

No. 840,261.

PATENTED JAN. 1, 1907.

F. A. SCHWERTNER.
GLOBE LIFTING ATTACHMENT FOR LANTERNS.

APPLICATION FILED JULY 12, 1906.

Fig. 1.

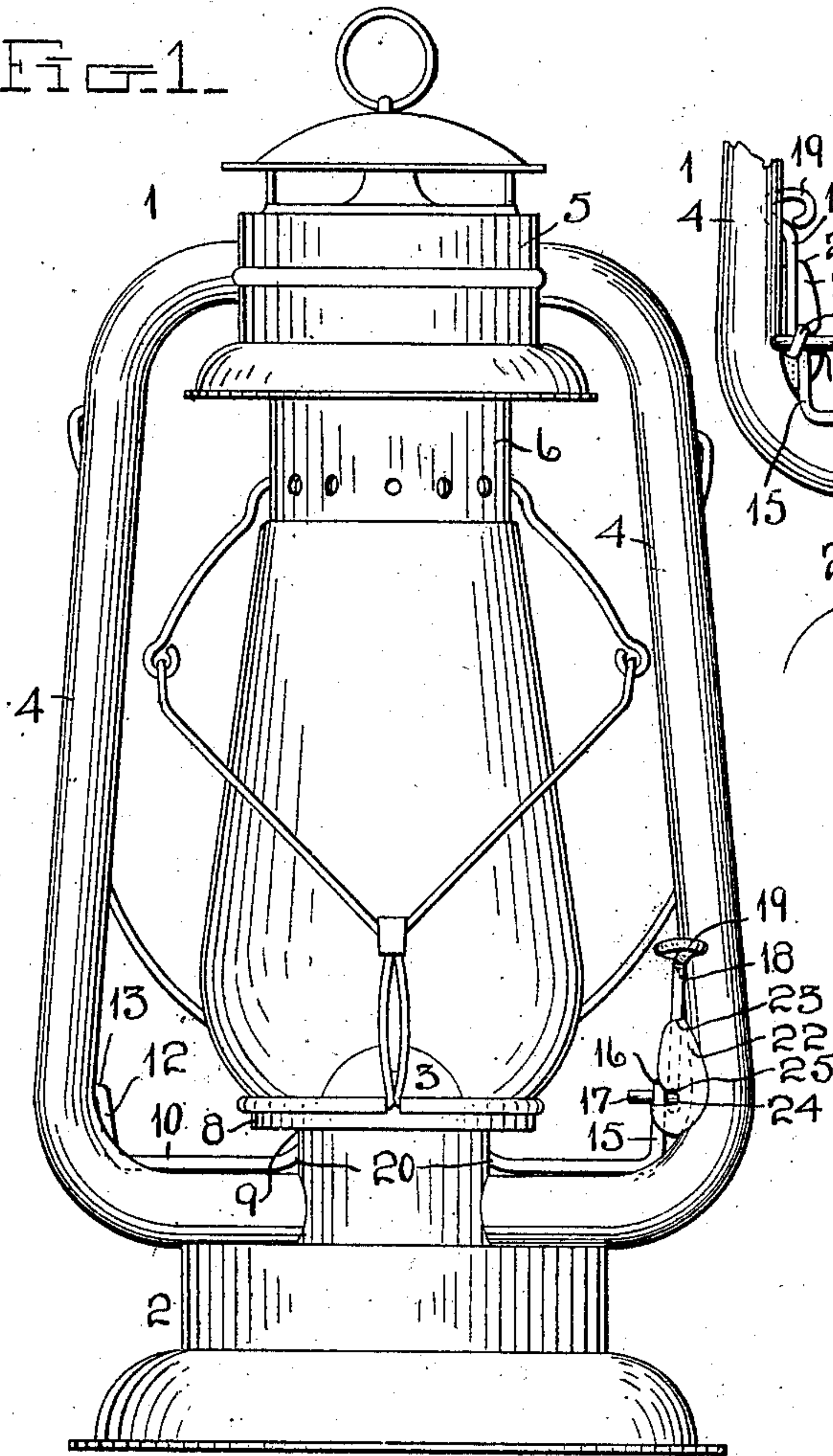


Fig. 3.

