

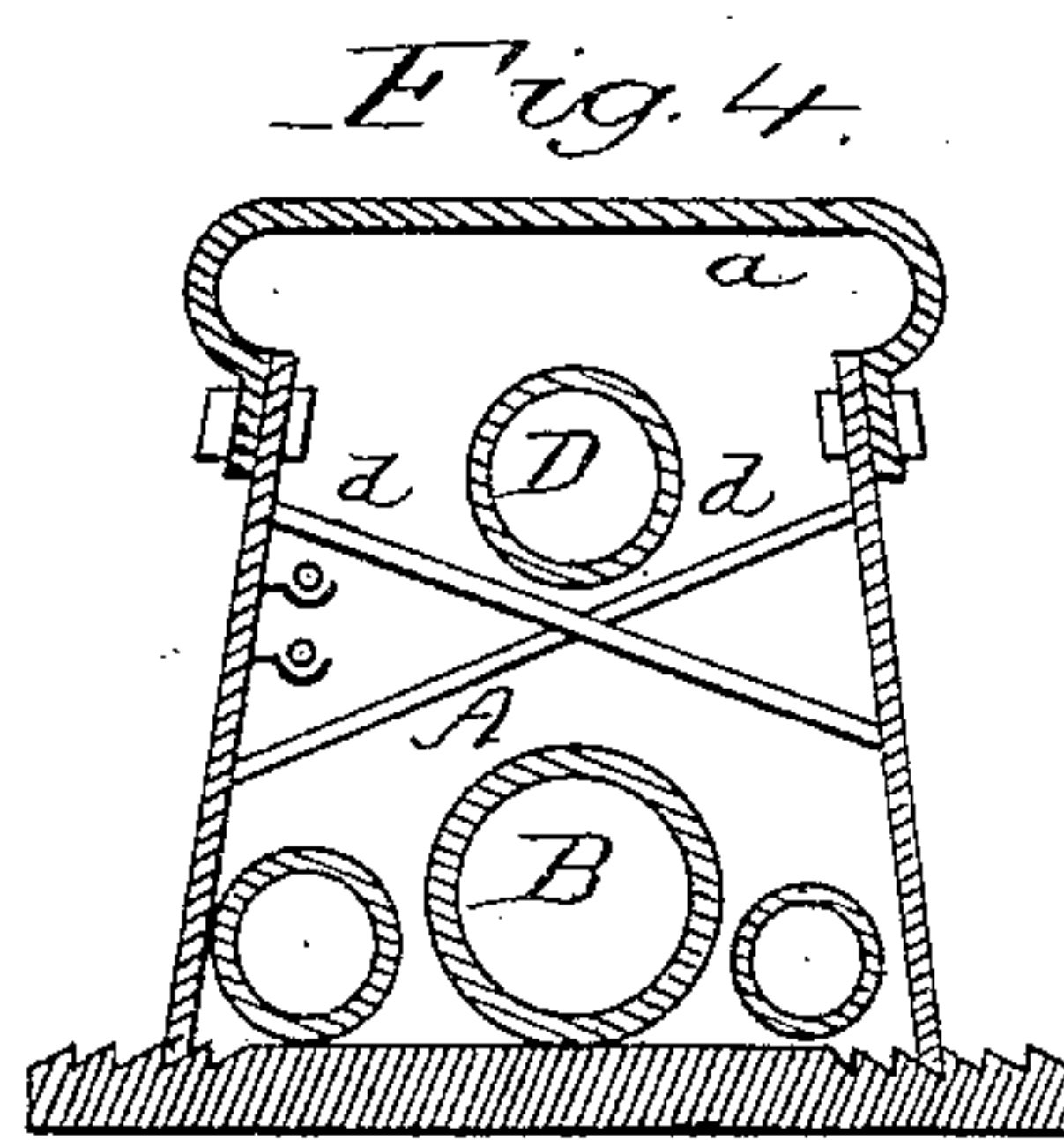
