(No Model.)

F. V. MATTON.

OVERFLOW DEVICE FOR TELESCOPING GAS HOLDERS.

No. 511,444. Patented Dec. 26, 1893.

FIG. 1.

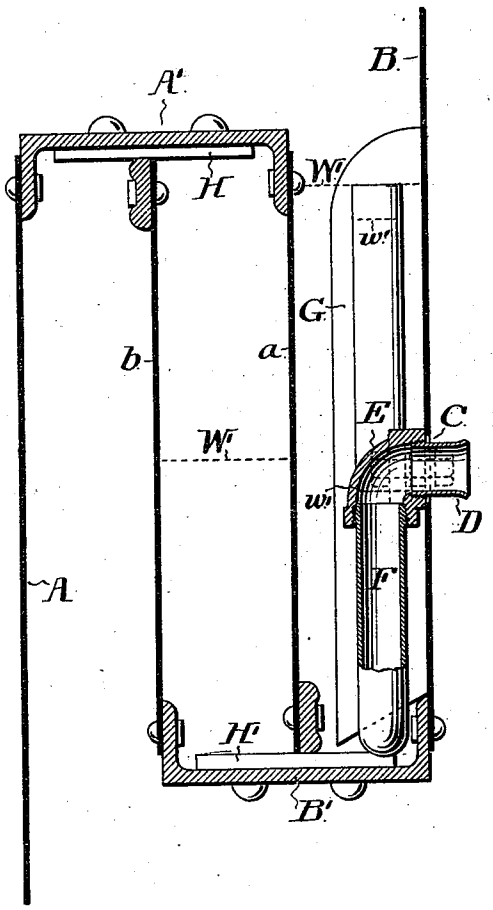
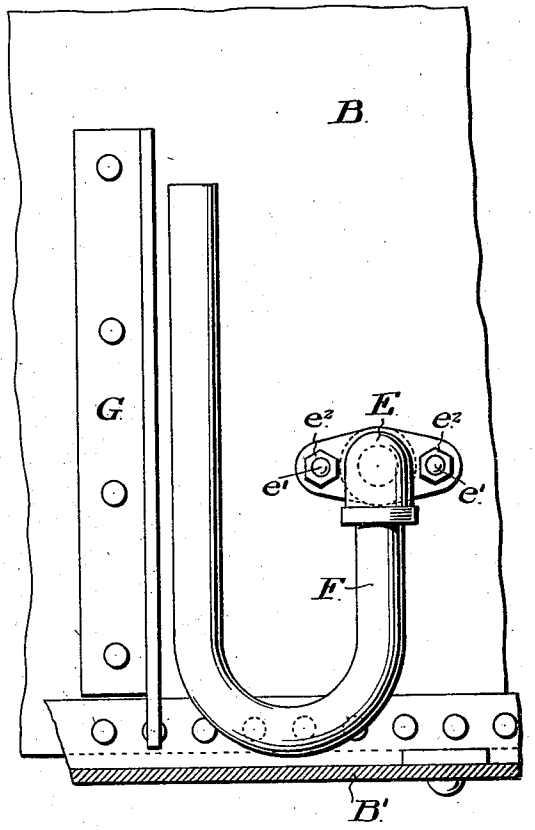


FIG. 2.



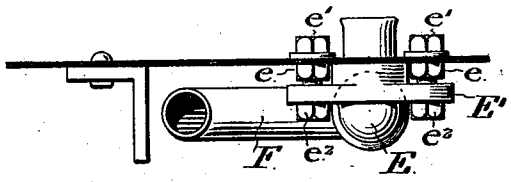


FIG. 3.

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OVERFLOW DEVICE FOR TELESCOPING GAS-HOLDERS.

SPECIFICATION forming part of Letters Patent No. 511,444, dated December 26, 1893.

Application filed May 11, 1893. Serial No. 473,862. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK V. MATTON, a subject of the King of Sweden and Norway, and now a resident of Camden, in the State of New Jersey, have invented certain new and useful Overflow Devices for Telescoping Gas-Holders, whereof the following is a specification, reference being had to the accompanying drawings.

