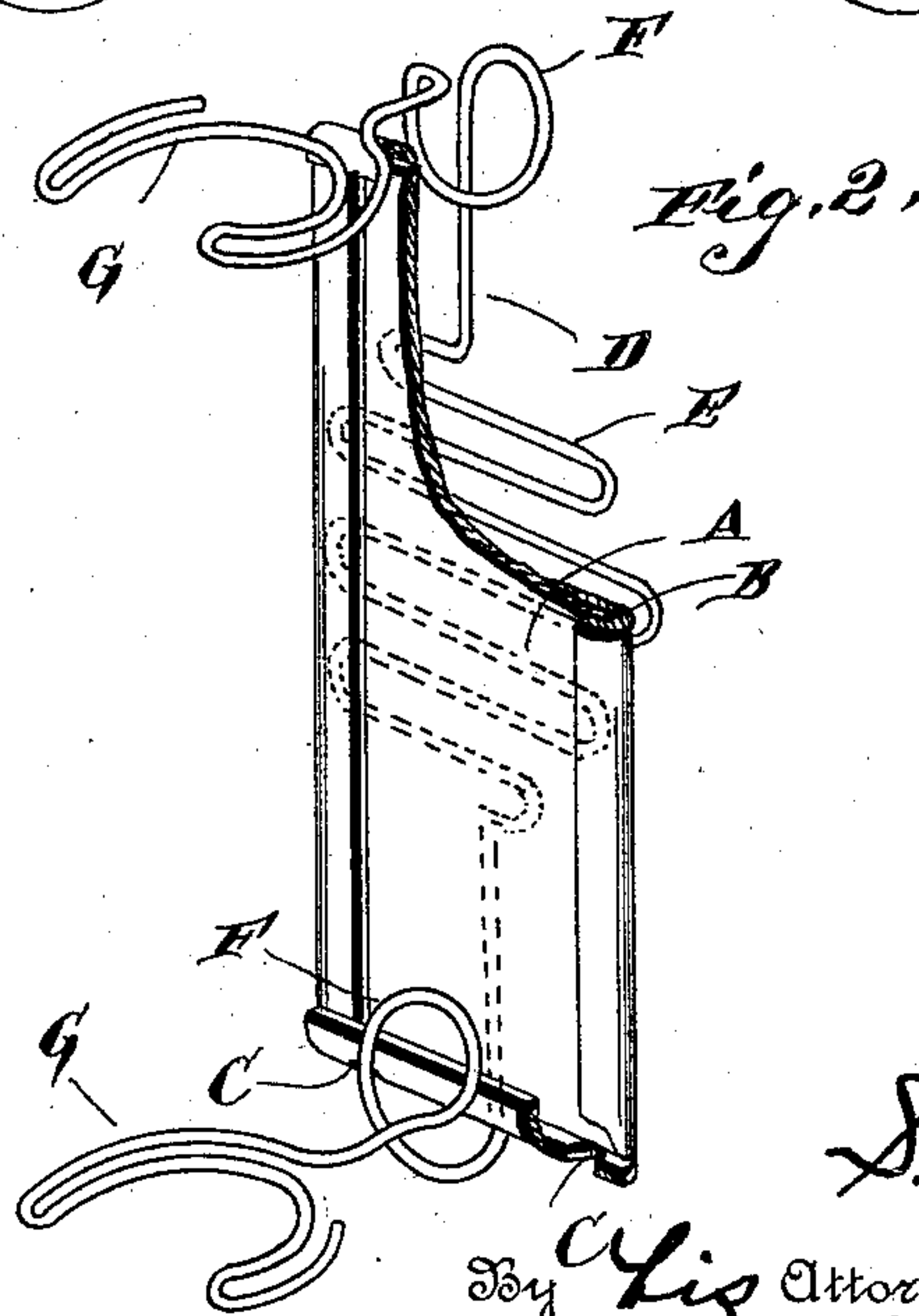
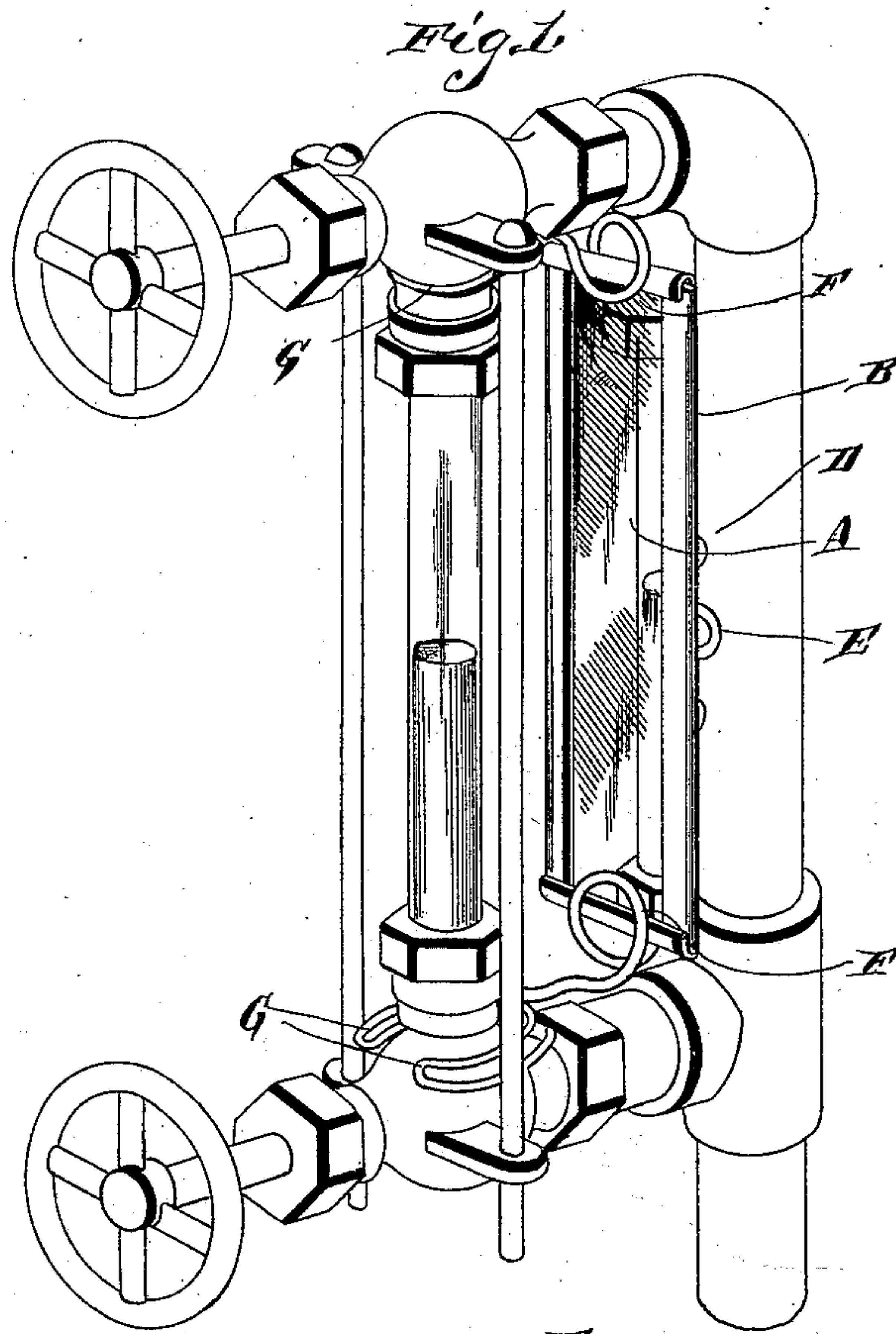


