(No Model.)

M. A. MORRIS.

WICK ADJUSTER.

No. 313,678. Patented Mar. 10, 1885.

Fig. 1

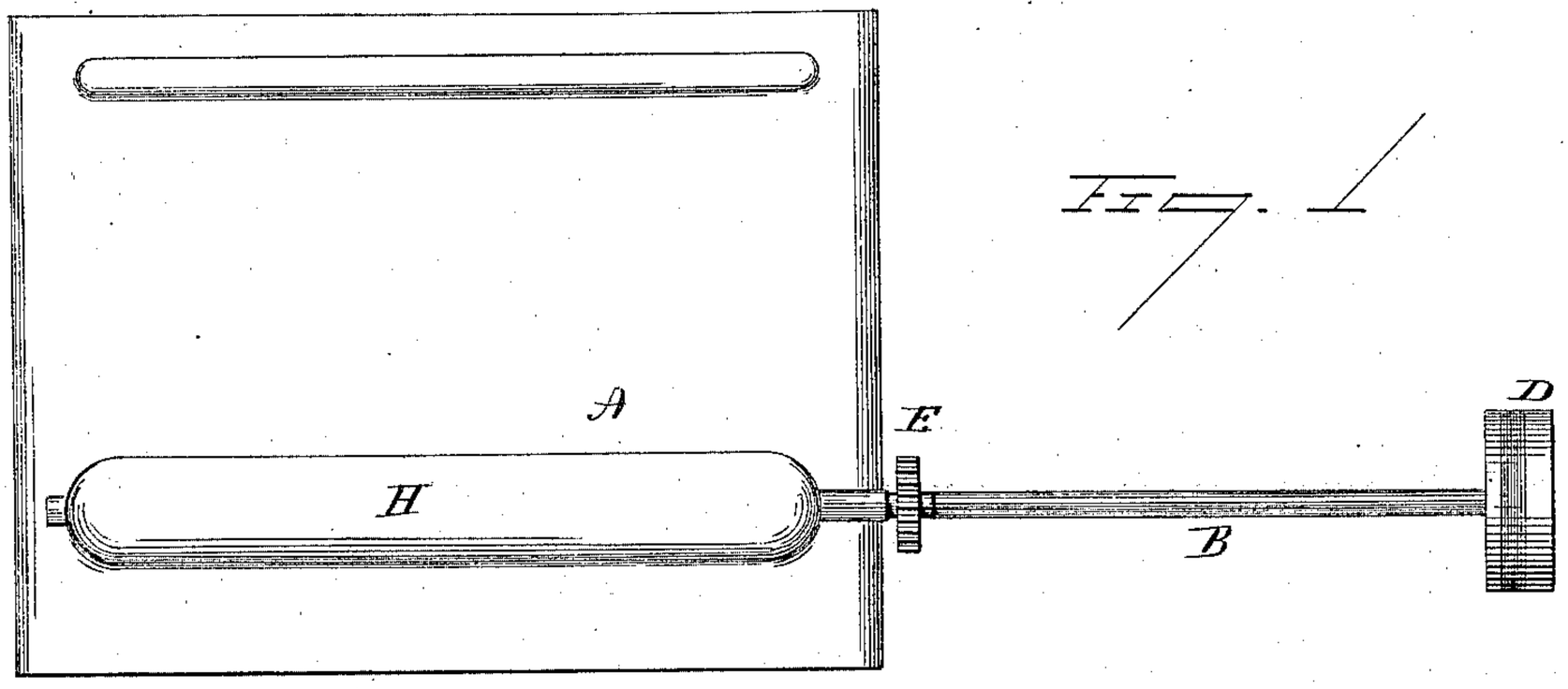


Fig. 2

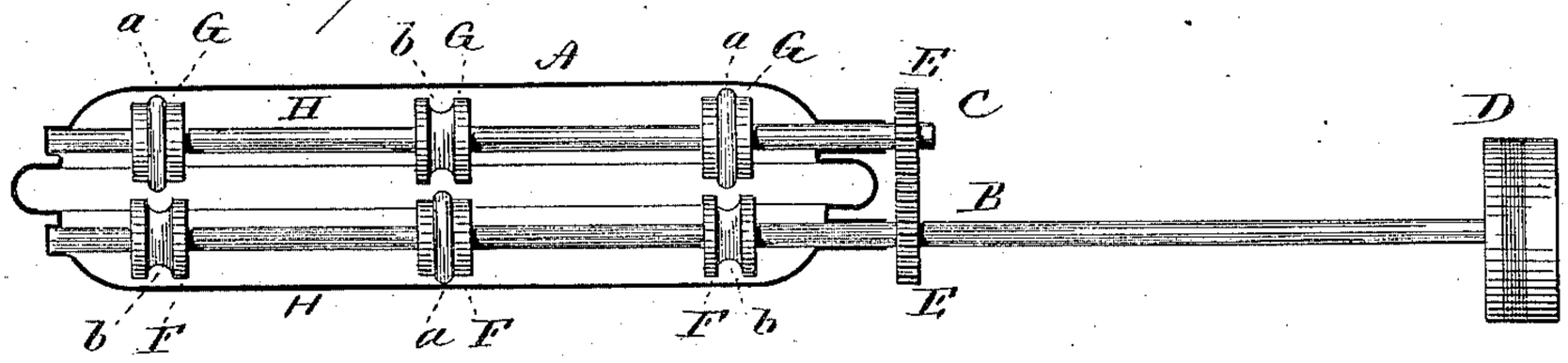


Fig. 3

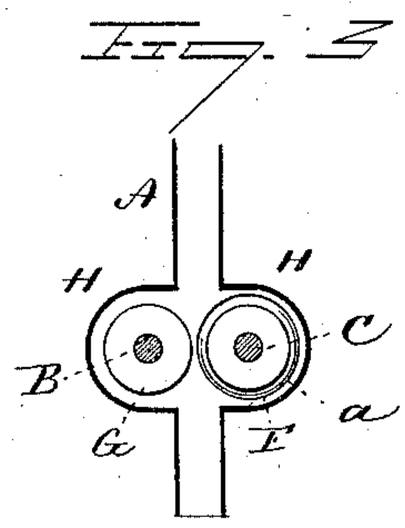
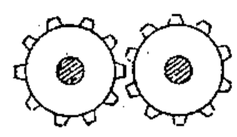


Fig. 4



Witnesses,
J. P. Shumway.
Jos. C. Earle

Marion A. Morris
Inventor
By Atty
Wm. O. Earle.

UNITED STATES PATENT OFFICE.

MARION A. MORRIS, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF SAME PLACE.

WICK-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 313,678, dated March 10, 1885.

Application filed October 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARION A. MORRIS, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Wick-Adjusters; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a wick-tube with adjuster; Fig. 2, a horizontal section of the wick-tube, showing a horizontal view of the wick-adjusting device; Fig. 3, a vertical central section; Fig. 4, a modification of the adjusting-cylinders.

This invention relates to a wick-adjuster such as employed to adjust the wick in oil-stoves. The wick in this class of burners is necessarily broad.

Wick-adjusters of various kinds have been employed. That more generally in use consists of several sharp-toothed wheels, similar to the wheels used in lamp-burners; but with such wheels it is difficult to conveniently adjust the wicks, for if there be a greater resistance to the movement of the wick at one point than another the wick yields to the teeth of the wheels, and under such resistance holds back from proper movement. In other cases a pair of cylinders have been arranged one each side the wick, the cylinders geared together, so that by the rotation of the cylinders the wick will be adjusted; but a serious difficulty attends the use of these cylinders, as to work properly they necessarily bind so hard upon the wick as to force the oil from the wick in raising and interfere materially with the proper draft of oil to the flame. In other cases the cylinder has been used on one side of the wick with ratchets on the other; but in such an arrangement the teeth of the ratchets catch the threads of the wick and interfere with the proper adjustment.

The object of my invention is the construction of a wick-adjuster which will overcome such difficulties; and it consists in a pair of transverse shafts—one each side of and parallel with the plane of the wick—the two geared together, and each carrying a short cylinder arranged to impinge upon the wick at directly-opposite points, the one cylinder constructed with an annular rib on its periphery, its companion cylinder on the other shaft with a corresponding annular groove, and as more fully hereinafter described.