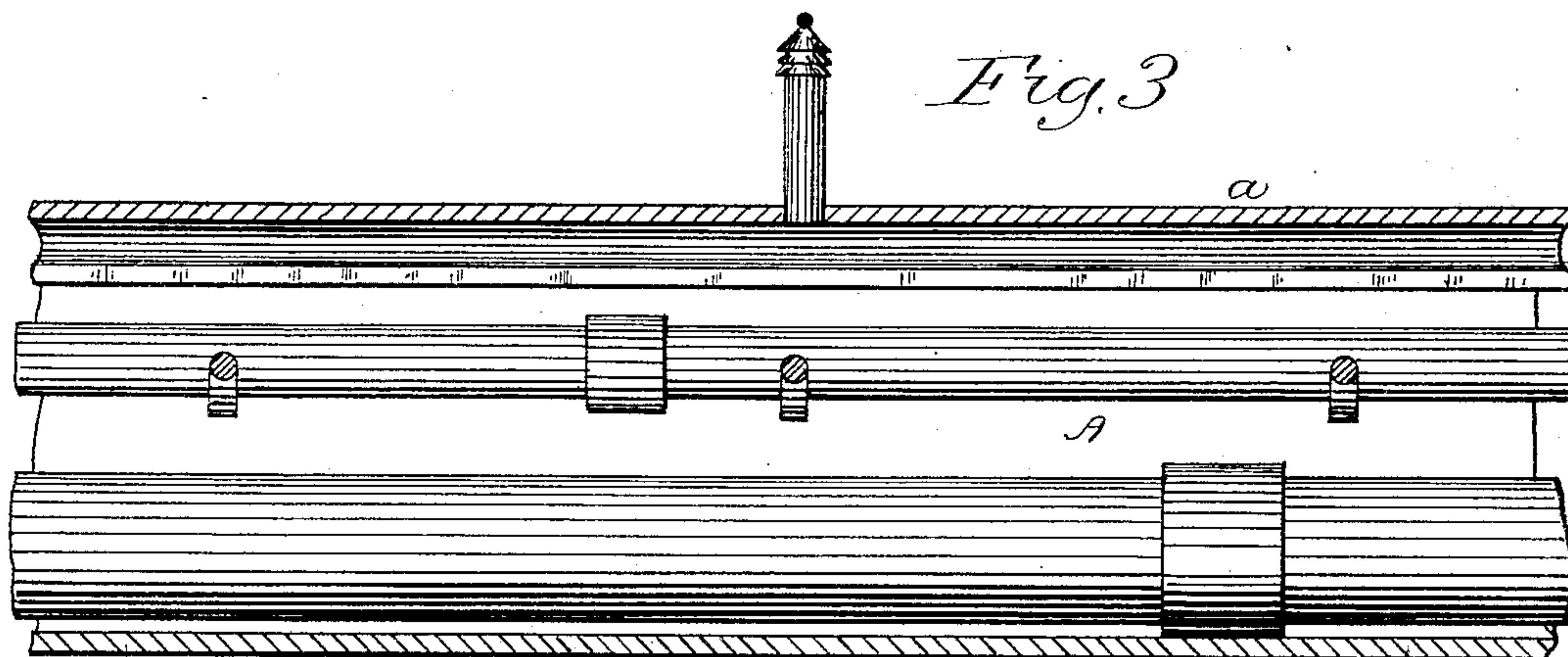
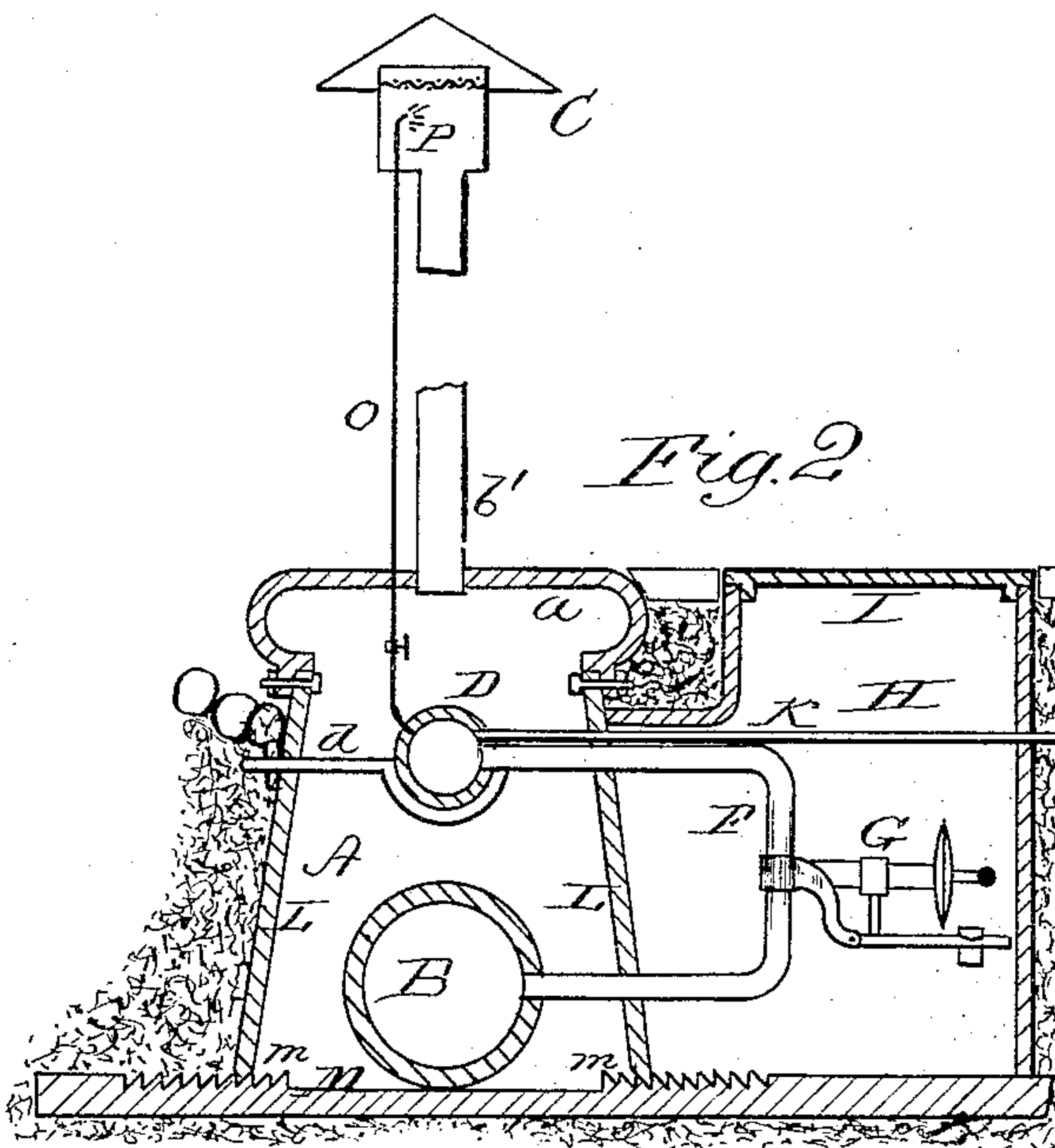
