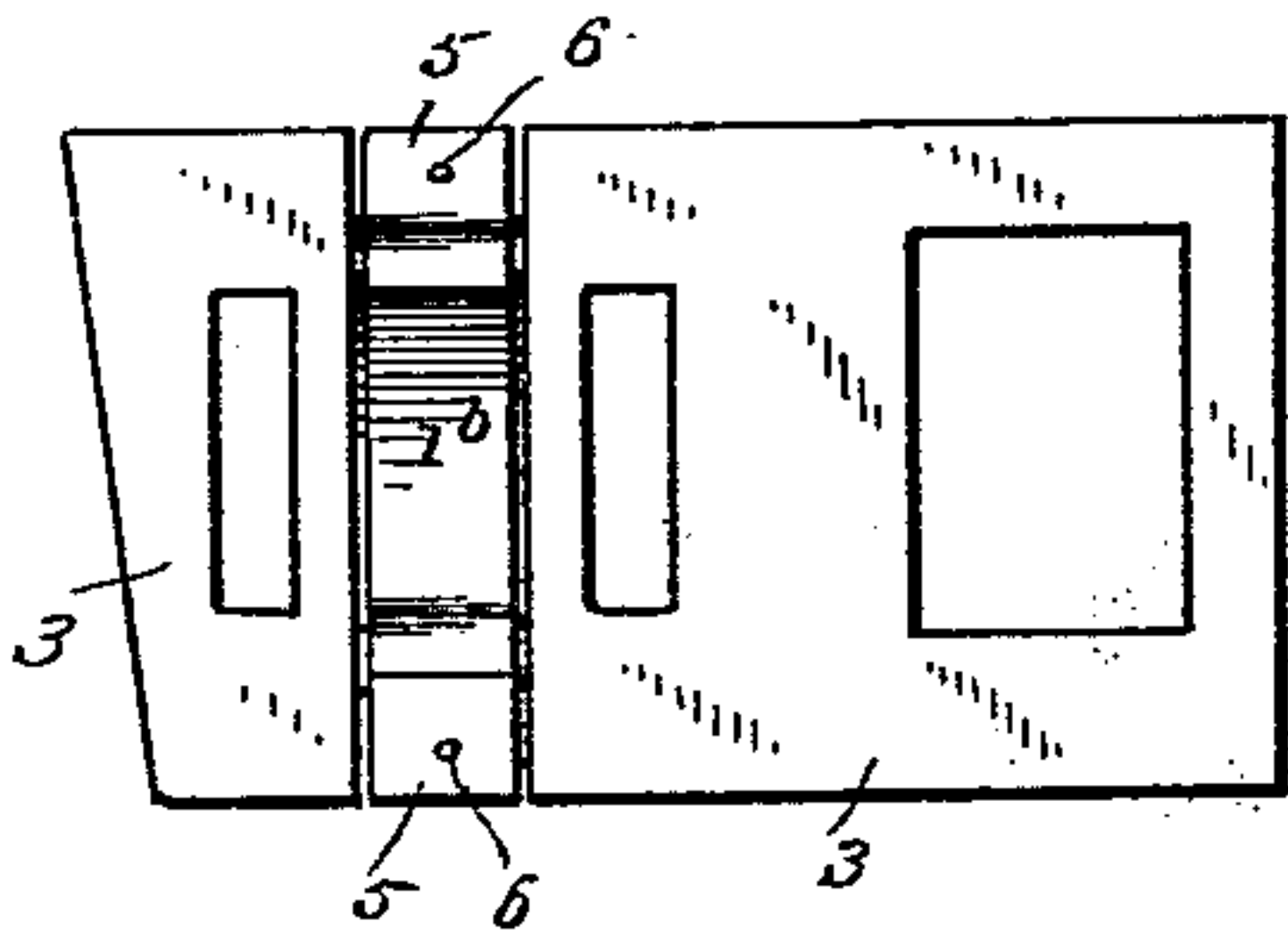


Fig. 9.