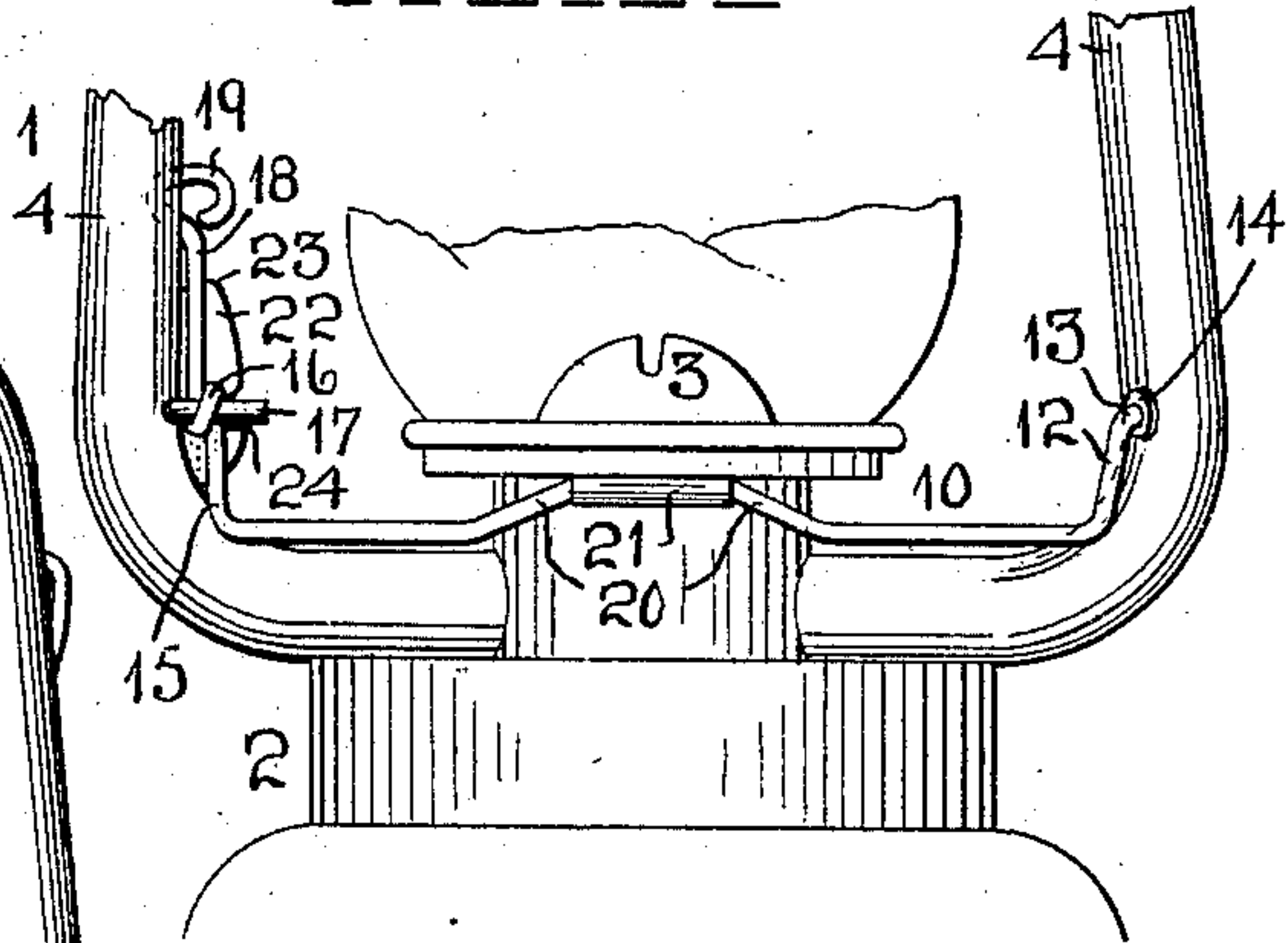


Fig. 4.

