

(No Model.)

2 Sheets—Sheet 1.

A. C. STOUT.
LANTERN.

No. 434,646.

Patented Aug. 19, 1890.

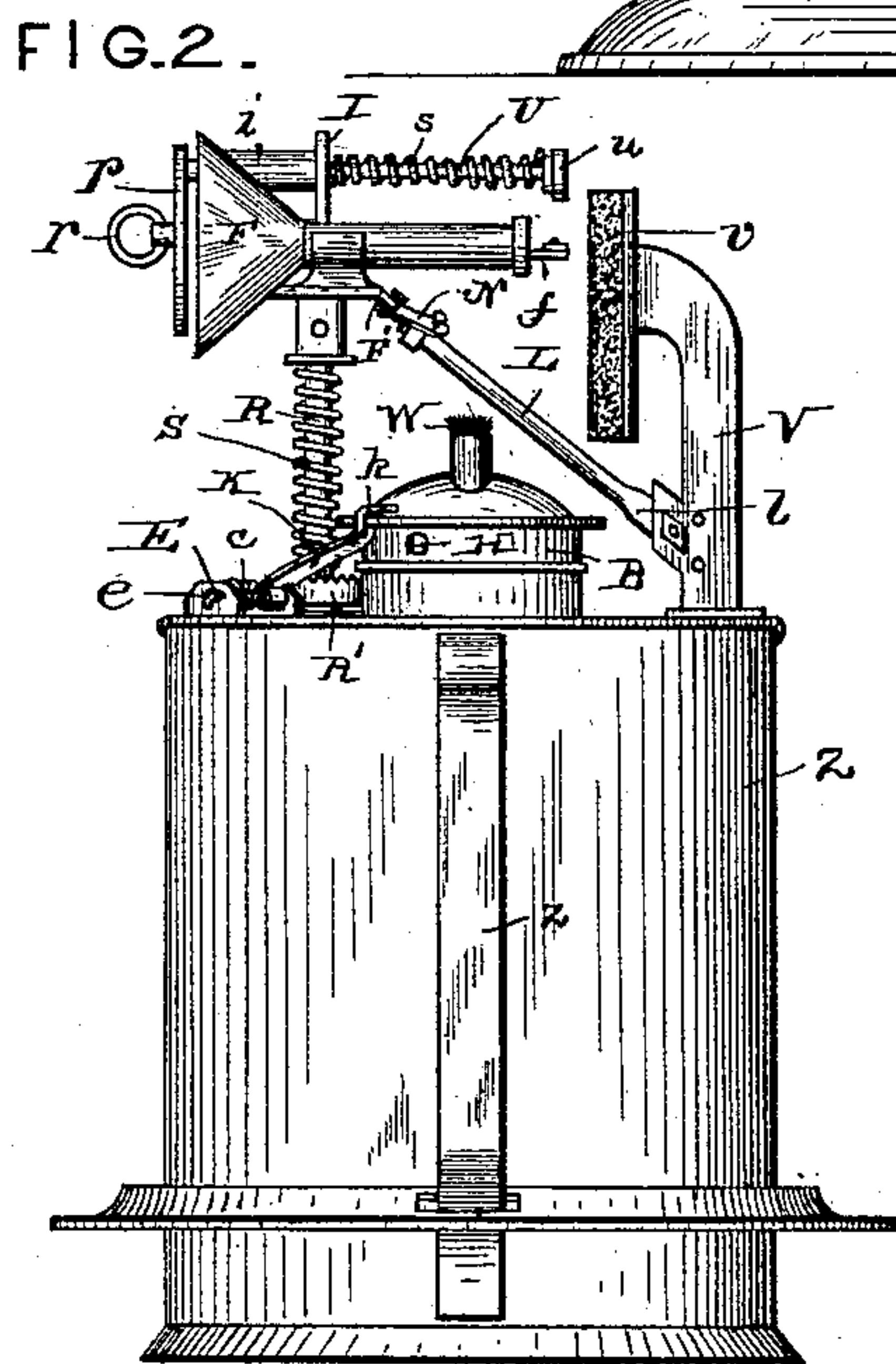
