

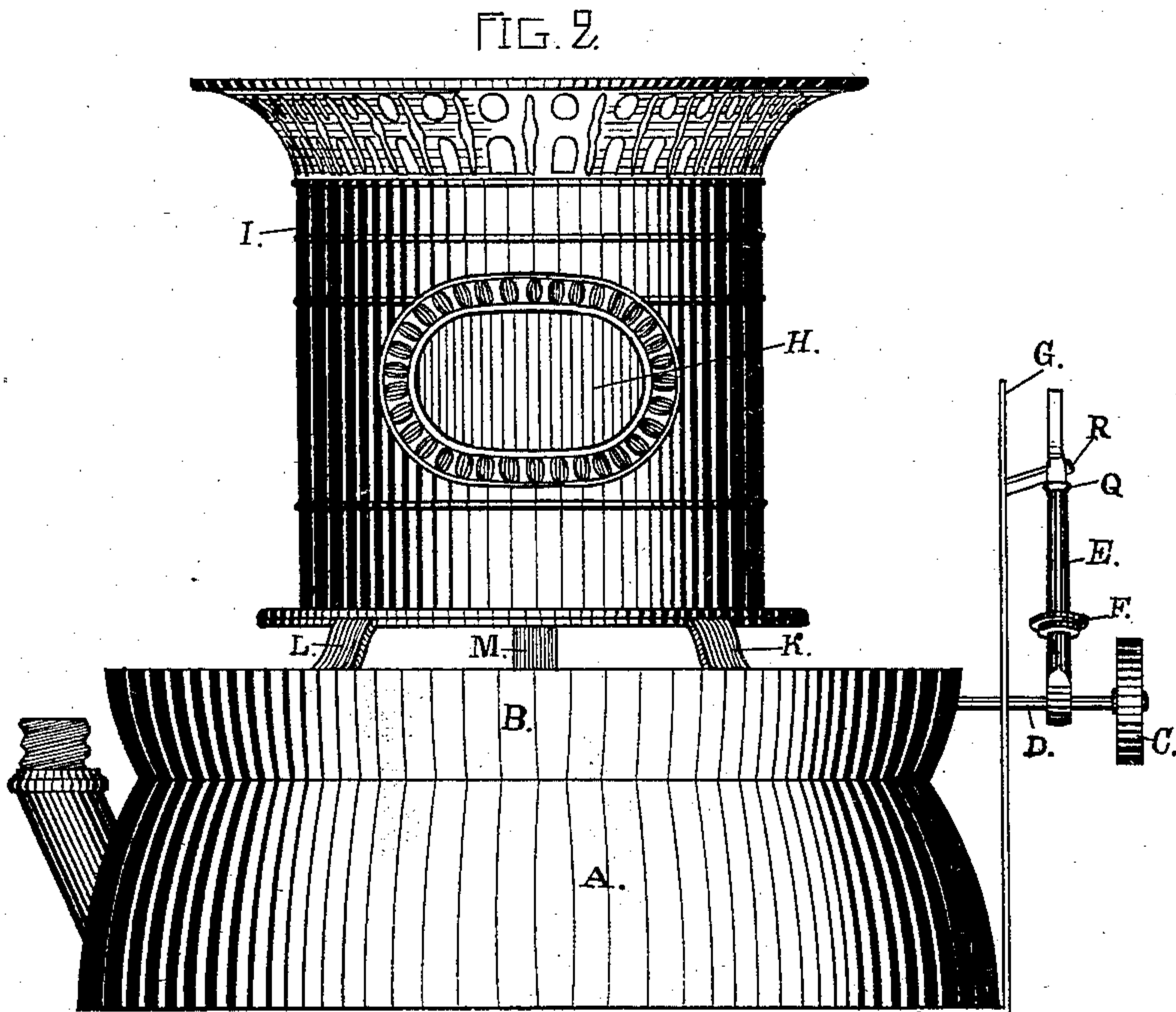