My invention is intended for use in connection with gas holders having two or more sections, and is designed to remedy some of the objections found in apparatus of this kind as at present constructed. The joint between the sections of the telescoping gas holders is formed by means of a circumferential trough, which extends outwardly around the bottom of the inner (or upper) section, and which fits into and engages with a corresponding inverted circumferential trough, extending inwardly around the top of the outer (or lower) section. The trough upon the inner section is filled with water, and the rim of the trough upon the outer section, by dipping into this, enables the water to act as an efficient seal between the sections so as to prevent the escape of gas from within. Devices of this character are open to the objection that when the sections are in their raised position, if the water in the trough be forced to overflow from any cause, it escapes at random over the top of the outer section and trickles down upon the sides thereof without control, thus being liable to occasion injury to the holder in winter time by freezing and accumulating in such manner as to interfere with the free and proper movement of the sections. My invention remedies these difficulties by providing a definite and localized internal overflow for the surplus water, of such character as to insure a proper seal under all circumstances, and which can be readily cleansed in case it becomes clogged.

In the accompanying drawings, Figure 1 represents a partial vertical section through the adjacent ends of two of the gas holder sections, showing the sealing troughs upon each, and the overflow device combined therewith. Fig. 2 is a front view of the overflow device, the rims of the troughs being represented as removed; and Fig. 3 is a top view of said device.

The vertical walls of the gasometer sections are represented at A and B, respectively, the inverted trough upon the outer or lower section, A, being formed by an inwardly projecting circumferential channel-bar, A′, and the vertical rim, *a*, depending therefrom. The trough upon the inner or upper section, B, is formed in a similar manner by means of an outwardly projecting circumferential channel-bar, B′, provided with an upwardly projecting rim, *b*, corresponding in depth to the rim, *a*. Transverse strips, H, H′, respectively, are placed at intervals within the channels of the bars, A′, and B′, against which the edges of the troughs abut during the lifting operation. An aperture, C, is formed in the wall of the inner section, B, at a point about half way down the trough, and an inwardly extending nozzle, D, is inserted freely through this aperture. Said nozzle screws into a flanged elbow, E, which is secured upon the outside of the wall, B, by means of bolts, *e′*, *e′*, which are permanently fastened to the wall by jam nuts, *e*, *e*. The outwardly projecting ends of these bolts pass through the flange, E′, of the elbow, E, which is clamped into position against the wall of the section by means of nuts, e^2, e^2. A U-shaped pipe, F, extends down from the elbow, E, to a point near the bottom of the trough and thence upward to a point slightly below the top thereof. A guard-piece, G, is secured to the wall of the section B, adjacent to the pipe, F, and projects outwardly to an extent sufficient to cover said pipe and thus protect it from injury which might otherwise occur through its being struck by the rim, *a*.

The operation of the device is as follows: When the section, B, is in a raised position, the water (which at the commencement of its upward movement completely filled the trough) will, of course, be forced to different levels on opposite sides of the rim, *a*, and such change of level will necessitate an overflow from the trough. As the water rises outside of the rim, *a*, it will escape through the pipe, F, and be discharged at the nozzle, D, into the interior of the gas holder until a con-

dition of stable equilibrium is reached, when the respective water levels in the trough will be such as are indicated by W′, W′, and in the pipe, F, by w', w', respectively. It will thus be seen that the overflow which otherwise would have to take place over the outer surface of the channel-bar, A′, is controlled and directed within the interior of the gasometer, so that none of the difficulties above mentioned can arise. Should the pipe, F, or the nozzle, D, become clogged, it is only necessary to unscrew the nuts, e^2, e^2, and lift away the pipe and its nozzle for cleaning, the aperture, C, being of course closed by means of a plug during such temporary removal.

Having thus described my invention, I claim—

1. The combination with the inner and outer gas-holder sections having circumferential troughs arranged with relation to one another as set forth; of an overflow pipe situate in the trough of the inner section and leading to a point of discharge within the gas-holder, substantially as set forth.

2. The combination with the inner and outer gas-holder sections, having circumferential troughs arranged with relation to one another as set forth; of an overflow pipe situate in the trough of the inner section; and a discharge nozzle for said overflow pipe, leading through and detachably connected with the wall of the inner section, substantially as set forth.

3. The combination with the inner and outer gas-holder sections having circumferential troughs arranged with relation to one another as set forth; of an overflow pipe situate in the trough of the inner section and leading to a point of discharge within the gas-holder, and a guard plate adjacent to said pipe, substantially as set forth.

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