

(No Model.)

J. T. HILL.
LAMP.

No. 270,312.

Patented Jan. 9, 1883.

Fig. 1.

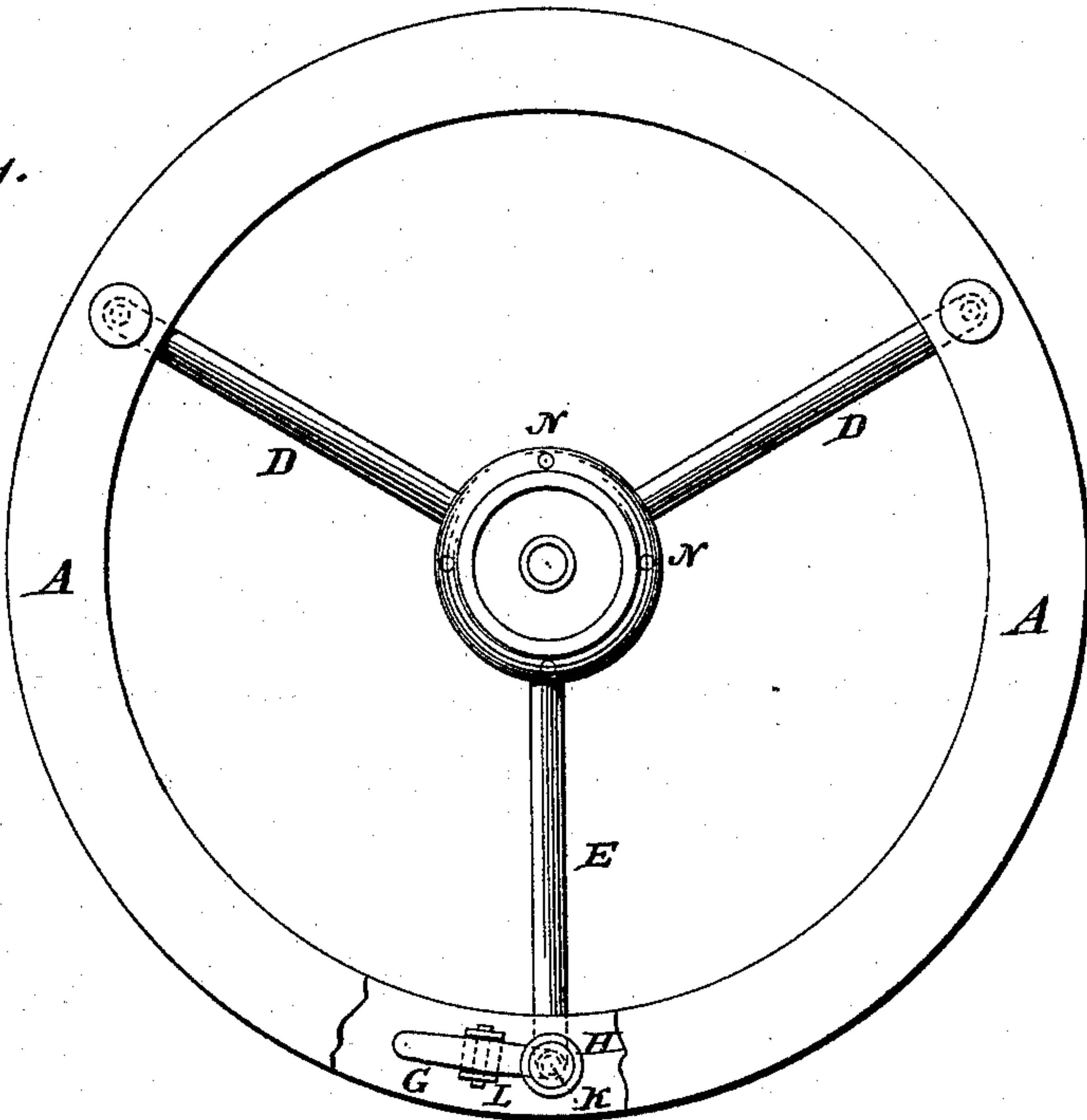


Fig. 2.