(No Model.)

S. P. GILBERT.
REFLECTOR FOR WATER GAGES.

No. 389,802.

Patented Sept. 18, 1888.



Witnesses
W. Taylor,
E. J. Figgis

Inventor
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UNITED STATES PATENT OFFICE.

SOLOMON PORTER GILBERT, OF ST. CLAIR, MICHIGAN.

REFLECTOR FOR WATER-GAGES.

SPECIFICATION forming part of Letters Patent No. 389,802, dated September 18, 1888.

Application filed June 5, 1888. Serial No. 276,063. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON PORTER GILBERT, a citizen of the United States, residing at St. Clair, in the county of St. Clair and State of Michigan, have invented a new and useful Improvement in Reflectors for Water-Gages, of which the following is a specification.

My invention relates to an improvement in reflectors for water-gages for steam-boilers, whereby rays of light may be concentrated on the water-gage to render the column of water therein more clearly visible; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a reflector embodying my improvements, showing the same arranged on a water-gage. Fig. 2 is a detail perspective view of the reflector, showing the same detached from a water-gage, a portion of the case of the reflector being removed to illustrate the construction thereof.

A represents a looking-glass of suitable size, the back of which is formed by metallic plate B, which has its side and upper and lower edges bent around the edges of the mirror, as shown. In the lower corners and in the lower edge of the case, at suitable distances between the lower corners thereof, are made openings C. This arrangement and construction of the case enables water, which may be deposited on the reflector as the result of condensation, to pass from the lower side of the case, and prevents the same from lodging between the back of the glass and the case and injuring the coating of mercury on the glass.

D represents the holder, the construction of which is as follows: A piece of wire of suitable length and diameter is bent back and forth at its center to form loops E, whereby the holder may be contracted or expanded in a longitudinal direction. Circular open hooks F are then formed in the wire at suitable distances from the loops E, and are adapted to engage the upper and lower edges of the case of the reflector, the back of the same bearing against the loops E. The ends of the wire are

then bent out at right angles, so as to form semicircular open clamps G, which are adapted to engage the couplings at the upper and lower ends of the gage-tube, and thereby secure the reflector to the gage in a vertical position, as shown in Fig. 1, and adapt the reflector to be swung around the gage-tube and concentric therewith to any desired position, so as to concentrate the rays of light on the gage-tube and enable the height of the column of water therein to be more readily distinguished.

Having thus described my invention, I claim—

1. The reflector comprising the mirror, having its back formed of sheet metal, the edges of the metal back being bent around the edges of the reflector, and said metal back being provided with the opening C in its lower side, substantially as described.

2. The combination of the water-gage, and the holder having the hooks F and the clamps G, the latter being pivotally attached to the gage, so that the holder may be swung around the same and the reflector engaged by the hooks F, and thereby secured to the holder, substantially as described.

3. The combination of the water-gage, and the holder having the hooks F and the clamps G, the latter being pivotally attached to the gage, so that the holder may be swung around the same, substantially as described.

4. The holder having the loops E, and provided with the hooks F, for the purpose set forth, the holder being further provided with the arms having the semicircular spring-clamps G, substantially as described.

5. As a new article of manufacture, the reflector-holder for water-gages, comprising the wire having the loops E, the hooks F, to engage the sides of the reflector, and the arms provided with the spring-clamps G, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

SOLOMON PORTER GILBERT.

Witnesses:

T. D. BARRON,
J. R. HAYNER.