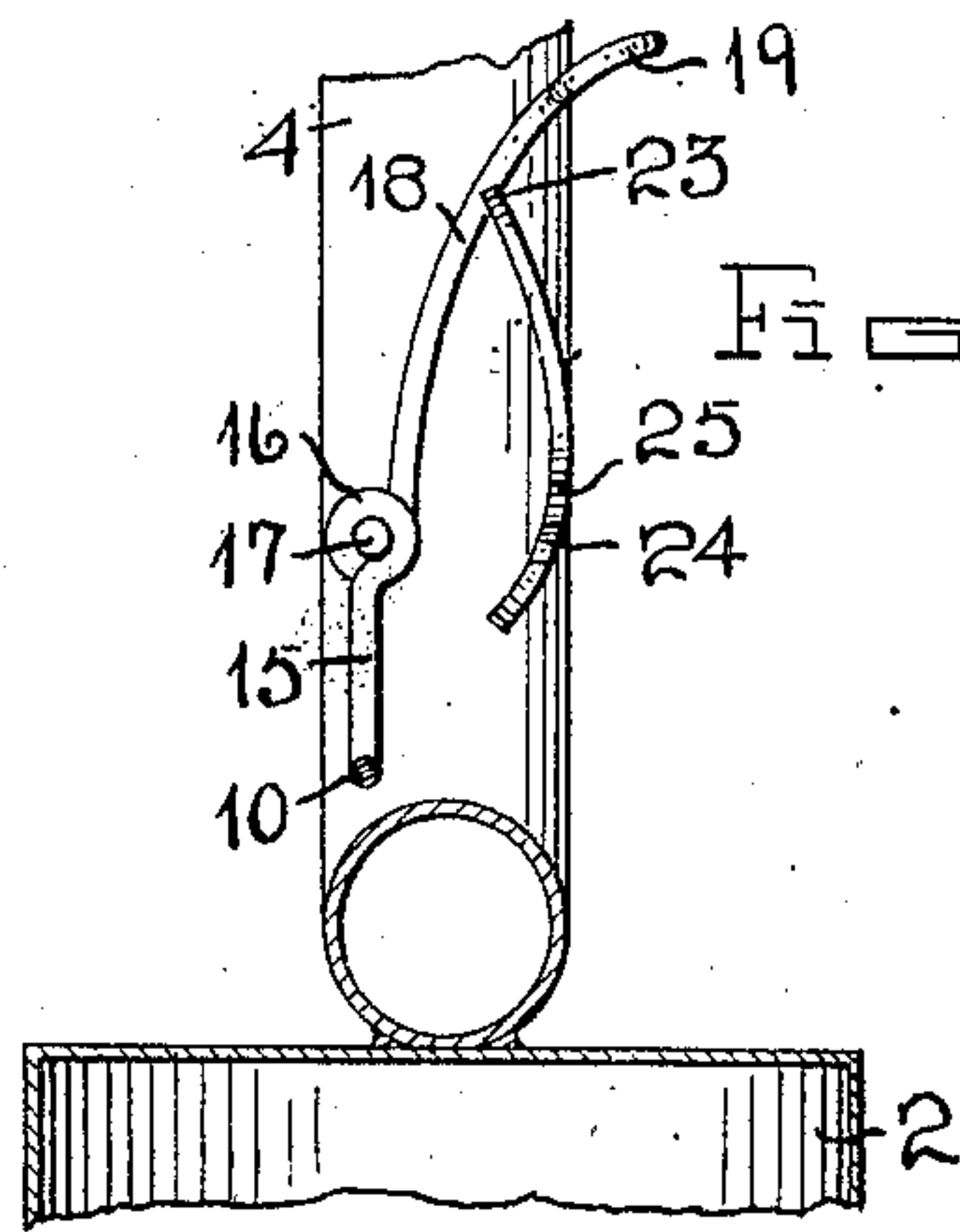
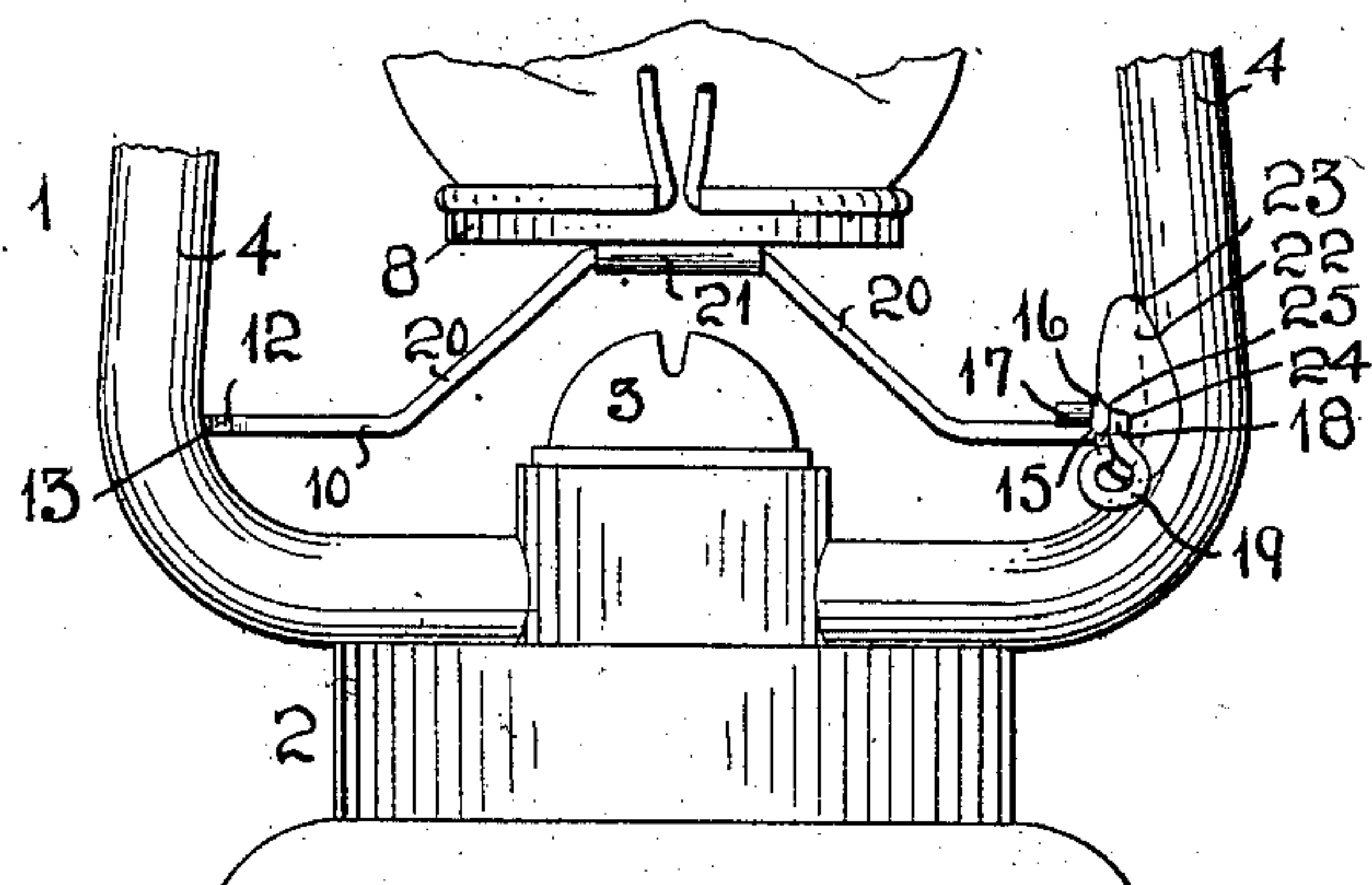