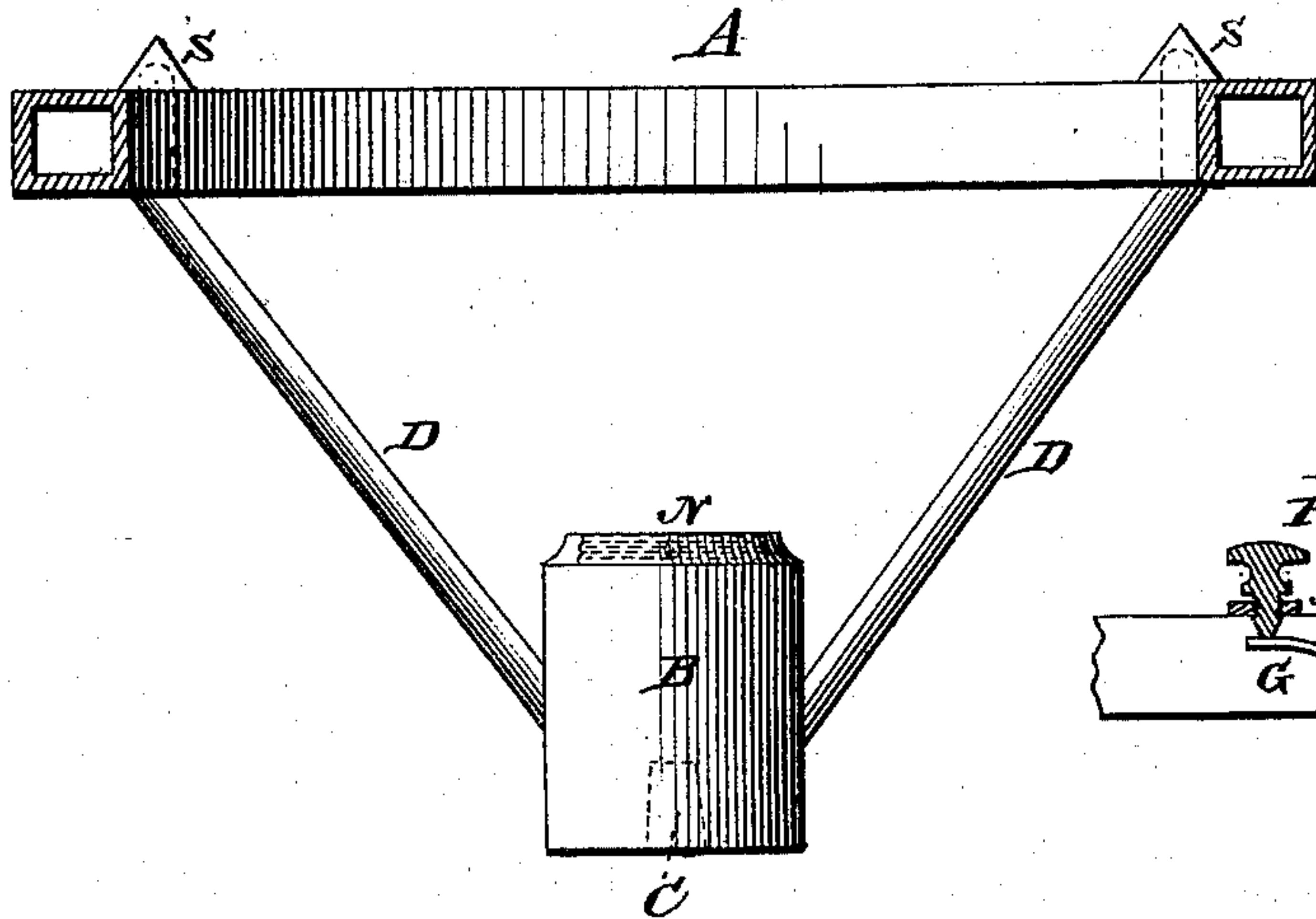
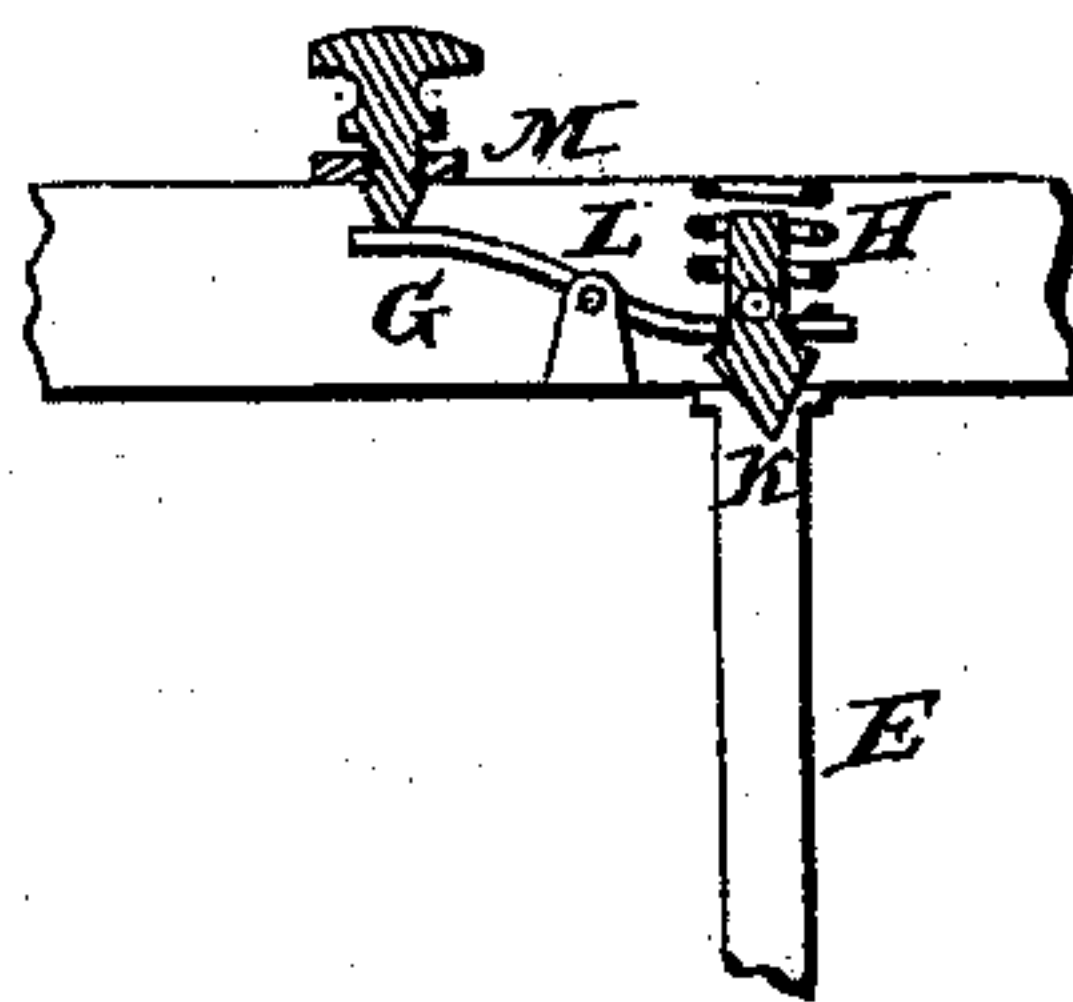


