

No. 882,442.

PATENTED MAR. 17, 1908.

E. E. ADAMS.
REVOLVING FLASH LAMP.
APPLICATION FILED JUNE 19, 1907.

Fig. 1.

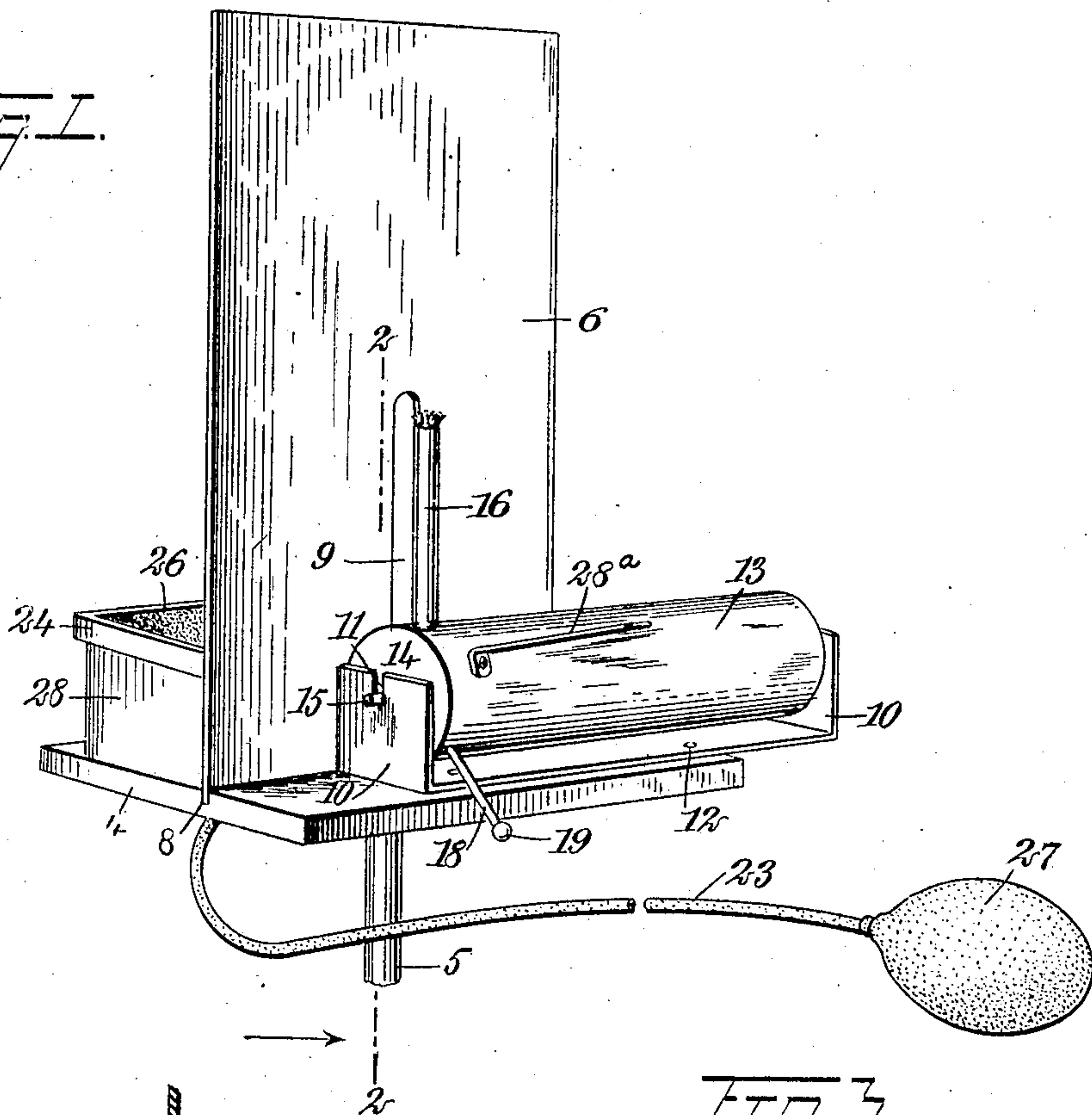
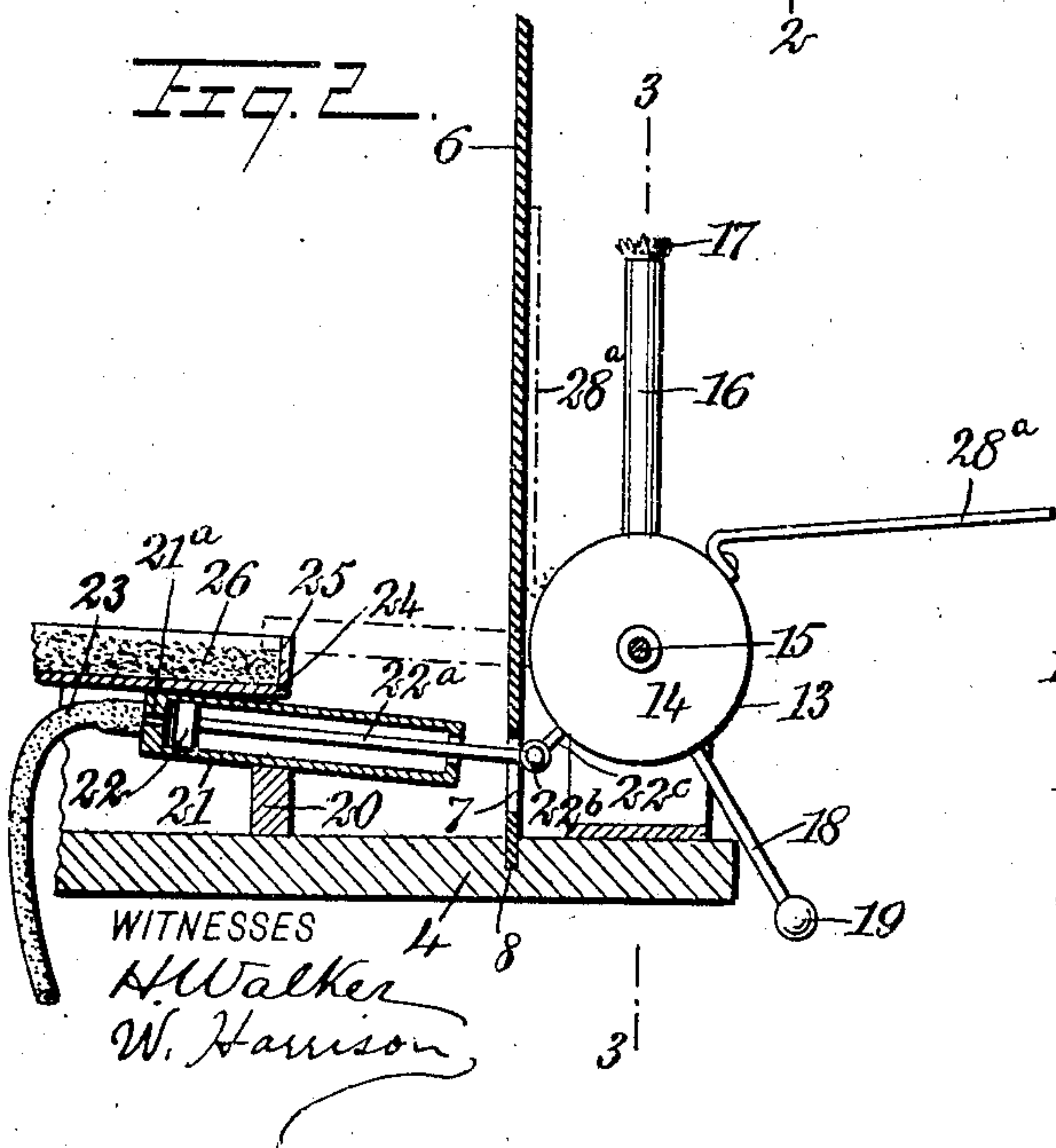
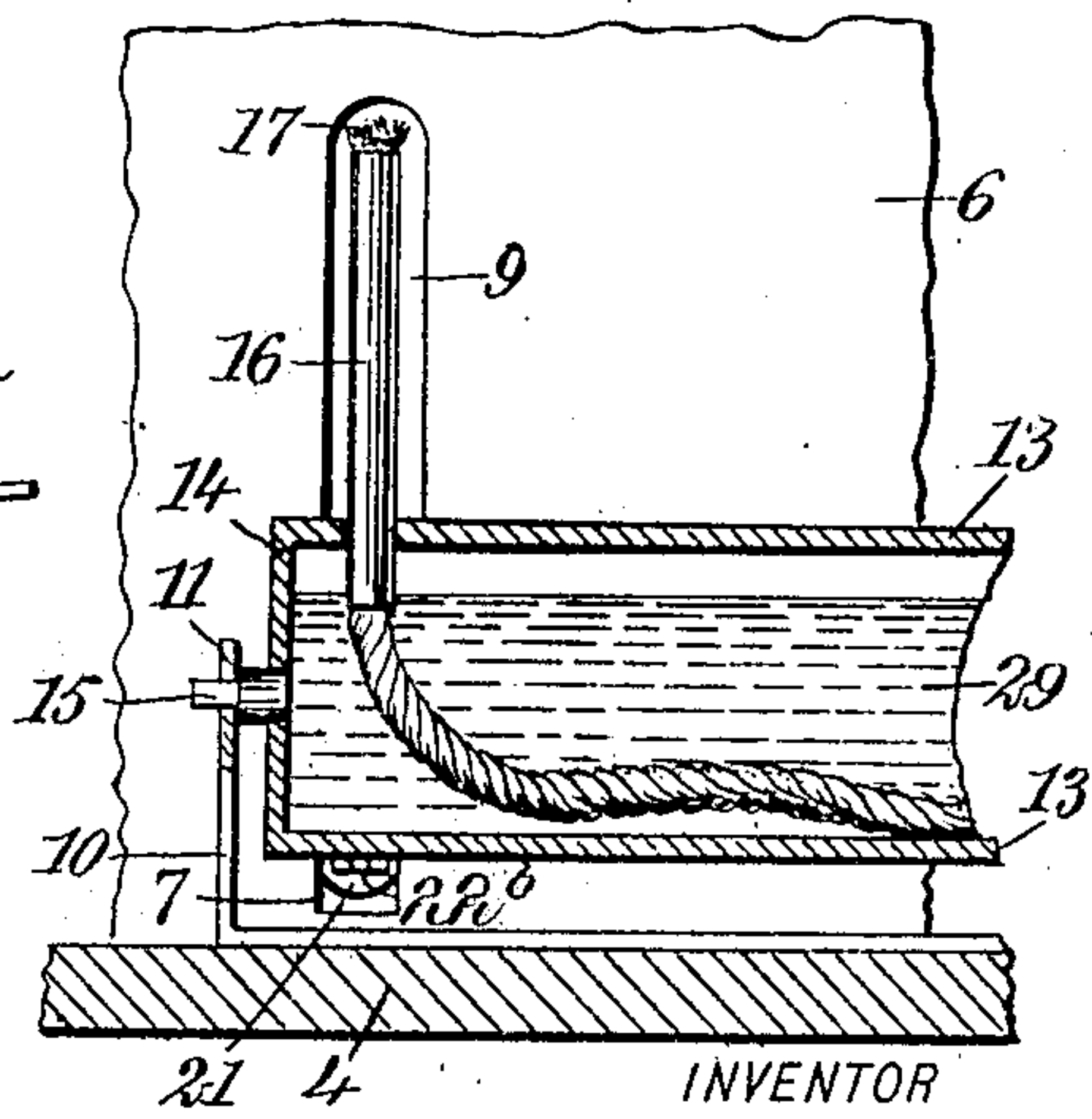