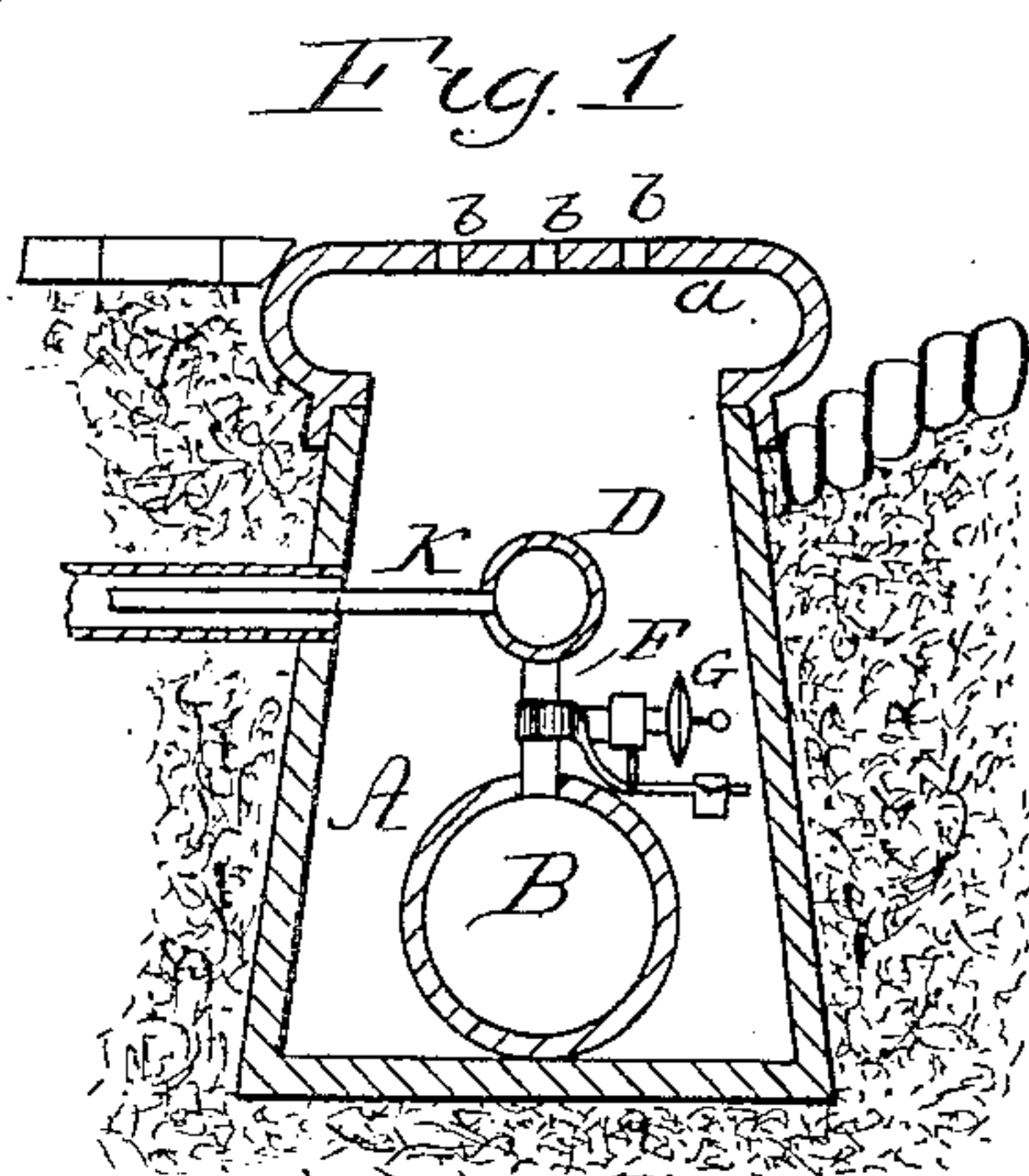
(No Model.)