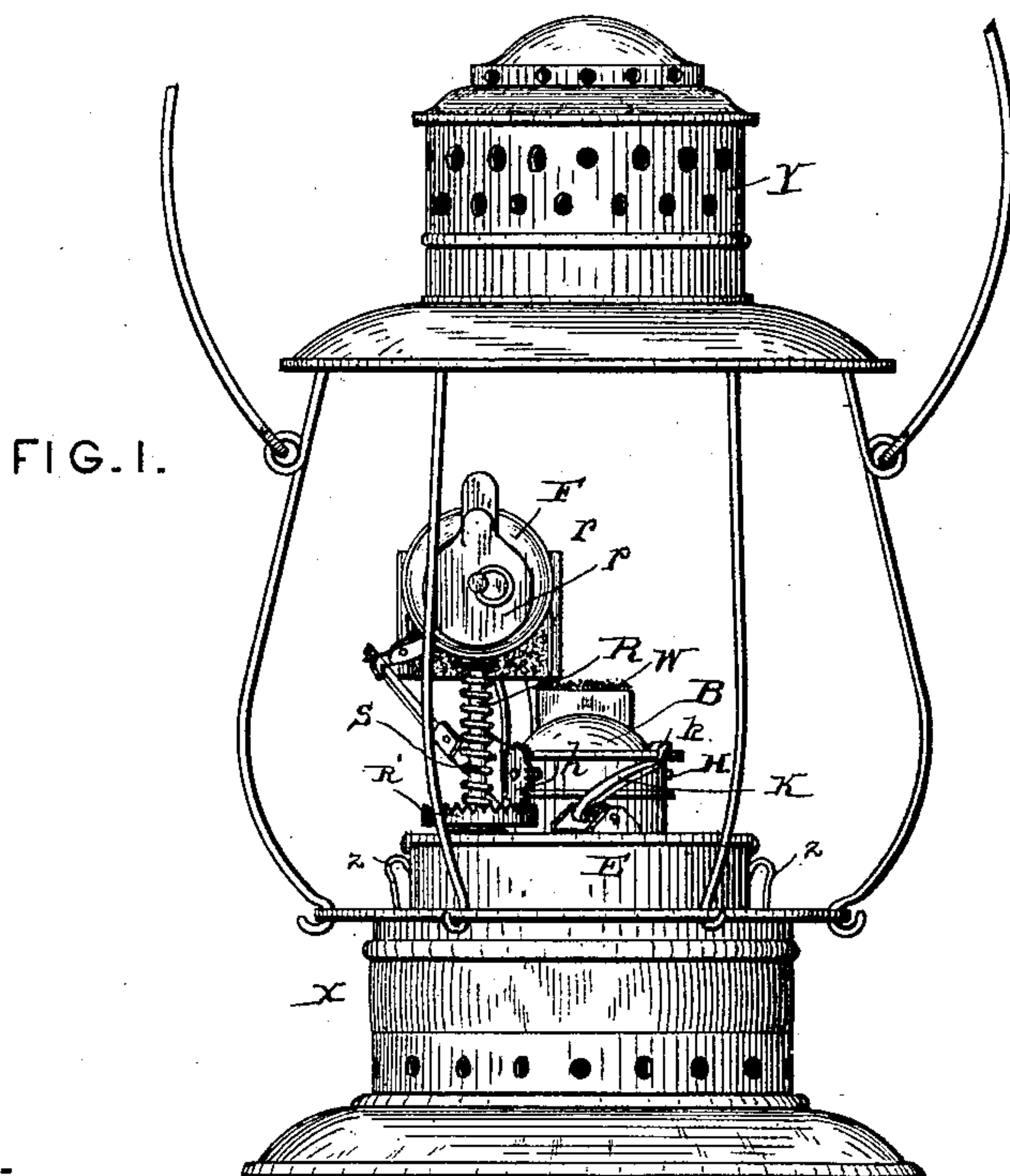
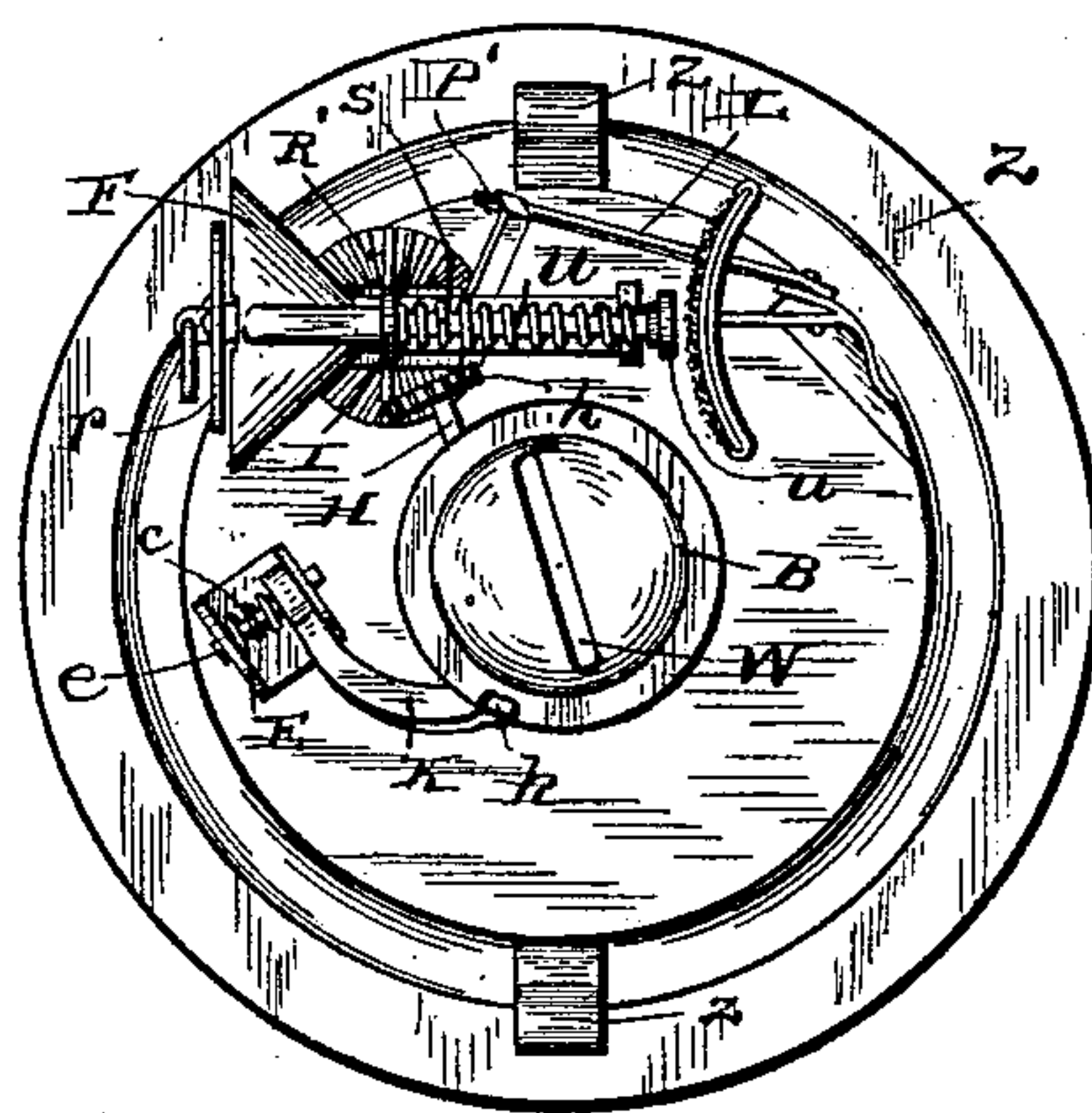