Fig. 2.



WITNESSES
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Fig. 3.



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ERNEST EUGENE ADAMS, OF OMAHA, NEBRASKA.

REVOLVING FLASH-LAMP.

No. 882,442.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed June 19, 1907. Serial No. 379,744.

To all whom it may concern:

Be it known that I, ERNEST EUGENE ADAMS, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved Revolving Flash-Lamp, of which the following is a full, clear, and exact description.

My invention relates to flash lamps used for various purposes, such, for instance, as photography, my more particular object being to provide means for igniting the powder at the exact moment desired and without any warning.

My invention further relates to certain details of construction to be employed in lamps of this character, for improving their general efficiency.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view showing a revolving lamp of my improved construction and means associated with said lamp for turning it, for the purpose of bringing the flame into contact with the powder to be ignited by the lamp; Fig. 2 is a fragmentary section upon the line 2—2 of Fig. 1, looking in the direction of the arrow, and showing the powder pan, the board used for separating the lamp from the pan, the pneumatic cylinder for turning the lamp, and various other features; and Fig. 3 is a fragmentary section on the line 3—3 of Fig. 2, through one end of the lamp, showing various parts adjacent thereto.

A base is shown at 4 and is mounted upon a stem 5. Mounted upon this base is a plate 6 extending vertically therefrom and provided with a slot 7. The lower edge 8 of the plate 6 is fitted into the base 4 which is slotted for this purpose, and the plate is provided centrally with a longitudinal slot 9.

