

(No Model.)

A. B. MACKLIN.
PIPE CLEANING APPARATUS.

No. 593,225.

Patented Nov. 9, 1897.

Fig. 1.

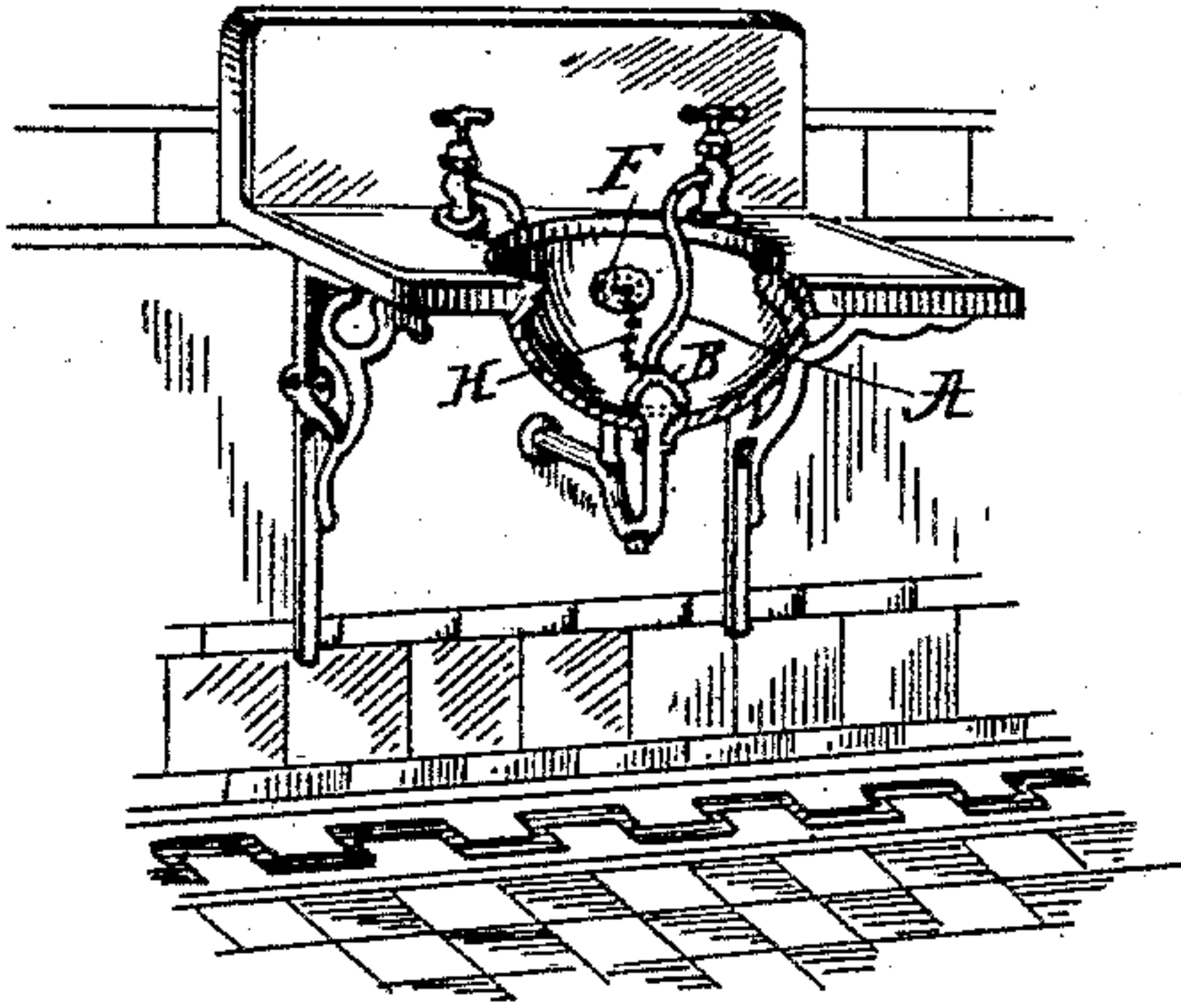


Fig. 4.

