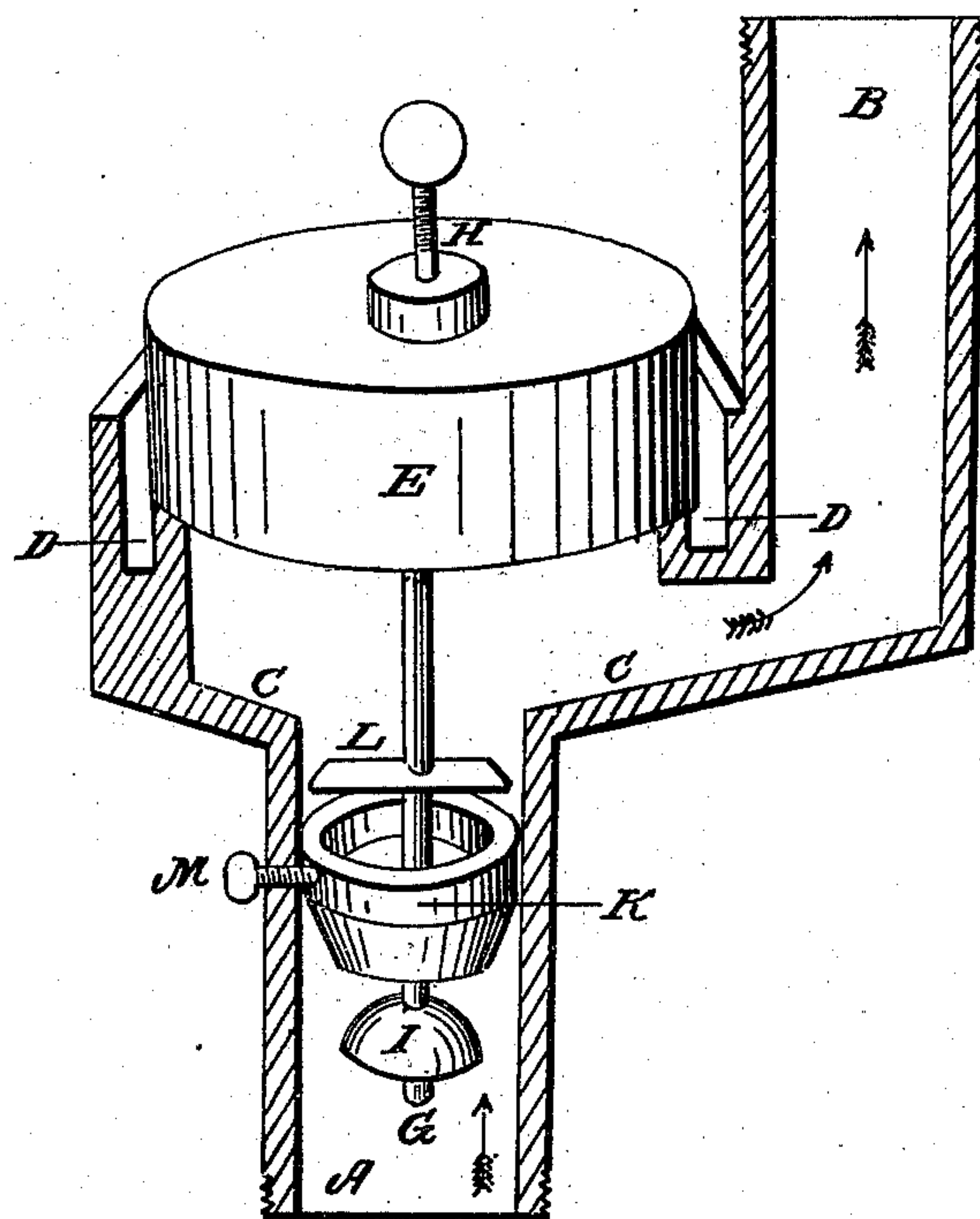


W. G. STERLING.

Gas Regulator.

No. 21,281.

Patented Aug. 24, 1858.



Witnesses:

E. C. Sterling
A. E. Sterling

Inventor:

W. G. Sterling

UNITED STATES PATENT OFFICE.

W. G. STERLING, OF BRIDGEPORT, CONNECTICUT.

GAS-REGULATOR.

Specification of Letters Patent No. 21,281, dated August 24, 1858.

To all whom it may concern:

Be it known that I, W. G. STERLING, of Bridgeport, State of Connecticut, have made a new and original Improvement in Gas-Regulators. The following is a full and exact description of the same.

The accumulation of tar in gas regulators destroys their uniform action, and often renders them useless.

10 The object of my invention is to obviate this difficulty by so forming a regulator that it can be easily cleaned without removing it from the meter and gas pipes.

15 A is the pipe which is attached by a coupling to the meter, in which the valve hereafter described works.

B is the pipe which is secured to the induction pipe. The arrows show the current of the gas.

20 C C is a section of the outer case of the regulator, the front having been removed to show the internal construction of the same.

25 D D is a circular channel in which the lower edge of the gasometer E rests which is floated in quicksilver in the channel.

G H is a rod attached by a screw at H to the center of the gasometer E to regulate the same, and support the valve I.

30 K is a movable valve seat formed in the shape of a ring fitting the pipe closely, the lower part being formed like an inverted hollow cone makes a circular edge for the valve seat, leaving little surface for the accumulation of tar. The rod G H passes 35 through this valve seat working the valve on the under side of it. This valve seat is adjusted to its place by pressing the gasometer E down the cross bar L on the rod G H forces the valve seat K to its place, or 40 the cross bar may be attached to the valve

seat and the rod play through it so as to press it to its place. The set screw M holds it in its position. When the gasometer is brought to its proper place, the cross bar L being above the valve seat will not interfere 45 with the action of the valve.

When it becomes necessary to clean the regulator, the gasometer, with the valve seat, connecting rod, and valve can all be withdrawn from their places and taken out without being separated, by loosing the set screw and lifting out the gasometer. It can then be washed and cleaned without derangement and replaced by pressing down the gasometer in its bed till the valve seat is 55 brought to its place, and then tighten the set screw and the regulator will be in order again.

I do not claim the gasometer attached to a valve as this is an old device. 60

I claim—

1. The above described adjustable conical shaped valve seat, with its cross bar, or its equivalent and valve attached.

2. I claim the set screw in combination 65 with the valve seat, or any other construction substantially the same.

3. I claim the combination of the movable valve seat, valve and cross bar attached, in any form or manner, to a gasometer, disk, 70 diaphragm, or other device, by which said regulator can be cleaned without the least derangement to the machine, as above described, or in any other form or way equivalent thereto.

W. G. STERLING.

Witnesses:

LEONARD STERLING,
M. A. HUSSEY.