

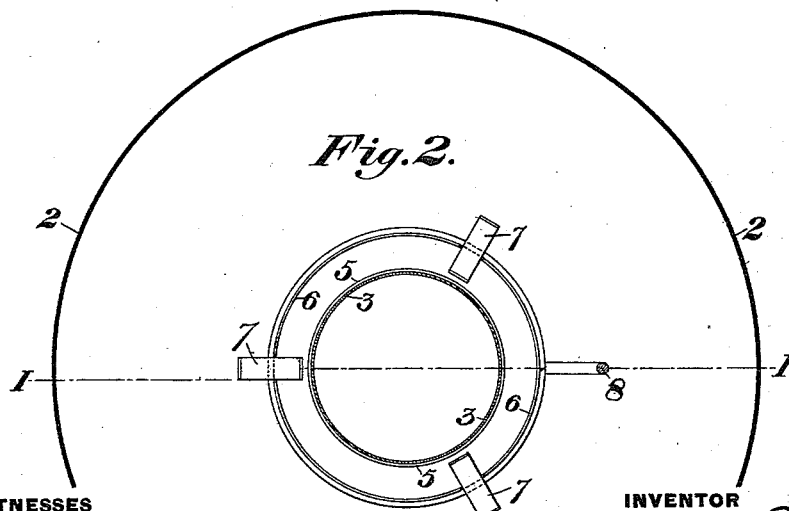
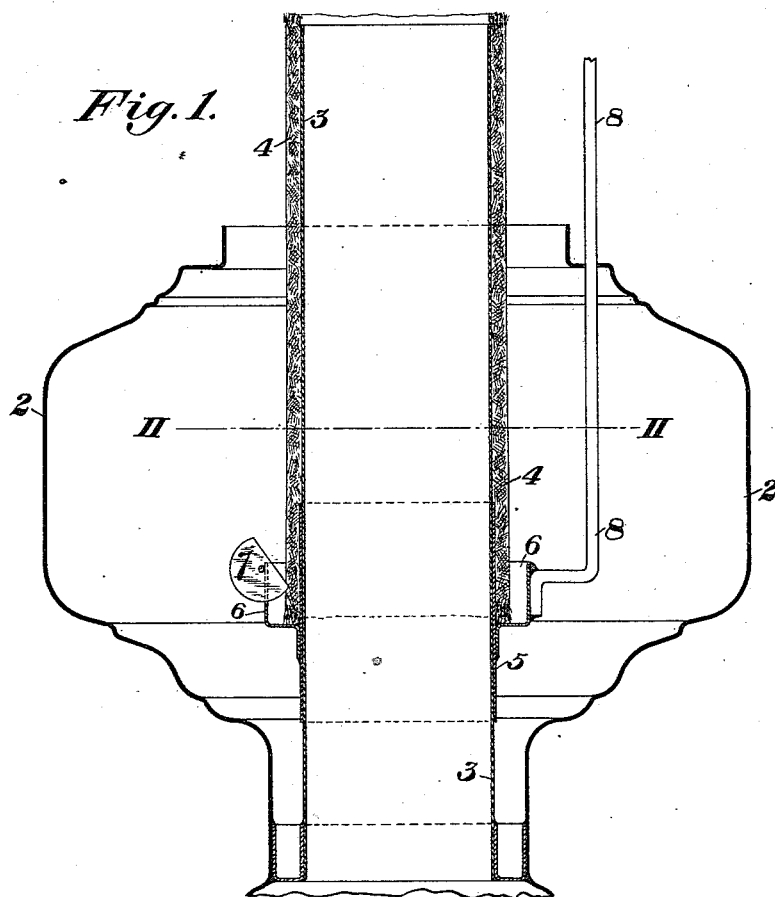
(No Model.)

2 Sheets—Sheet 1.

A. W. PAULL.
WICK RAISER.

No. 420,093.

Patented Jan. 28, 1890.