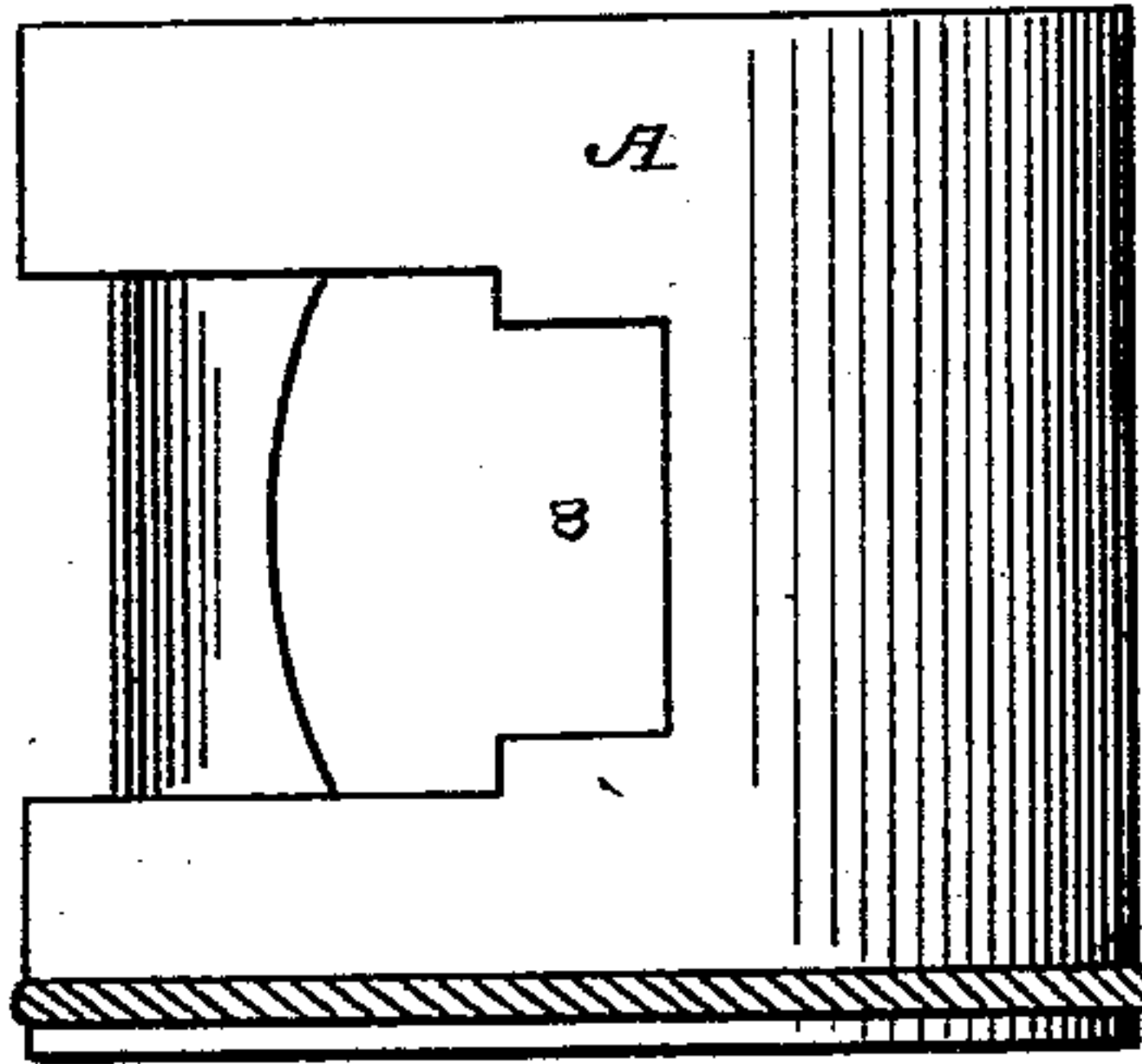


Fig. 11.