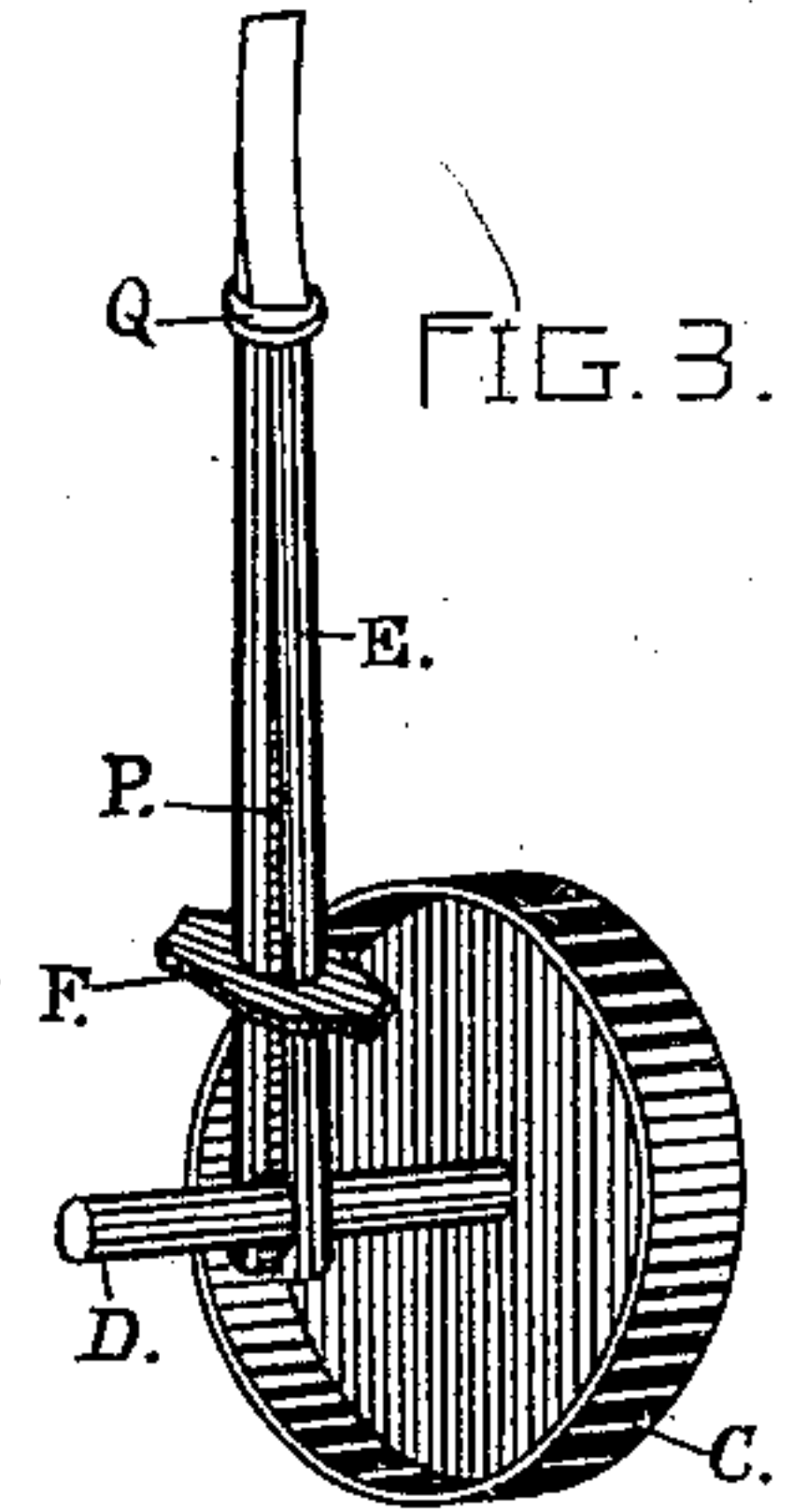