WITNESSES

A. L. Gill
W. B. Brown

INVENTOR

Archibald W. Paull
by W. Baxendell & Sons
his Attorneys

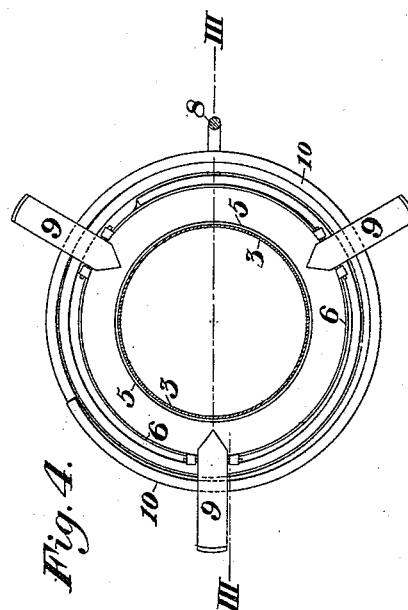
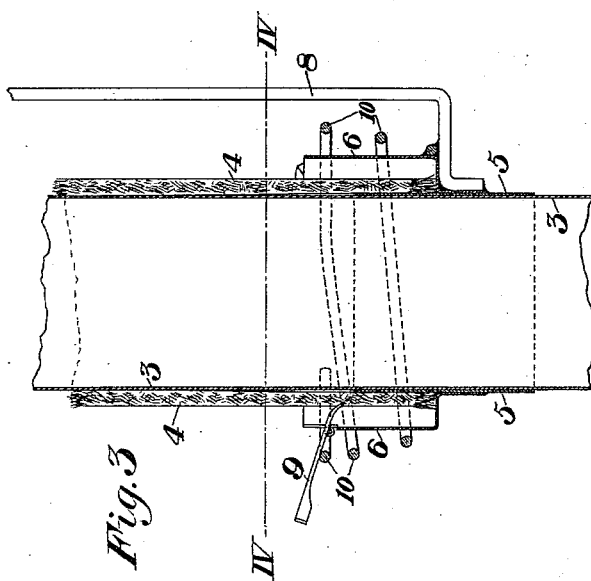
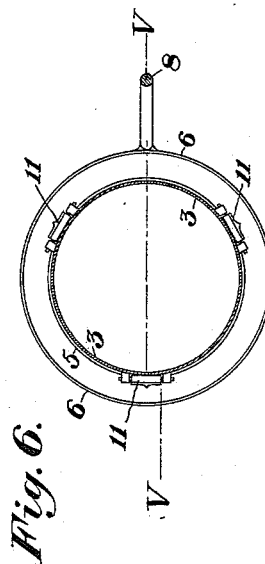
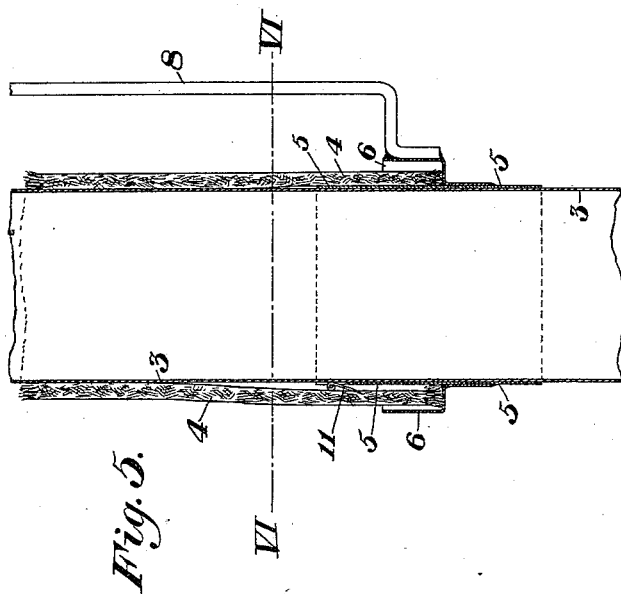
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2 Sheets—Sheet 2.

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WICK RAISER.

No. 420,093.

Patented Jan. 28, 1890.



WITNESSES

H. L. Gill
W. B. Corwin

INVENTOR

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UNITED STATES PATENT OFFICE.

ARCHIBALD W. PAULL, OF WHEELING, WEST VIRGINIA.

WICK-RAISER.

SPECIFICATION forming part of Letters Patent No. 420,093, dated January 28, 1890.

Application filed November 18, 1889. Serial No. 330,672. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD W. PAULL, of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and useful Improvement in Wick - Raisers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view of a lamp provided with my improved wick-raising device. Fig. 2 is a horizontal cross-section on the line II II of Fig. 1. Figs. 3 and 5 are vertical sectional views of modified forms of wick-raiser, the sections being on the lines III III and V V of Figs. 4 and 6, respectively. Figs. 4 and 6 are horizontal sections on the lines IV IV and VI VI of Figs. 3 and 5.

Like symbols of reference indicate like parts in each.

In the drawings, Figs. 1 and 2, 2 represents the bowl of a central-draft lamp.

3 is the air-tube, and 4 is the cylindrical wick which encircles the air-tube.

The wick-raiser consists of a sliding frame or sleeve 5, which fits on the air-tube, and is provided at an intermediate place with an annular portion 6 of greater diameter, so as to be capable of receiving within it the foot of the wick, which rests on an annular shoulder at the base of said portion 6.

7 7 are segmental cams or catches, which are journaled to the rim of the part 6 of the frame or sleeve 5, and are of such form relatively to their centers of gravity that normally they shall tend to swing toward the position of the wick on the central air-tube. There should be a suitable number of these cams or catches. I deem three to be sufficient.