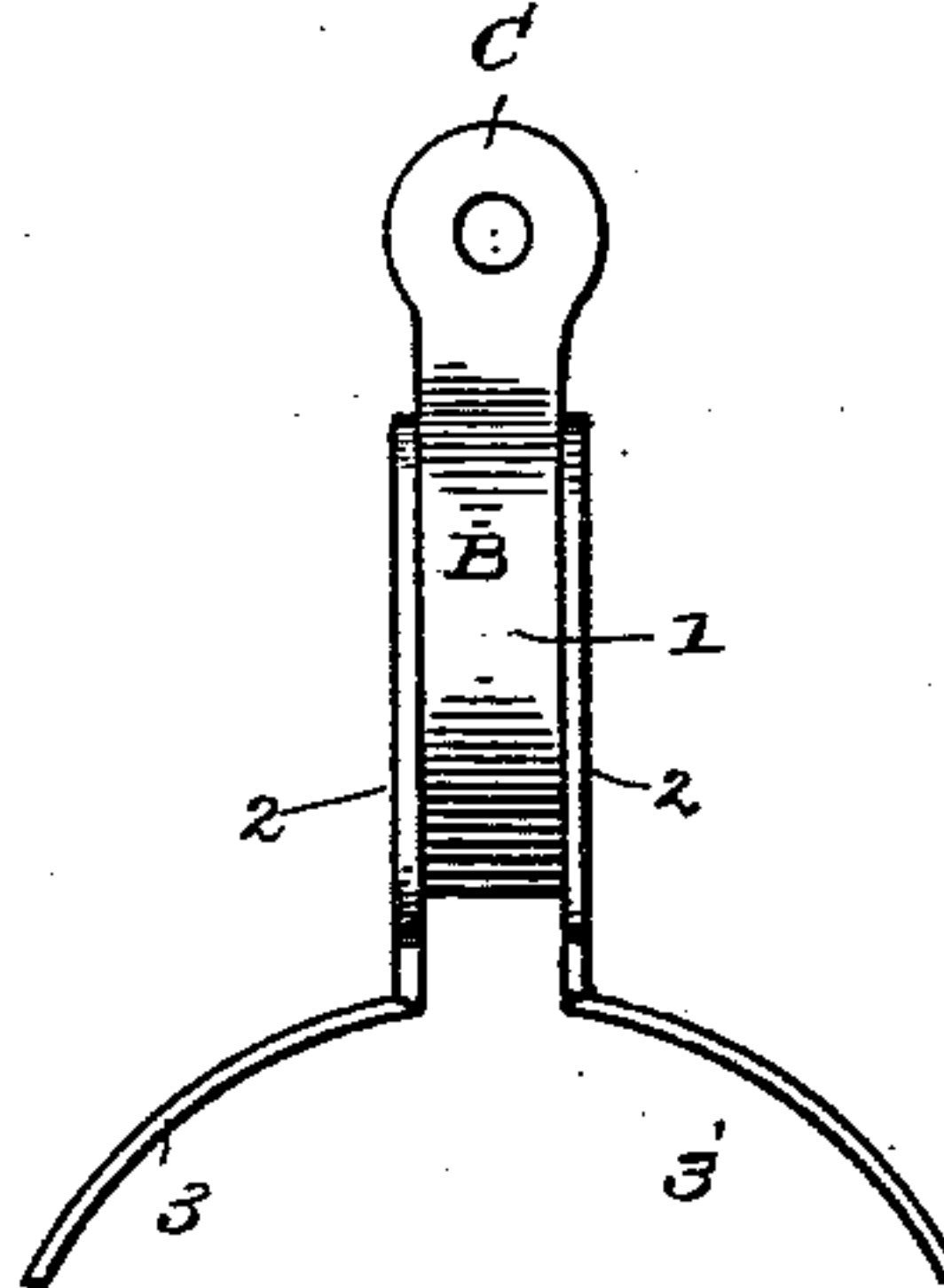


Fig. 10.