FIG. 3.



Witnesses

Harry L. Amer.

Inventor

A. C. Stout

By his Attorneys,

W. J. Collamer.

C. A. Snow & Co.

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2 Sheets—Sheet 2.

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FIG. 4.

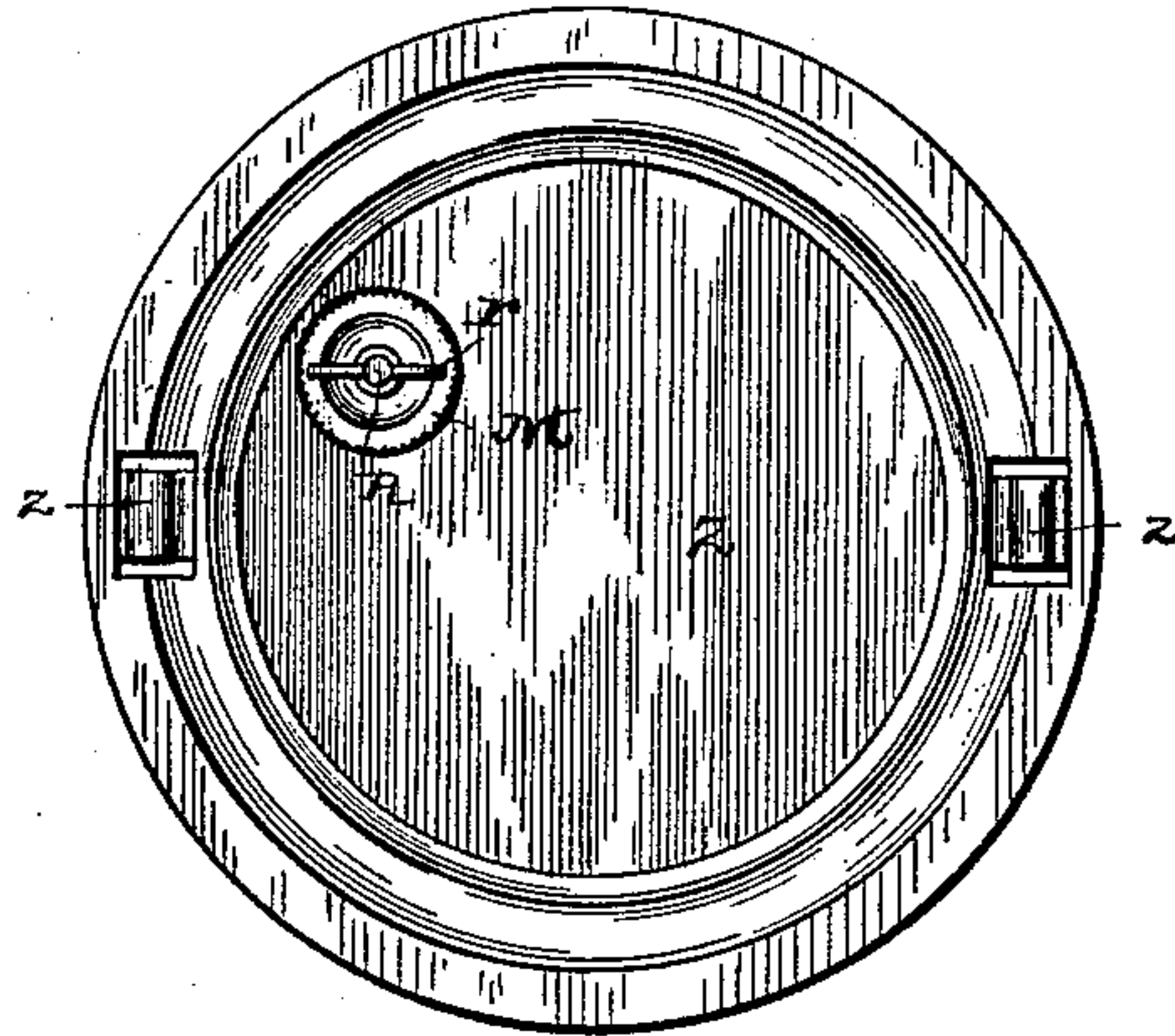
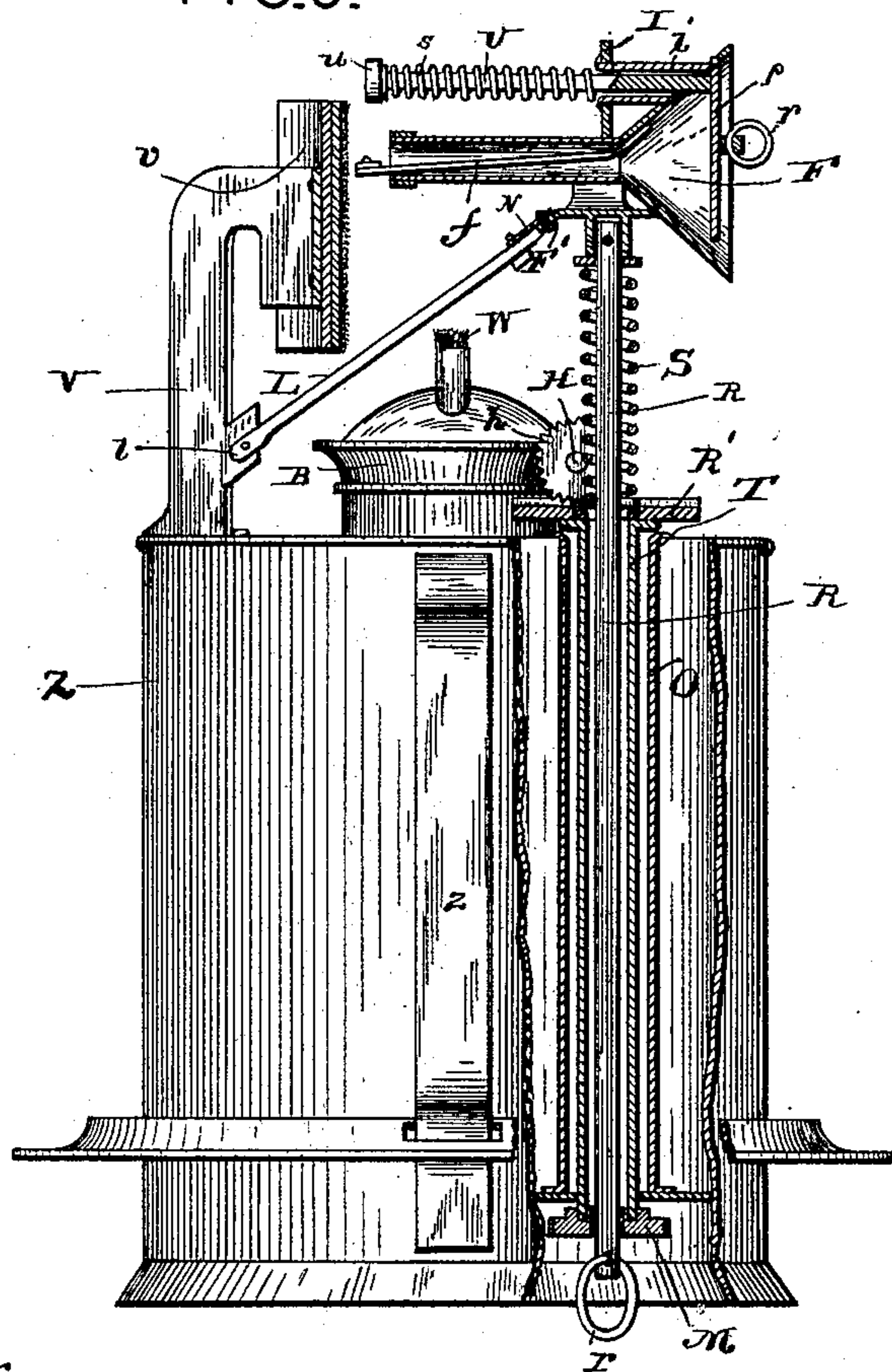