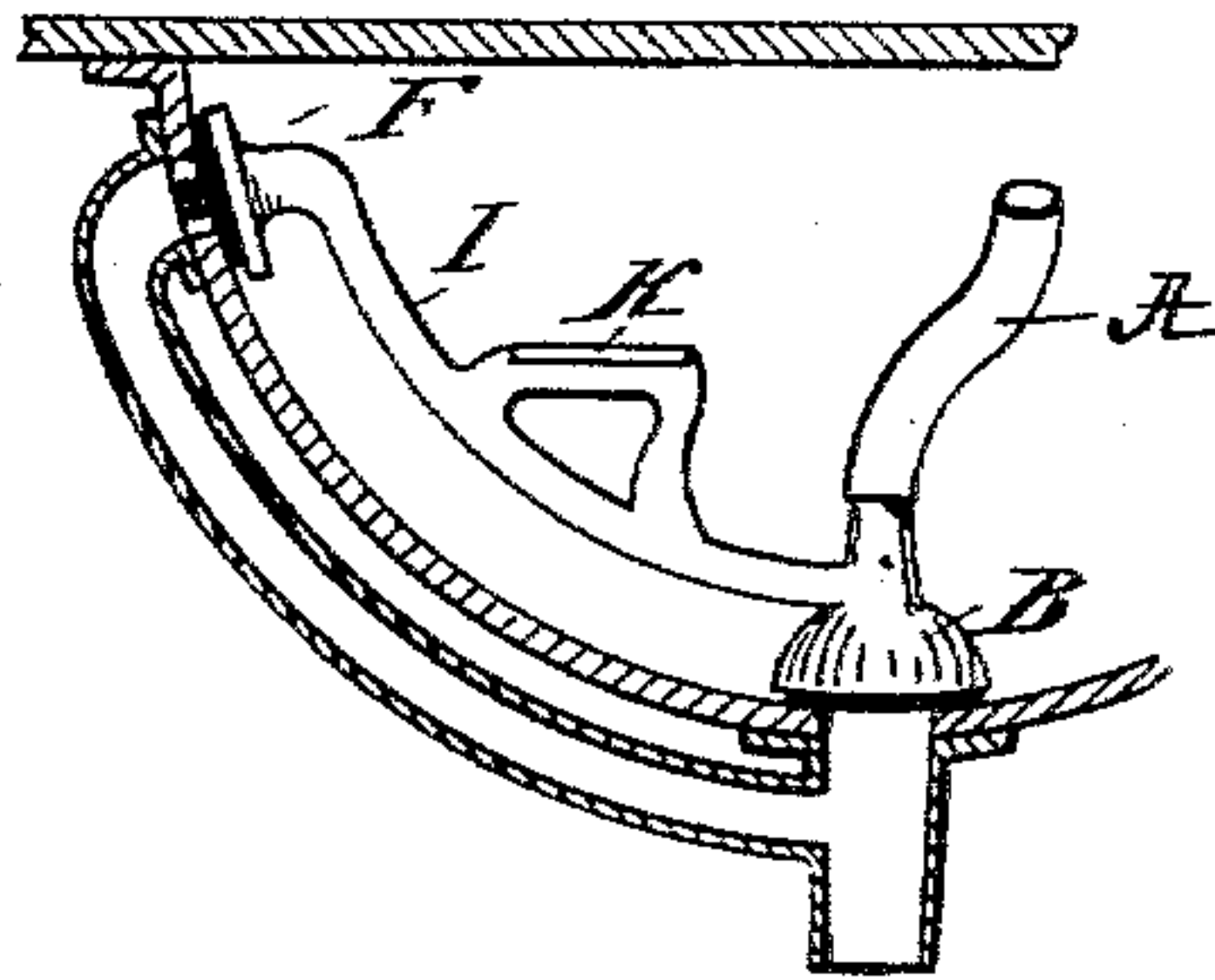


Fig. 2.