W. A. HOEVELER.

SYSTEM FOR THE DISTRIBUTION OF GAS.

No. 333,462.

Patented Dec. 29, 1885.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM A. HOEVELER, OF PITTSBURG, PENNSYLVANIA.

SYSTEM FOR THE DISTRIBUTION OF GAS.

SPECIFICATION forming part of Letters Patent No. 333,462, dated December 29, 1885.

Application filed November 9, 1885. Serial No. 182,191. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. HOEVELER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Systems for the Distribution of Gas; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification.

This invention has relation to systems for the conveyance of gas through cities and towns, and has for its object the provision of means whereby the high and low pressure mains of a natural-gas-conveying system may be combined with and located within hollow curbs, said curbs being made of cast-iron or other material, and formed with removable tops, and with means for affording access to the conduits and the pressure-regulators connected therewith; and it has for its further object the provision of a novel form of curb, which, for the purposes of my invention, is provided with adjustable sides or walls by which the capacity of the curb may be increased or diminished, so as to accommodate it to mains or conduits of different sizes.

My invention has for its further object the provision of means for properly ventilating the curb, and also for accommodating and protecting the pressure-regulators when the same are located outside the curb.

My invention consists in the novel construction, combination, and arrangement of parts, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a vertical transverse section of a hollow cast-iron curb containing high and low pressure conduits and an intermediate pressure-regulator; Fig. 2, a transverse vertical section of a modified form of curb having adjustable walls and containing a high and a low pressure main, with a pressure-regulator located in a chamber to one side of the curb; Fig. 3, a vertical longitudinal section of a curb containing high and low pressure conduits arranged in keeping with my invention, and Fig. 4 a section of a modification.

A designates the curb, which in its simplest form, as shown in Fig. 1, consists of a trough,

of cast-iron or other material, either made in transversely-divided sections, each section being one casting, or made up of plates bolted together. The curb as thus constructed is provided with a cap consisting of a plate, *a*, having flanges on its edges, which embrace the edges of the curb walls or sides, and are secured thereto by bolts or rivets. The cap or cap-plates are provided with openings or holes *b*, for the purposes of ventilation and the escape of leakage-gas, and may also be provided with escape-pipes *b' b'*, rising to any desired height, and furnished with hoods or deflecting caps *C*, as shown in Fig. 2. These cap-plates or covers in all forms of the curb are removable, to afford access to the interior of the curb.

B designates a high-pressure main conduit arranged within the curb at the lower portion or bottom thereof, and D designates a low-pressure conduit located above the high conduit and supported in any suitable way, as by the bolt-rods *d*, or by brackets or other devices. The high-pressure main may be either led directly from the main source of supply or fed from another high-pressure conduit.