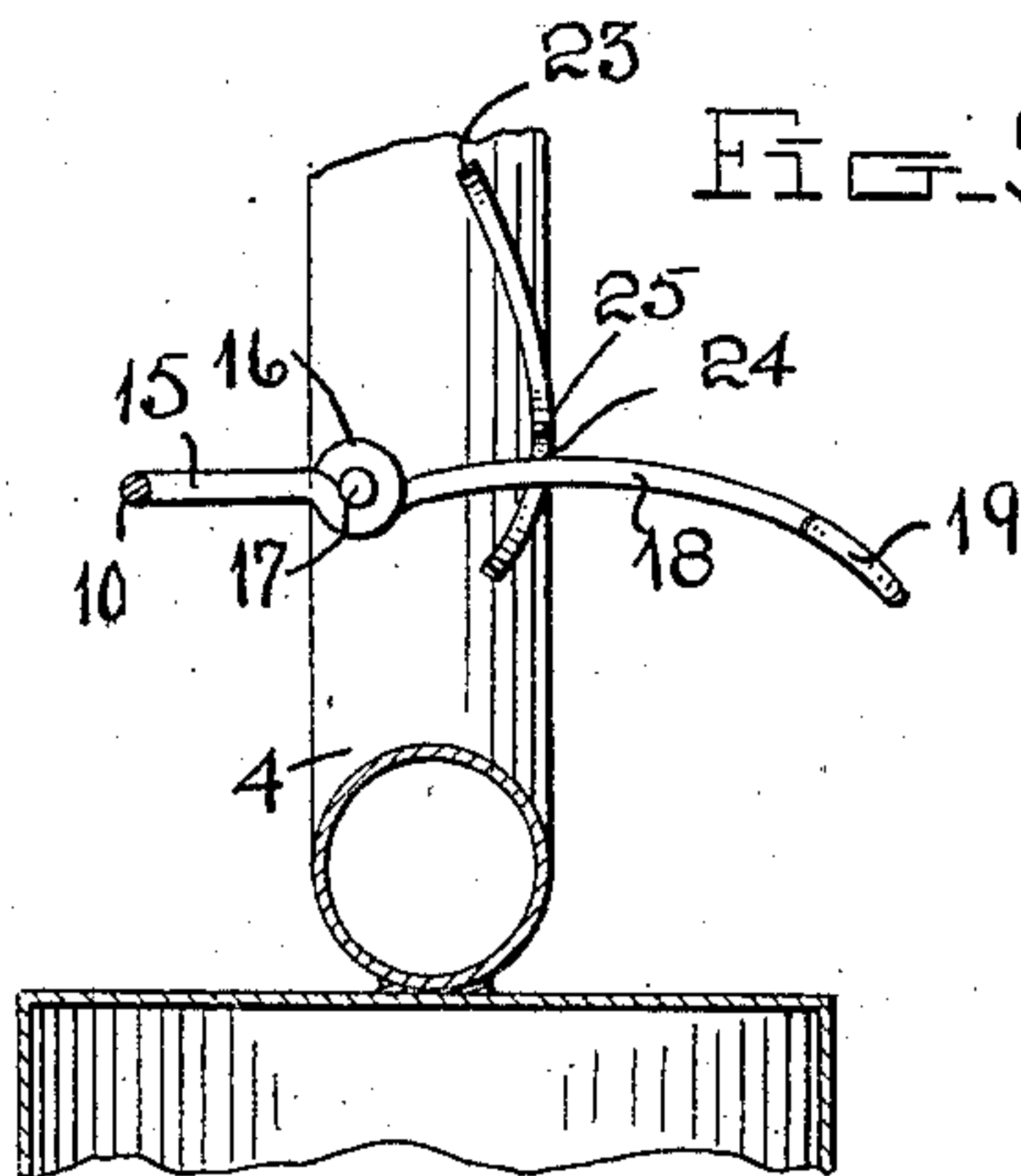