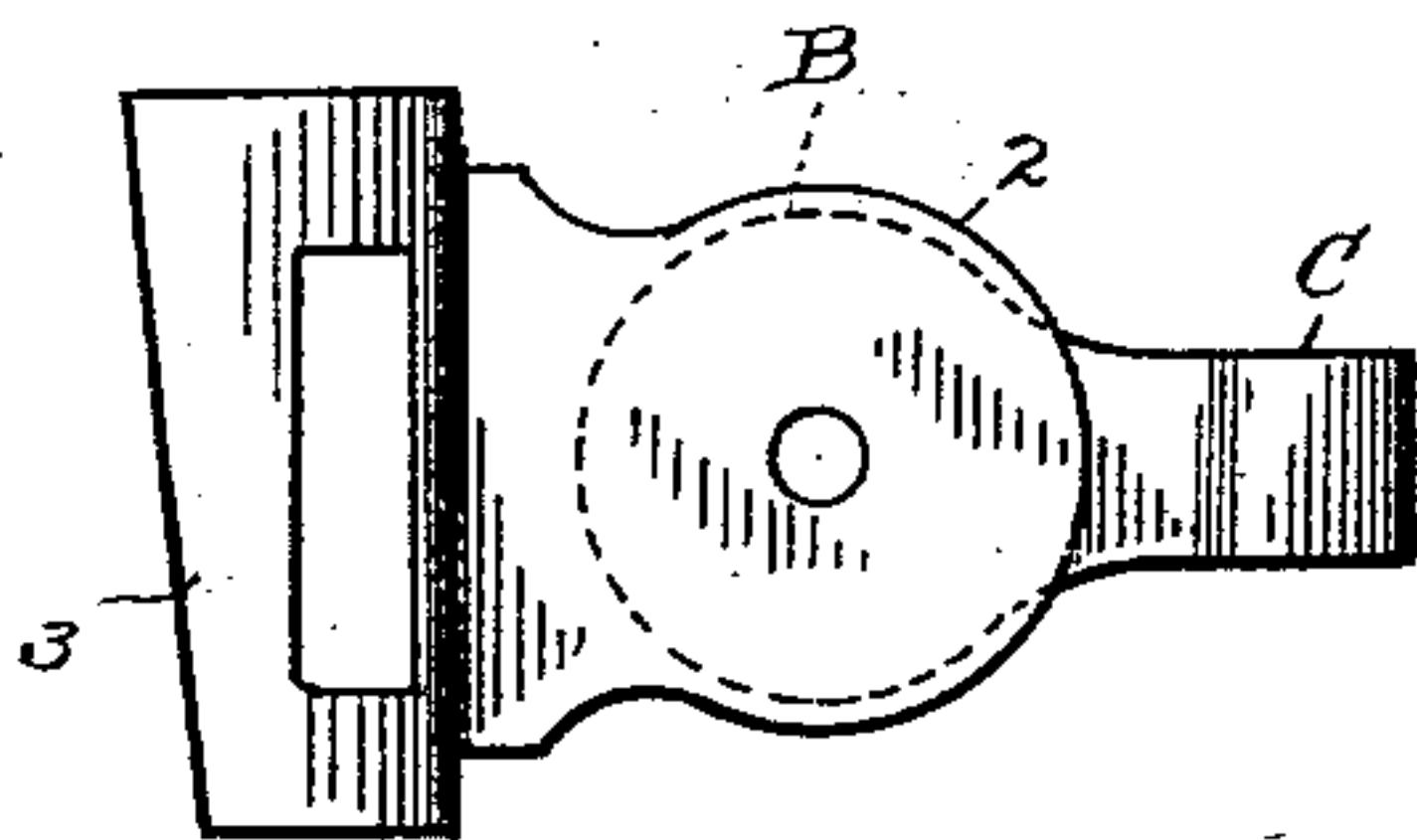


Fig. 12.

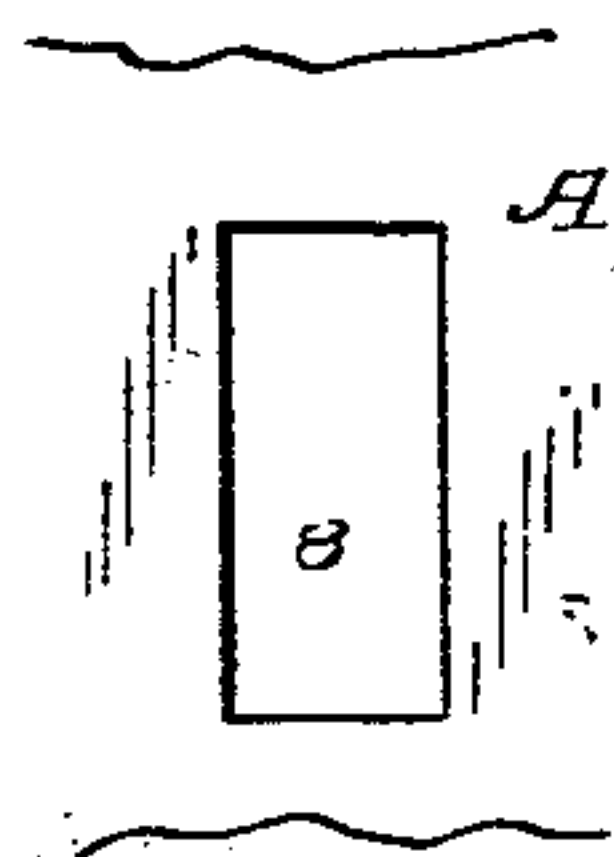


Fig. 13.



WITNESSES

H. F. Lamb  
H. Sincerbeaux

INVENTOR

Frank Rhind  
By  
A. M. Wooster  
Atty.



# UNITED STATES PATENT OFFICE.

FRANK RHIND, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE BRIDGEPORT BRASS COMPANY, OF SAME PLACE.

## BICYCLE-LAMP.

SPECIFICATION forming part of Letters Patent No. 560,109, dated May 12, 1896.

Application filed February 20, 1896. Serial No. 580,079. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK RHIND, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Bicycle-Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the construction of lamps for bicycles, carriages, cars, &c., and has for its object to provide a lamp-body in which the connecting device by means of which the lamp is attached to the holding device shall be attached to the inner side of the body without solder and in such a manner as to greatly strengthen the lamp as a whole, this point of attachment of the connecting device to the body of the lamp being, as the parts are ordinarily constructed, one of the weakest parts of the structure.

With these ends in view I have devised the novel construction of which the following description in connection with the accompanying drawings is a specification, numbers and letters being used to designate the several parts.