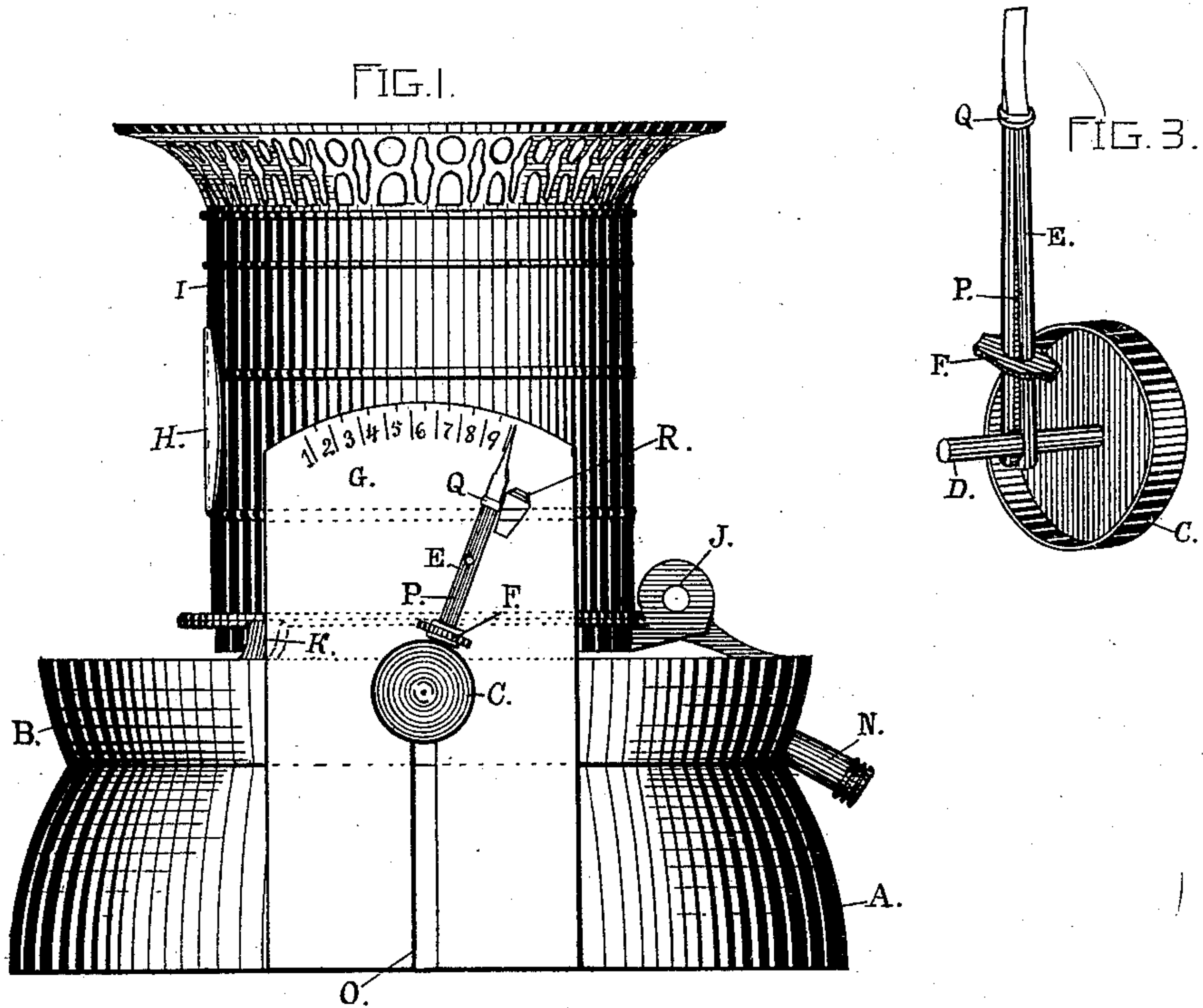
(No Model.)