The high and low pressure conduits are connected together by pipes *F*, in which are interposed pressure-regulators *G*, of any desired or suitable construction, the object thereof being to maintain the pressure within the low-pressure conduit at a predetermined degree. The pressure-regulator may either be located within the curb, as shown in Fig. 1, or it may be contained within a supplementary box or casing, *H*, located at one side of the curb, preferably the inner side, said box or casing being provided with a removable cap, *I*, by raising which access may be had to the interior of the box and the pressure-regulator contained therein.

The low-pressure conduit has leading from it the service-pipes *K*, which lead therefrom to houses, buildings, or points of consumption, such service-pipes passing out through holes formed in the walls of the curb.

In Fig. 2 I have shown a modified construction of curb, wherein, instead of making the curb-sections as already described, I construct them with adjustable sides or side walls, *L*, so that the capacity of the curb may be increased

or diminished, and thereby adapted for the reception of different sizes of conduit-pipe. This adjustment may be effected in a variety of ways; but I suggest as expedient the construction shown in Fig. 2 of the drawings, wherein the base-plate M is formed with beveled ribs or ridges *m*, forming racks, which receive the lower edges of the curb-walls, and while retaining said walls rigidly in place allow them to be adjusted inwardly or outwardly. The adjustable walls are secured at their upper edges by bolts or other fastenings to the flanged portions of the curb caps or covers, and further security may be obtained by connecting the walls by means of screw-bolts *d*, which will also serve as saddles to support the low-pressure conduits.

While I have described the hollow curb as especially adapted for the reception of gas-conduits, it may also be used for the passage and protection of electric conductors, and for the reception of water, steam, and other pipes.

In order to consume the gas escaping by way of the pipes *b'*, I connect with either the high or low pressure conduits, or both, a tube, O, terminating in a burner, P, in close proximity with the outlet of said escape-pipes, and, by keeping a small jet constantly burning, ignite the gas as it escapes.

I have herein shown and described a hollow curb having adjustable walls; but I do not in this application broadly claim the same, as I wish to make that feature of the invention the subject-matter for a separate application.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In systems for the distribution of gas, the combination, with a hollow curb, of high and low pressure conduits contained therein, and having means of intercommunication, substantially as described.

2. In systems for the distribution of gas, the combination, with a hollow curb, of high and low pressure conduits, connecting-pipes, and interposed pressure-regulators, substantially as described.

3. In systems for the distribution of gas, the combination, with a hollow curb having a removable cover and means for ventilation and for the escape of gas, of high and low pressure conduits arranged in said curb and connected by pipes having interposed pressure-regulators, substantially as described.

4. In systems for the distribution of gas, the

combination, with a hollow curb containing high and low pressure conduits or pipes, of a supplementary chamber or chambers containing pressure-regulators, and a pipe or pipes leading therefrom to the high and low pressure conduits, substantially as described.

5. In systems for the conveyance or distribution of gas, a hollow curb, in combination with a gas conduit or conduits contained therein, said curb being constructed with the adjustable walls or sides, the ribbed or rack-like base-plate, and the removable cap or cover, substantially as described.

6. The combination, with a hollow curb, of high and low pressure conduits and electric conductors, substantially as described.

7. In systems for the distribution of fluids in cities and towns, a hollow curb having a removable cap and means for ventilating its interior and allowing the escape of vapors, and conduits located within said curb for the conveyance of fluids, substantially as described.

8. The combination, with a hollow curb containing conduits for the conveyance of gas and provided with escape-openings or ventilators for the egress of leakage-gas, of burners located in close proximity to said openings or ventilators for the ignition and consumption of the escape-gas, substantially as described.

9. A curb for the reception of gas-conduits and having high and low pressure pipes contained therein, in combination with escape-pipes rising or extending from the curb and communicating with the interior thereof, and a pipe leading from one or both the mains or conduits and provided with a burner located in proximity to the escape-outlets of said pipes, so as to ignite the gas issuing from the latter, substantially as described.

10. In systems for the distribution of gas, the combination, with a curb and a gas-conduit extending therethrough, of escape-pipes rising from said curb and a pipe leading from the conduit and provided with a burner located in close proximity with the outlet of the escape-pipe, so as to ignite the gas escaping from said outlet.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of November, 1885.

WILLIAM A. HOEVELER.

Witnesses:

JOHN F. ATCHESON,
THOS. A. CONNOLLY.