Fig. 3.



Witnesses:

A. M. Long.
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Inventor.

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UNITED STATES PATENT OFFICE.

JOHN T. HILL, OF MEADVILLE, PENNSYLVANIA.

LAMP.

SPECIFICATION forming part of Letters Patent No. 270,312, dated January 9, 1883.

Application filed June 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. HILL, a citizen of the United States, residing at the city of Meadville, in the county of Crawford and State of Pennsylvania, have invented a new and Improved Lamp for Burning Petroleum and other Oils, of which the following is a specification.

My invention relates to improvements in that class of lamps known as "fountain-lamps," in which the wick is fed from a reservoir in the lamp, placed higher than the wick, and to be so constructed that the oil will be automatically supplied to the wick as fast as it is consumed, and in such a manner as to avoid all danger from explosion or overflow. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure I represents a top view of my lamp; Fig. II, a sectional side view; and Fig. III, a sectional view of a portion of the same, showing the manner in which the lamp is filled with oil.

A A, Fig. I, is a circular reservoir to contain the oil; B, the wick-cup, attached to the reservoir A A by three tubes, D, D, and E, in such a manner that the wick-cup will be below the level of the reservoir. The two tubes D D pass up to the upper portion of the reservoir into two conical-shaped cups, S S, and down into the wick-cup B. (See Fig. II.) The tube E passes from the bottom of the reservoir into the wick-cup B at the top of the tube E, and inside the reservoir A A is a valve, K, (seen in drawings, Fig. III,) which closes the tube E while the reservoir A A is being filled with oil through the cup M. This valve is hinged on the bottom of the reservoir, as shown at L, the valve-stem G passing under the screw-plug F of the cup M.

H is a spiral spring, that closes the valve when the plug F is removed for the purpose of filling, and thereby prevents the oil from running down and flooding the oil-cup B. When the reservoir is filled and the screw-plug turned down, it presses on the valve-stem G and opens the supply-tube E, and permits the oil to flow into the wick-cup B. The res-

ervoir being air-tight, the flow of the oil through the tube E would soon make a vacuum in the upper part of the reservoir A A and prevent the further flow of oil; but as the oil is consumed in the wick-cup B until it falls below the end of the tubes D D the air is admitted through air-holes at N in the wick-holder, and through the air-tubes D D into the reservoir at S S, and then the oil from the reservoir flows down the tube E, and, filling the wick-cup B, prevents any more air entering the tubes D D and reservoir A A until the oil is consumed down below the air-tubes D D, when the supply continues, as described. It will be seen that this action is automatic, and the supply of oil is just equal to the demand made by the consumption in the wick-cup B.

The bottom of the wick-cup has a socket, G, in its center, and by which the lamps may be placed over a common gas-burner or on a standard or bracket.

I am aware that oil-reservoirs having an opening for supplying oil and an exit-tube provided with a valve which is raised or lowered when the cover of the oil-supplying opening is closed or opened are old, and to that I make no claim; but

What I do claim is—

In a lamp, the combination, with a reservoir having cups S, air-tubes D D, oil-supplying opening M, outlet-pipe E, lever G, fulcrumed upon standards L, and having valve K fixed on one end, a coiled spring, H, having its upper coil in contact with the top of the reservoir and the lower coil encircling the neck of the valve and resting upon lever G, and a plug, F, which, when inserted in opening M, counteracts the effect of spring H, of a wick-chamber suspended from the reservoir by air-tubes D D and outlet-pipe E, and having a series of perforations, N, between the collar and the wall, to supply air to the reservoir through pipes D D, substantially as described.

JOHN T. HILL.

Witnesses:

A. B. RICHMOND,
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