Fig. 5.



Witnesses. Fig. 2.

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UNITED STATES PATENT OFFICE.

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GLOBE-LIFTING ATTACHMENT FOR LANTERNS.

No. 840,261.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed July 12, 1906. Serial No. 325,912.

To all whom it may concern:

Be it known that I, FRANK A. SCHWERTNER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented new and useful Improvements in Globe-Lifting Attachments for Lanterns, of which the following is a specification.

This invention relates to improvements in globe-lifting attachments for lanterns.

The object of the invention is to provide an attachment of this character by means of which the lantern-globe may be readily lifted for lighting the burner or other purposes, means being provided whereby the lifting attachment will be locked when the globe is in either a raised or lowered position.

A further object is to provide an attachment of this character which will be simple, strong, durable, and inexpensive in construction and which may be readily applied to lanterns now in use.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of one side of a lantern having my improved attachment applied thereto and showing the globe in closed or lowered position. Fig. 2 is a similar view of the lower portion of the lantern, showing the globe in raised position. Fig. 3 is a side view of the opposite side of the lantern. Fig. 4 is a detail vertical sectional view of the lower end of the lantern looking toward the locking device and showing the position of the parts when the globe is in lowered position, and Fig. 5 is a similar view showing the position of the parts when the globe is raised.