A U-shaped bracket 10 is provided at its ends with slots 11, and is secured upon the base by fastenings 12. A lamp 13 of cylindrical form is provided with a head 14, these parts considered as a unit being of substantially cylindrical form and being mounted upon necks 15, one of which is shown. Thus mounted the lamp may be turned relatively to its support.

A burner tube 16 forms a part of the lamp,

and encircles a wick 17, which projects slightly above the tube 16 and extends downwardly, as will be understood from Fig. 3. An arm 18 extends radially outward from the lamp 13 and is provided upon its outer end with a ball 19 constituting a counterpoise. When the lamp is in its normal position the arm 18 rests against the base 4, as indicated in Figs. 1 and 2.

Mounted upon a block 20 is a pneumatic cylinder 21 into which is fitted a piston 22, and the cylinder is provided with an inlet 21^a. The piston 22 is connected by a piston rod 22^a and pivot 22^c with an arm 22^d, the latter being rigidly mounted upon the lamp 13 and radiating therefrom. A rubber tube 23 is connected with one end of the pneumatic cylinder 21, and is used for forcing air into the cylinder. A powder pan is shown at 24 and is provided with a slot 25 of substantially semi-cylindrical form, for the purpose of permitting the tube 16 to partially enter the pan, as indicated by dotted lines in Fig. 2. The powder used in flashing is shown at 26, and fills the pan to a point substantially level with the slot 25. At 27 is a bulb connected with the rubber tube 23, for the purpose of forcing air there-through.

At 28^a is a metallic shield having preferably the form of an L-shaped, flat metallic bar, this shield being just large enough to cover the slot 9 whenever the lamp is tilted into the position indicated by dotted lines in Fig. 2.

My invention is used as follows: The powder 26 being placed within the powder pan 24 and the lamp being lighted and in its normal position, as indicated in Fig. 1, the operator, when ready to cause the flash to occur, simply presses the bulb 27 with his hand. This causes compressed air to flow from the bulb to the tube and into the pneumatic cylinder where it pushes the piston 22 to the right, according to Fig. 2. This turns the lamp so that the burner tube 16 becomes substantially horizontal and the flame from the lamp is brought into engagement with the powder 26, causing the latter to burn and to produce the desired flash.

No injury to the lamp can be caused by the gases of combustion traveling through the slot 9, for the reason that this slot is closed, as indicated by dotted lines in Fig. 2, at the instant when the flash takes place.

Pressure upon the bulb 27 being relaxed, the counterpoise 19 restores the lamp to its normal position.

Having thus described my invention, I
5 claim as new and desire to secure by Letters Patent:

1. A device of the class described, comprising a base, a vertically slotted plate arranged perpendicular to the base, a powder
10 receptacle on one side of the plate adjacent to the slot, a U-shaped bracket on the other side, a substantially cylindrical lamp having trunnions at its ends journaled in the bracket, said lamp being parallel with the plate and
15 provided with a burner tube in alinement with the slot, said lamp having a radial arm projecting therefrom, a pneumatic cylinder provided with a piston connected with the arm, a shield connected with the lamp and
20 adapted to close the slot of the plate when the burner tube is rocked into contact with the powder receptacle, and a counterpoise for returning the lamp to its original position.

2. A device of the class described, comprising a base, a vertically slotted plate arranged perpendicular to the base, a powder
25 receptacle on one side of the plate adjacent to the slot, a U-shaped bracket on the other side, a substantially cylindrical lamp having trunnions at its ends journaled in the bracket,
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said lamp being parallel with the plate and provided with a burner tube in alinement with the slot, said lamp having a radial arm projecting therefrom, a pneumatic cylinder provided with a piston connected with the
35 arm, and a shield connected with the lamp and adapted to close the slot of the plate when the burner tube is rocked into contact with the powder receptacle.

3. A device of the class described, comprising a substantially vertical slotted plate,
40 a powder receptacle on one side of the plate, a substantially cylindrical lamp mounted for rocking movement on the other side of the plate and provided with a burner tube
45 registering with the slot, said lamp being provided with a radial arm, means in connection with the arm for rocking the lamp in one direction to bring the burner tube into
50 contact with the powder receptacle, and a counterpoise for returning the lamp to its original position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST EUGENE ADAMS.

Witnesses:

ARTHUR CHASE,
C. C. SHIMER.