FIG. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

ANSON C. STOUT, OF FORTY FORT, PENNSYLVANIA.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 434,646, dated August 19, 1890.

Application filed April 16, 1890. Serial No. 348,225. (No model.)

To all whom it may concern:

Be it known that I, ANSON C. STOUT, a citizen of the United States, residing at Forty Fort, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Lantern, of which the following is a specification.

This invention relates to lanterns, and more especially to the lighting devices therefor; and the object of the invention is to provide means for lighting a railway, signal, or other lantern, and for regulating it without removing the lamp proper from the globe and frame of the lantern.

To this end the invention consists of the improved details of construction hereinafter more fully described, and illustrated in the drawings, in which—

Figure 1 is a front elevation of a lantern embodying my invention. Fig. 2 is a side elevation, Fig. 3 a plan, and Fig. 4 a bottom plan, of the lamp proper. Fig. 5 is a side view from the opposite side as that seen in Fig. 2, the match-holding device and the tubes in the lamp-body being shown in section.

Referring to the said drawings, the letter X designates a lantern-body of any approved construction, having a chimney Y, and Z is the lamp-body proper, within which is the oil, and which is passed upwardly into the lantern-body through a hole in the bottom thereof and held there by any suitable means, as the spring-catches *z*.

B designates the burner, which comprises a cap screwed into the upper end of the lamp-body, and through this burner passes the wick W, which is raised and lowered by the ordinary toothed wheel within the burner B upon a shaft H, all as is common and well known in devices of this character.

Coming now to the present invention, T is a tubular shaft passing through an outer tube O, which extends vertically through the lamp-body Z, and M is a milled wheel on the lower end of the tube T, by means of which it can be turned. The upper end of this tube carries a wheel R', having radial grooves in its upper face, and on the outer end of the shaft H is a gear-wheel *h*, engaging these grooves, by which construction the raising and lowering of the wick can be regulated from the bottom of the lamp-body, and hence from the

outside of the lantern and without opening the latter or removing the chimney Y therefrom. The burner B, which is screwed into the lamp-body Z and must be removed when it is desired to fill the latter with oil, is prevented from automatically unscrewing by means of a small catch K, whose free end is bent upwardly, as at *k*, and normally engages a notch in the edge of the burner, and whose lower end is mounted upon a pin *e*, which extends between two ears E, connected to the top of the lamp-body Z, and is pressed against one of such ears by a small coiled spring *c*, surrounding the pin *e*, all as shown in Fig. 2. When it is desired to unscrew the burner, the tip *k* is drawn laterally out of the notch in the edge of the burner, which movement compresses the spring *c*, after which the catch K is turned upwardly or downwardly out of the way, and the burner can be removed without difficulty.

R is a rod passing loosely through the tube T and having a ring *r* in its lower end. Connected to the upper end of this rod is a funnel F, and projecting from the smaller end of this funnel is a flat spring *f*. A spiral spring S surrounds the rod R between the funnel and the upper end of the tube T, and normally holds the funnel and rod elevated.

I is an eye above the funnel and connected therewith, and *i* is a tube carried by said eye, and through this tube passes a rod U, having a plate *p* attached to its inner end and adapted to partially close the larger end of the funnel. Surrounding the shank of the rod U, in rear of the tube *i* and between the eye I and an enlargement or nut *u* at the end of the rod U, is a coiled spring *s*, which, it will be understood, draws the plate *p* normally into position. A ring or handle *r* is attached to this plate, whereby it may be drawn outwardly and turned to one side, after which a match may be passed into the funnel and its sulphur end will protrude from the rear end thereof and rest on the flat spring *f*. The plate *p* is then drawn outwardly, turned so as to cover the rear end of the match, and released; and it will be obvious that when the ring *r* at the bottom of the lamp is operated the funnel and match can be raised and lowered or turned to one side or the other. The rod R stands at one side of the wick W, and at about

quarter-way around the lamp-body stands a support V, having preferably an enlarged and laterally-curved head *v*, whose front face is covered with sand-paper or emery-paper.

5 The head of the match stands normally against this paper, near the upper edge of the head *v*, and the force of the spring *s* presses said match-head against it, so that when the rod R is moved either vertically or axially the
10 match-head will be drawn across the sand-paper. The match being thus lighted, the operator turns the rod R so as to throw the lighted end of the match over the wick W, and this operation lights the lamp. The wick
15 can of course be adjusted by the milled wheel M, as is desirable and necessary.

A careless operator may sometimes leave the smaller end of the funnel over the flame, or the rod R may turn with the tube T so as
20 to bring the parts into this position, and the result will be that the funnel and the spring *f* will become blackened and burned, if not melted. To avoid this undesirable accident, I provide a leaf-spring L, whose shank *l* is
25 enlarged and is pivoted to the support V, as shown in Fig. 5. A link N is pivoted to a tongue F' on the funnel, and at its outer end carries an eye, which loosely engages the free end of the spring L, the latter being provided
30 with a stop P' to prevent its slipping out of the eye. When the rod R is turned so as to carry the funnel over the wick, this link draws the spring L inwardly and also turns it about its pivotal connection with the support V;
35 but when the rod R is released the spring will return the funnel to its normal position. It will be understood, however, that I do not limit myself to this particular form of spring L.