Figure 1 is an elevation illustrating the application of my invention to the well-known "Search-Light" lamp, the lamp itself being in dotted lines and the parts comprising my improvement in full lines; Fig. 2, a plan view of a portion of one form of connecting device detached, and also showing the back reflector in place; Fig. 3, an elevation corresponding with Fig. 2, except that the back reflector is removed; Fig. 4, a section on the line *xx* in Fig. 3; Fig. 5, an elevation corresponding with Fig. 3, illustrating a modification in the details of construction; Fig. 6, a plan view corresponding with Fig. 5; Fig. 7, a section on the line *yy* in Fig. 6; Fig. 8, an elevation corresponding with Fig. 5, illustrating the application of my invention to a two-part body—such, for example, as is illustrated and described in my pending application, Serial No. 558,525, filed August 7, 1895; Fig. 9, an elevation of the outer part of the body in this form detached; Fig. 10, a side

elevation, and Fig. 11 a plan view, illustrating still another form in which I have carried my invention into effect; Fig. 12, a detail view illustrating the opening in the back of the body, through which the drum of the form of connecting device illustrated in Figs. 1 to 8, inclusive, is passed; and Fig. 13 is a similar view illustrating openings through which the side plates of the form of connecting device illustrated in Figs. 10 and 11 are passed.

A denotes the body of a bicycle-lamp, which appears in dotted lines in Fig. 1, and another form of which appears in full lines in Fig. 9, and B denotes the connecting device, which comprises two elements—viz., a drum 1, which may be attached to the body of the lamp, as in Figs. 1 to 8, inclusive, or to the holding device C, as in Figs. 10 and 11, and side plates 2, which may be attached to the body of the lamp, as in Figs. 10 and 11, or to the holding device, as clearly illustrated in Fig. 1, said side plates and said drum being adapted to turn relatively to each other, whereby the lamp may be adjusted in the vertical plane, and to be locked in position after adjustment by a bolt E, (see Fig. 1,) which passes through both of said elements, or by any ordinary or preferred form of lock.

An essential feature of my invention is that the portion of the connecting device which is attached to the body of the lamp, no matter whether that portion be the drum, as in Figs. 1 to 8, inclusive, or the side plates, as in Figs. 10 and 11, is provided with wings 3, which lie on the inner side of the body and are secured thereto by rivets passing through holes 4. In Figs. 2, 3, and 4 I have illustrated a form in which the drum and wings are made from a single piece of metal, and in Figs. 5, 6, 7, and 8 forms in which the drum is made in three pieces, the wings in this form being formed integral with plates 1<sup>a</sup>, between which is a center piece 1<sup>b</sup>, which is curved to the outline of the drum and the ends 5 of which are secured to the body by rivets passing through holes 6. In Fig. 6 I have shown plates 1<sup>a</sup> as provided with flanges 7, which are turned over the edges of the center piece to hold it firmly in position. In Figs. 10 and 11 I have illustrated a form in which the drum is made part of the holding device. In this



form wings 3 are made integral with the side plates and lie upon the inner side of the body in the same manner as in the other form.

9 (see Figs. 2 to 6, inclusive) denotes flanges which may or may not be formed upon the ends of the wings. These flanges when used form ways to receive the back reflector 10. (See Fig. 2.)

The construction of the holding device is wholly immaterial so far as my present invention is concerned, it being simply necessary to provide some suitable device for holding the lamp and for attaching it to a bicycle.

In assembling the parts of the form illustrated in Figs. 1 to 8, inclusive, the drum is passed through an opening 8 in the back of the body (see Fig. 12) and then the wings are riveted to the body. When the wings form part of the connecting device, as in Figs. 10 and 11, the side plates may be passed through a single opening in the back of the body, as in Fig. 12, or two smaller openings may be made to just receive the side plates, as in Fig. 13.

Having thus described my invention, I claim—

1. The combination with a lamp-body hav-

ing an opening 8, of a suitable holding device and a connecting device B, said connecting device comprising two elements, viz; side plates and a drum, one of said elements being attached to the holding device and the other element being passed through the opening in the body and being provided with wings 3 which are riveted to the inner side of the body.

2. The combination with a lamp-body having an opening 8, of a suitable holding device and a connecting device B, said connecting device comprising two elements, viz; side plates and a drum, one of said elements being attached to the holding device and the other element being passed through the opening in the body and being provided with wings 3 which are riveted to the inner side of the body, the ends of said wings being provided with flanges 9 forming ways to receive a back reflector.

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

FRANK RHIND.

Witnesses:

A. M. WOOSTER,

H. SINCERBEAUX.