Referring more particularly to the drawings, 1 denotes the lantern, which may be of any suitable style or make and is here shown as a tubular lantern comprising a base portion 2, containing the oil receptacle or font, as shown. On the base is arranged the usual burner 3, with which is connected the lower ends of upwardly-projecting draft-tubes 4, said tubes being secured at their lower ends to the base, as shown.

The upper ends of the draft-tubes 4 are connected to the globe-protecting cap 5, in

which is slidably mounted the upper end of a globe-supporting frame 6. To the lower end of the frame 6 is connected a circular globe-supporting plate 8, which is here shown as being provided with a centrally-disposed aperture 9, adapted to fit over the upper end of the burner when the globe is in a lowered position. The supporting-frame and plate of the lantern may be of the usual or any desired construction and do not form a part of the present invention.

Arranged beneath the plate 8 is a globe-lifting device, which consists of a rod or bar 10, the ends of which are bent at right angles, one of said ends 12 being provided with an integrally-formed trunnion or pivot-pin 13, adapted to be engaged with a bearing-aperture 14, formed in the inner side of one of the draft-tubes 4, as shown. The opposite angularly-bent end 15 of the rod or bar is bent or coiled to form a bearing-eye 16, which is adapted to be engaged with a bearing-stud 17, secured to the opposite draft-tube 4 and projecting inwardly therefrom in line with the bearing-aperture in the other draft-tube. The end 15 of the rod or bar 10 after forming the eye 16 is extended to form a lifting-lever 18, the outer end of which is bent to form a finger-engaging loop 19. Midway between the angularly-bent ends of the rod 14 the latter is bent rearwardly to form a globe-plate-engaging offset 20. The offset 20 is pivotally connected to the under side of the plate 8 by means of an elongated bearing-clip 21, which is soldered or otherwise secured to the under side of the plate 8.

Secured to the inner forward side of one of the draft-tubes 4 adjacent to the pivot-stud 17 is a cam-locking plate 22. The plate 22 projects inwardly from the side of the tube and has its upper end slightly bent or curved rearwardly, as clearly shown in Figs. 4 and 5 of the drawings. The upper end of the plate is rounded off and provides a seat 23 for the lever 18 when the latter is in position for holding the globe down. In the edge of the locking-plate 22 near the lower end of the same is formed a notch or recess 24, the upper corner of which is slightly rounded off, as shown at 25. The notch 24 is adapted to receive and hold the lifting-lever 18 when the latter is forced downwardly to raise the rod 10, and thereby lift the globe to an elevated

position, as clearly shown in Figs. 2 and 5 of the drawings.

The lever 18 when engaged with the notch 24 will firmly support the globe in an elevated position. In order to lower the globe, it is necessary to force the lever inwardly sufficiently to spring the same out of the notch 24 and over the edge of the upper portion of the cam-plate 22, thus lowering the lifting-rod and the globe until the latter is in engagement with the burner, at which time the lever 18 will be engaged with the seat 23 at the upper end of the locking-plate, in which position it is held by frictional engagement, due to the yielding or spring metal qualities of the end of the lifting-rod. It will be noted that the finger-loop 19 on the end of the lever is arranged at such an angle as to project into convenient position for engagement with the finger when the lever 18 is in an elevated position, so that the same may be readily pressed inwardly and downwardly around the edge of the cam-plate and into engagement with the locking-notch 24.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined by the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a lantern, the combination of a globe raising and lowering attachment for lanterns comprising a lifting-rod having right-angularly-bent ends, a bearing-trunnion formed on one of said ends to engage a bearing in one of the draft-tubes of the lantern, a bearing-stud arranged on the opposite draft-tube, a bearing-eye formed in the opposite angularly-bent end of the lifting-rod to engage said stud, an offset formed in said rod, a bearing-clip to pivotally connect said offset with the globe-supporting plate of the lantern, a lever formed on one end of said rod, a finger-engaging loop formed on the end of said lever and bent at an angle thereto, a longitudinally-curved cam-shaped spring locking-plate secured to one of the draft-tubes of the lantern, a lever-engaging seat formed on the upper end of said plate, a lever-engaging notch or recess formed near the lower end of the plate, said seat and recess being adapted to be engaged by said lever to hold the lantern-globe in a raised or lowered position, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANK A. SCHWERTNER.

Witnesses:

HARRY G. GELTZ,
JOS. SOHM.