8 is a lifting-rod, which extends from the frame or sleeve 5 up through the top of the lamp-bowl.

The operation is as follows: When it is desired to place the wick in the lamp, the wick may be attached to the wick-raiser without removing the latter from the lamp or otherwise by simply placing the wick around the air-tube and pushing it down thereon until its end enters the part 6 of the sleeve 5 and pushes aside the cam 7 to permit its entrance. Now, if the wick-raiser be moved up by the

lifting-rod the engagement of the base of the part 6 will be sufficient of itself to lift the wick, and if the wick-raiser be pushed down into the lamp-bowl the engagement of the periphery of the cams or catches with the wick will tend to tighten them thereon and will pull the wick down with the wick-raiser. To disengage the wick from the wick-raiser the wick may be seized and held at its upper end and the lifting-rod then pushed down with sufficient force to draw the cams or catches from the wick, they turning sufficiently to permit the disengagement of the wick therefrom. The same end may be attained by holding the lifting-rod and forcibly pulling the wick up, or by simply raising the lifting-rod until the cams 7 engage the sleeve of the burner, which will of itself turn back the cams and release them from the wick.

It will be understood that the form and construction of these cams or catches may be varied in many ways by the skilled mechanic without departing from the principles of my invention, the only requirement being that the wick - lifter should be provided with catches, which, when the wick is pushed down thereon into the lamp-bowl, will automatically adjust themselves to the wick, so as to retain it and to draw it down as the lifting-rod is depressed. Thus, as shown in Figs. 3 and 4, the wick-raiser consists of a sleeve or frame 5, having an enlarged part 6, and pointed catches 9, pivoted to the rim of the parts 6, and normally held with their points in a somewhat downwardly-inclined position by means of an encircling supporting-spring 10. The wick is adjusted to the lamp by pushing it down into the bowl around the air-tube. The catches yield to permit passage of the wick, and when the lifting-rod is pushed down the catches engage the wick firmly and draw it down into the bowl. The wick may be released from these catches in the manner hereinbefore explained with reference to Figs. 1 and 2—that is, if the wick be forcibly pulled upward (or the lifting-rod forcibly pushed down) the catches will overturn and release the wick, or the catches may be released by lifting them into contact with the burner-sleeve.

In Figs. 5 and 6 I show the catches (indicated by 11) pivoted to the sleeve 5 on the

inner side of the wick. Their engagement with and manner of release from the wick will be readily understood. The catches permit the wick to be pushed down over them into the lamp-bowl, and when the lifting-rod is depressed their engagement with the wick will carry it down. The wick may be withdrawn from the catches by pulling it forcibly upward or pushing the lifting-rod forcibly downward, when the wick will yield sufficiently to permit the catches to overturn and to be released.

Other modifications of my invention will suggest themselves: For example, instead of making the cams or catches of Figs. 1, 2, and 3 sufficiently short to be capable of turning upward to permit release of the wick by forcibly pulling thereon, as I have above explained, they may be made longer, so as to be incapable of turning up in this manner, the drawing of the catches up against the burner being depended on to effect the wick's release.

It will be understood that in the claims the word "catches" is used generically to include the devices shown in the drawings and other automatically-grasping catches acting on the same principle.

The advantages of my invention will be appreciated by those skilled in the art. The wick-raser is sure and efficient in its action, and the readiness with which the wick may be adjusted makes it very cleanly and desirable for domestic use.

In one of the following claims, by the description of the catches as normally tending toward the position of the wick, I mean that, as shown in the drawings, the catches of themselves without the assistance of other mechanism operated from the outside of the lamp-bowl tend at all times toward the position of the wick on the central air-tube.

I claim—

1. A movable wick-raising device having an automatic catch or catches constructed to be engaged with the wick by the action of the wick when inserted into the lamp-fount, substantially as and for the purposes described.

2. A movable wick-raising device having automatic pivotally-movable catches constructed to be engaged with the wick by the action of the wick when inserted into the lamp-fount, said catches at their engaging-point being upwardly movable on their pivotal connections to release the wick on the application of excessive force to the wick, substantially as and for the purposes described.

3. The combination, with the air-tube, of a sleeve or carrier vertically movable thereon, said sleeve or carrier having a shoulder on which the extreme lower end of the wick has a bearing, and having a catch or catches to engage the wick, substantially as and for the purposes described.

4. The combination, with the air-tube, of a sleeve encircling the same and movable thereon, said sleeve having a portion for receiving the foot of the wick, and cams pivoted thereto, substantially as and for the purposes described.

5. A movable wick-raising device having an automatic catch or catches, which normally tend toward the wick, and are constructed to be engaged with the wick by the action of the wick when inserted into the lamp-fount, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 6th day of November, A. D. 1889.

ARCHIBALD W. PAULL.

Witnesses:

W. B. CORWIN,
THOMAS W. BAKEWELL.