G. HARDCASTLE.

WICK ADJUSTER AND REGULATOR.

No. 372,020.

Patented Oct. 25, 1887.



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UNITED STATES PATENT OFFICE.

GEORGE HARDCASTLE, OF SAN FRANCISCO, CALIFORNIA.

WICK ADJUSTER AND REGULATOR.

SPECIFICATION forming part of Letters Patent No. 372,020, dated October 25, 1887.

Application filed January 7, 1887. Serial No. 223,631. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HARDCASTLE, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented a new and useful Wick Adjuster and Regulator for Coal-Oil Burners for Lamps, Stoves, &c., of which the following is a specification.

My invention relates to improvements in adjusters and regulators for burners for lamps, stoves, &c., for adjusting and regulating the flame and preventing smoke. It will be understood by reference to the accompanying drawings and the letters and figures marked thereon.

Figure 1 is a front elevation; Fig. 2, a side elevation. Fig. 3 is a perspective detached view showing the adjusting and indicating clamp-lever E, the wick-adjusting thumb-piece C, and wick-rod D.

The following is the arrangement, construction, and operation of my improvement as I employ it in connection with an ordinary coal-oil stove.

A represents the oil-basin; B, the dust-pan on the top of the oil basin or reservoir; C, the wick-adjusting thumb-piece; D, the wick-rod; E, the adjusting and indicating clamp-lever; F, the lock-band for the adjusting and indicating clamp lever; G, the indicator plate and scale; H, the sight-window; I, the stove-drum; J, the hinge for the stove-drum; K, L, and M, the legs which support the base-plate of the stove-drum and connect the same with the oil-basin.

N represents the waste-spout of the dust-pan.

O represents the slot in the indicator-plate for allowing the same to be passed down over the wick-adjusting rod.

In Figs. 1 and 3, P represents the slot for opening the adjusting and indicating clamp-lever E and springing and clamping the same upon the wick-rod.

Q represents the stop to prevent the lock-band F from slipping off at the upper end of the adjusting and indicating clamp-lever.

R represents the rest for the wick adjusting and regulating clamp-lever.

The lock-band F is raised above the upper end of the slot O, which allows it to open sufficiently to place upon the wick-rod D, and the

lock-band F is brought down upon the adjusting and indicating clamp-lever, tightening the same upon the wick-rod, holding it firmly in position upon the same. The wick is then adjusted to the required height for a clear smokeless flame of the maximum size, and the adjusting and indicating clamp-lever is then brought down against the stop-rest R, when it is set fast upon the wick-adjusting rod D. The whole is then properly adjusted and ready to operate without changing the adjusting and indicating clamp-lever upon the wick-adjusting rod D until the wick is again trimmed, when the adjusting and indicating lever E is again adjusted and set fast as before.

The indicator plate and scale G is employed to regulate the amount of heat in cases where heat is necessary to be regulated carefully to a certain degree, as it should be in dental processes. Then the adjusting and indicating clamp-lever may be moved very slightly upon the scale—so little as not to be noticeable when done by the ordinary thumb-wheel C.

In the lamps employed in cars and in other places where they are liable to constant jarring the wick is often shaken down and the light reduced or entirely put out. This is wholly avoided by my improvement, as the adjusting and indicating clamp-lever E stops the wick at the highest point where a smokeless flame can be had, when it is stopped by the stop rest R, thus saving the time usually required to adjust by the eye, and in turning the lamp out the scale will show the exact point where the top of the wick will be below the top of the wick-tube, thus preventing the overflow of oil, which causes the disagreeable smell generally noticeable in coal-oil lamps where the wick is partially turned down and blown out. Another advantage is seen in having a mark on the scale to show the lowest point at which the wick may be lowered without danger of extinguishing the flame. This may be done by having a sleeve-clamp on the indicating clamp-lever, which may be moved out to come in contact with the extinguishing stop-rest, thus leaving the wick projecting above the wick-tube sufficiently to insure its burning.

The advantages of my improvement are as follows: The wick, never being raised too high,

does not char at the top and will last many times longer than one used in the ordinary way. The points of adjustment being known, the burners are instantly adjusted and lighted
5 without stopping to see the effect, thus allowing several burners to be lighted in the usual time required for lighting a single burner. The liability to accidents such as arise from the improper adjustment and handling of the
10 wick and burner are wholly avoided, as they always occur by reason of improper adjustment and regulation of the burners.

I do not confine myself to any exact form of construction, as the form of the indicating-
15 plate or of the indicating clamp-lever or the exact mode of setting the same fast upon the wick-rod may be varied without changing the principle of construction; but,

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

1. In adjusters and regulators for burners for lamps, stoves, &c., the adjusting and indicating clamp-lever E, having the slot P, and the lock-band stop Q and the lock-band F, in
25 combination with the wick-rod D, and the indicator-plate G, scale S, and stop R, for the purpose of adjusting the wick or other burner, constructed and operated substantially as and for the purposes set forth.

2. The adjusting and indicating clamp-lever
30 E, in combination with the wick-rod D and stop R, the plate G and its scale, all constructed and operated substantially as and for the purposes set forth.

GEORGE HARDCASTLE.

Witnesses:

O. D. BALDWIN,

E. H. THARP.