A represents the wick-tube, of usual form and construction; B, the principal wick-adjusting shaft; C, the second or auxiliary shaft. The two are arranged transversely through the wick-tube—one at each side—and parallel with the plane of the wick. One of the shafts, B, is fitted with a head, D, by which it may be conveniently rotated, and the two are geared together by toothed wheels E E.

On the shaft B two or more cylinders, F F, are fixed, presenting a short cylindrical surface, and upon the other shaft, C, are corresponding cylinders, G, forming pairs with the cylinders on the other shaft, and so that the wick passes up between the said cylinders, the cylinder on one side bearing upon that side of the wick against the cylinder upon the opposite side as a resistance. One cylinder of each pair is constructed with an annular rib on its periphery, and the other cylinder of the pair with a corresponding groove, *b*, which enables the cylinders to make a firm grip upon the wick. When the shafts are rotated, the cylinders work simultaneously, and, bearing upon opposite sides against each other, conveniently and perfectly adjust the wick, and without interference of the flow of oil.

The bearing-surface is sufficient to firmly grasp the wick, and the bearing may be so great as to force the oil entirely from the wick at the point where the cylinders bear; but this will be recovered as the wick passes above the cylinder by absorption from the adjacent portions of the wick.

To inclose the adjusting devices in the wick-tube, a chamber, H, is formed in each side of the wick-tube, in which the adjusters will work.

I am aware that wick-adjusters have been constructed consisting of a pair of shafts—one each side the wick—and each shaft provided

with a corresponding smooth-faced wheel or cylinder, and make no claim to such an adjuster.

I claim—

The combination of the wick-tube, the two shafts B C, arranged transversely across said wick-tube, one upon each side the wick and parallel therewith, the two shafts geared together, one provided with the head D, combined with two or more pairs of cylinders, F G, fixed to said shafts, one cylinder of each pair constructed with an annular rib, and the other with a corresponding annular groove, *b*, substantially as described.

MARION A. MORRIS.

Witnesses:
M. L. SPERRY,
T. R. HYDE, Jr.