40 What I claim is—

1. The combination, with the lamp-body and the burner having a notch in its edge, of ears on said body, a catch pivoted between them, and a bent-up tip to the catch engaging
45 said notch, substantially as described.

2. The combination, with the lamp-body and the burner having a notch in its edge, of ears on said body, a pin between them, a catch having an eye at one end pivoted on said pin,
50 and a bent-up tip at the other end engaging said notch, and a spring surrounding said pin and pressing the tip normally into engagement with the notch, substantially as described.

3. The combination, with the lamp-body, the burner, means, substantially as described, for preventing the unscrewing thereof, the wick-raising device, and a gear-wheel connected thereto, of a tube through said body,
60 a shaft seated therein, an operating-wheel at its lower end, and a flat wheel at its upper end having radial grooves in its upper face engaging said gear, as set forth.

4. The combination, with the lamp-body and burner and the fixed support having an enlarged roughened head, of the fixed tube
65 through said body, the operating-shaft longi-

tudinally and axially in said tube, match-holding devices, substantially as described, carried by the shaft at its upper end, a spring
70 between said devices and said tube, and a leaf-spring connected to said support for holding said devices normally away from the burner, as set forth.

5. The combination, with the lamp-body
75 and burner and the fixed support having an enlarged roughened head, of the fixed tube through said body, the operating-shaft passing through said tube, a funnel carried by the upper end of said shaft, an eye and tube
80 above said funnel and supported thereby, a spring-actuated rod having a plate standing over the larger end of said funnel, and a coiled expansive spring between the upper end of said fixed tube and the funnel, as set
85 forth.

6. The combination, with the funnel, the eye carried thereby above the center of its length and the tube connecting said eye with the larger end of the funnel, of a rod pass-
90 ing through said tube and having a stop on its rear end, a spring between said stop and the eye, and a plate secured to the front end of the rod and adapted to partially cover the larger end of the funnel, all as and for the
95 purpose set forth.

7. The combination, with the lamp-body and burner and the fixed support having an enlarged roughened head, and with the fixed tube through said body, the tubular shaft
100 within said tube, and the wick-operating devices, substantially as described, controlled by said tubular shaft from the lower end of the body, of the operating-shaft passing through said tubular shaft, match-holding
105 devices, substantially as described, at the upper end of said operating-shaft, and an expansion-spring between said devices and the upper end of said tubular shaft, the whole operating as set forth.
110

8. The combination, with the lamp-body and burner and the fixed support having an enlarged roughened head, of the fixed tube through said body, the operating-shaft pass-
115 ing through said tube, a funnel carried by the upper end of said shaft, and means, substantially as described, for retaining a match within said funnel, the whole operating as set forth.

9. The combination, with the lamp-body
120 and burner and the fixed support having an enlarged roughened head, of the fixed tube through said body, the operating-shaft passing through said tube, a funnel carried by the upper end of said shaft, means, substan-
125 tially as described, for retaining a match within said funnel, a link pivoted to said funnel and carrying an eye at its outer end, a leaf-spring having an enlarged shank pivoted to said fixed support, the free end of said spring
130 engaging said eye, and a stop in said free end beyond the eye, the whole operating as set forth.

10. The combination, with the lamp-body

and burner and the fixed support having an enlarged laterally-curved head with a roughened front face, of the fixed tube through said body, the operating-shaft passing through
5 said tube and having a ring in its lower end, a funnel carried by the upper end of the shaft, means, substantially as described, for retaining a match within the funnel, a spring around said shaft for holding said funnel normally raised, and a leaf-spring connected to
10 said fixed support and linked at its free end

to said funnel for holding it away from said burner, the whole operating as hereinbefore set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
presence of two witnesses.

ANSON C. STOUT.

Witnesses:

A. E. CHAPIN,
ELIAS COHEN.