## E. DETWILER & G. FAJEN.

GAS-METER.

No. 183,752.

Patented Oct. 31, 1876.

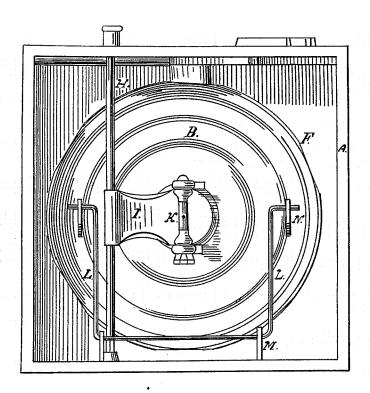


Fig.1.

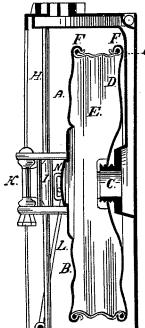


Fig. 2.

WITNESSES!

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## UNITED STATES PATENT OFFICE.

EMANUEL DETWILER AND GUSTAV FAJEN, OF MILWAUKEE, WISCONSIN.

## IMPROVEMENT IN GAS-METERS.

Specification forming part of Letters Patent No. 183,752, dated October 31, 1876; application filed March 11, 1876.

To all whom it may concern:

Be it known that we, EMANUEL DETWILER and GUSTAV FAJEN, of Milwaukee, in the county of Milwaukee in the State of Wisconsin, have invented certain Improvements in GasMeters, of which the following is a specification:

Our invention has for its object the measuring of gas, and is a meter constructed with a double-bottom diaphragm fastened to the meter, with a screen in the center of one of the bottoms of the diaphragm, and a bolt in the gearing, with a hole and wire through same, to hold it in place, or a nut on same, so that the diaphragm may be removed for repairs or cleaning, thus avoiding the soldering which is necessary in other meters; also, connecting the leather which forms the bellows with the tin bottom with a wire, which lies on the edges of the leather, and the tin turned over it, which forms a tight joint and leaves the tin bottom to be pressed together close, which cannot be done with the diaphragms as now made, and thus our diaphragms have more action, and there is no flickering of the gas.

Figure 1 is a plan view of our invention;

and Fig. 2 a sectional view of one half of a meter.

A is the outside case; B, the outer head of the diaphragm; C, a hollow hub, with a screw, on which a female screw on head D screws; D, the under head of the diaphragm; E, the diaphragm, made of leather; F, the edge of the tin head of the diaphragm, turned over the rim and leather; G, passage-way for gas to the diaphragm and out again; H, a roller-shaft, on which an arm, I, with a pin, K, passing through it, and ears on the head of the diaphragm; L, rim-guide, passing through ears M and the ends of same under ears N.

We claim as new and as our invention— A gas-meter constructed with diaphragm E and heads B and D, hollow hub C, on which head D screws, making a meter which can be taken apart for repairs without unsoldering the diaphragm from the case, substantially as described.

EMANUEL DETWILER. GUSTAV FAJEN.

Witnesses:

J. B. SMITH, E. J. SMITH.