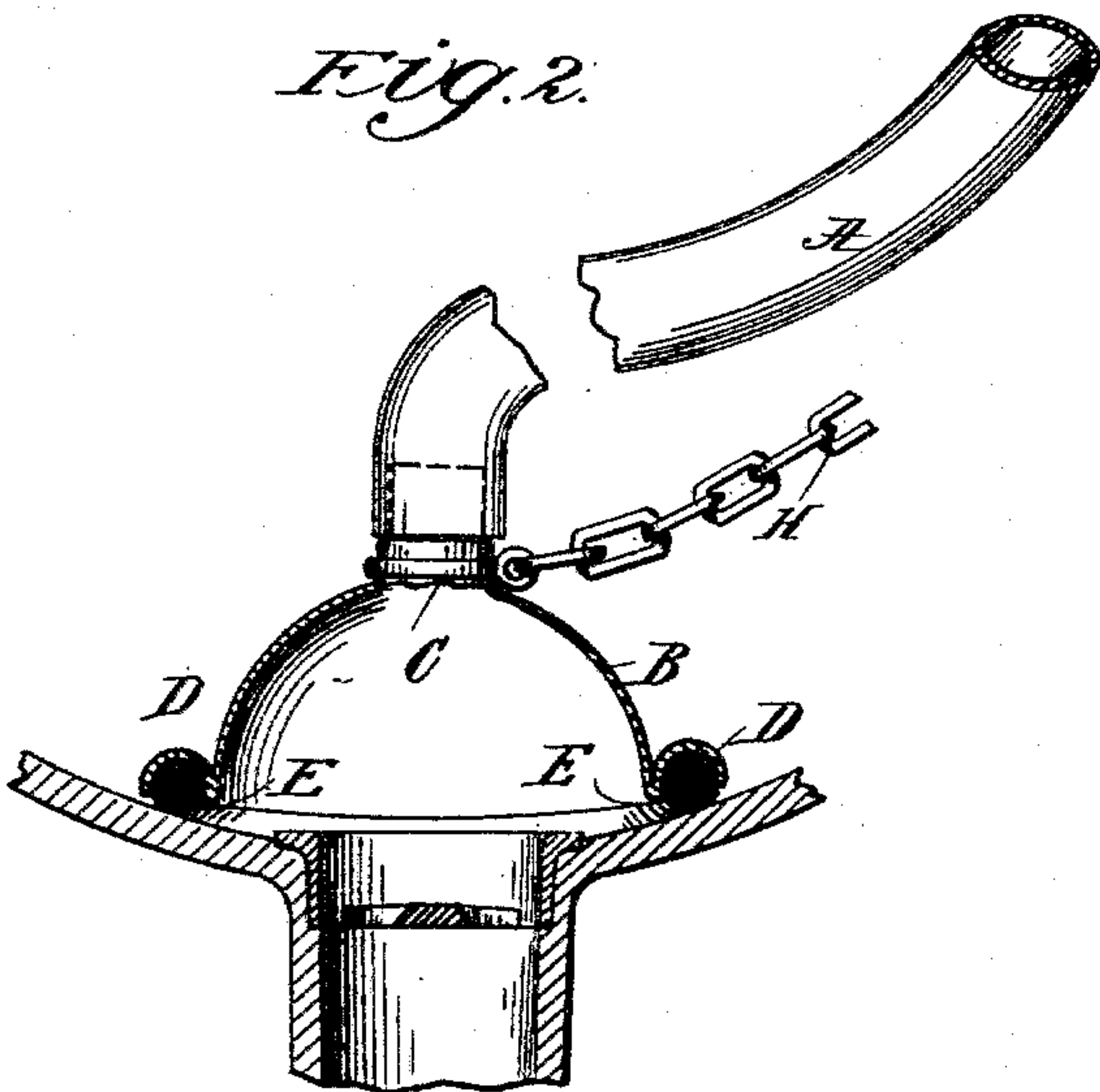
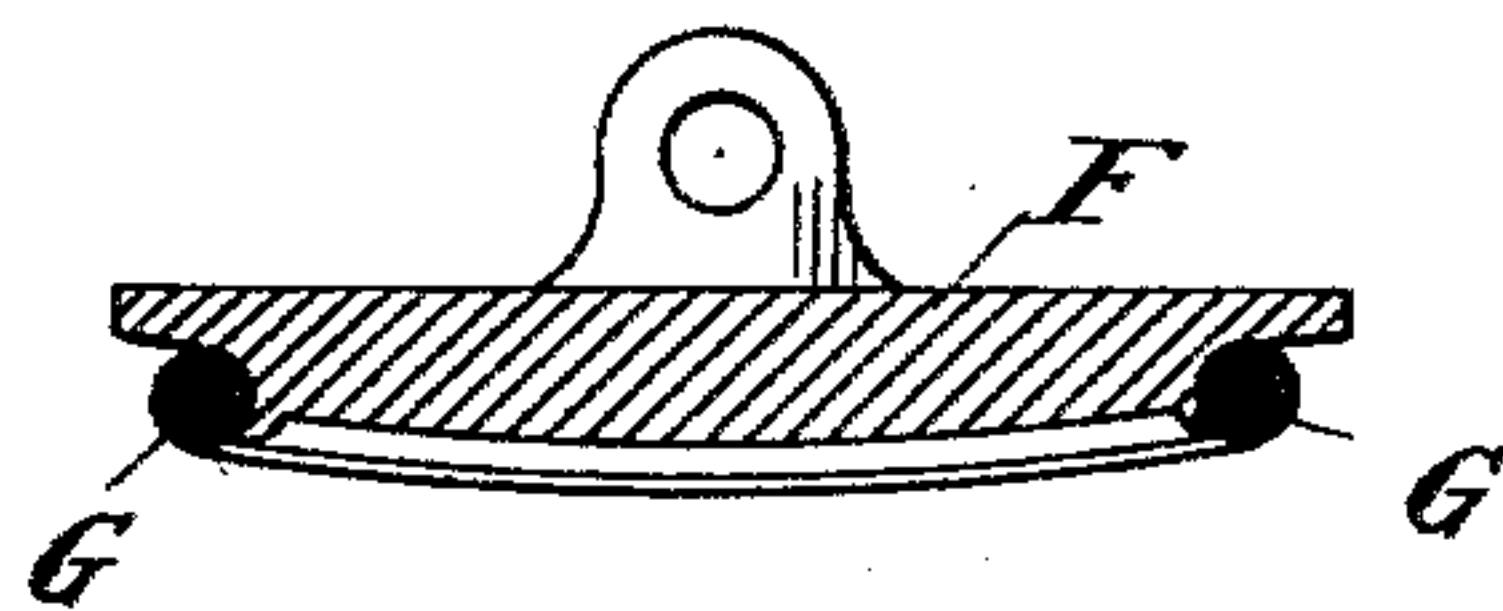
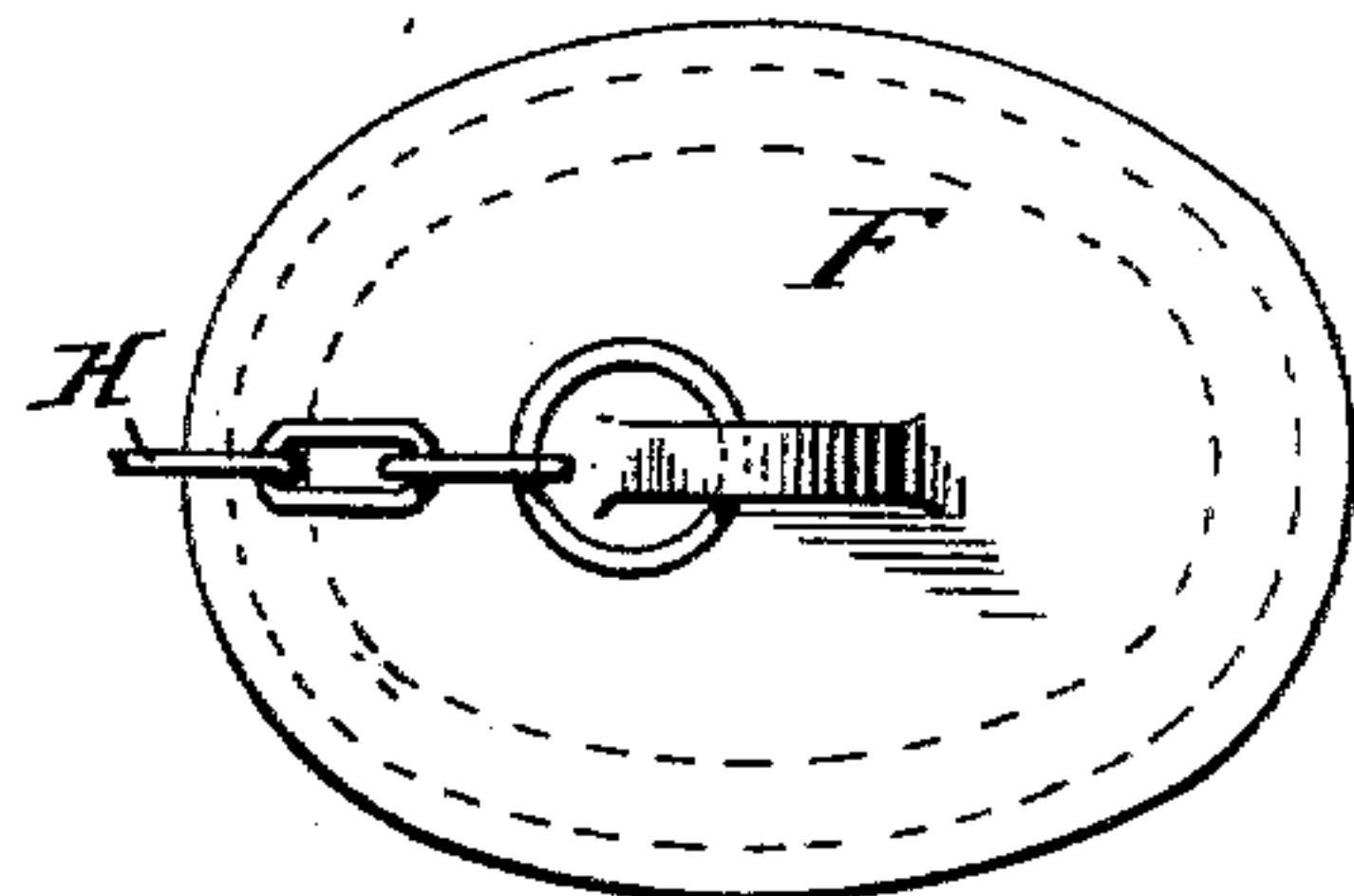


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ATHOL B. MACKLIN, OF NEW YORK, N. Y.

PIPE-CLEANING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 593,225, dated November 9, 1897.

Application filed February 1, 1897. Serial No. 621 444 (No model.)

To all whom it may concern:

Be it known that I, ATHOL B. MACKLIN, a subject of the Queen of Great Britain, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Pipe-Cleaning Apparatus, of which the following is a specification.

The invention relates to a new and useful means for removing obstructions from the drain-pipes of basins, sinks, bath-tubs, and similar structures; and it consists, generally stated, in a relatively inexpensive apparatus adapted to be applied to the exposed terminals of the drain and overflow pipes within the basin, sink, or bath-tub, as the case may be, and it is so constructed that the water-pressure in the supply-pipes may be utilized as the power for forcing the obstruction out from the drain-pipe, and the arrangement and method of use of the device is so simple that its application does not require any considerable skill or experience in such matters, and is therefore adapted to general household use. The device at present generally employed for this purpose is a rubber hemisphere, usually having a handle on its upper part, which is placed over the outlet of the bowl, sink, or tub, as the case may be, and then, pressure being applied upon the handle, air, and sometimes water with the air, is forced into the drain-pipe, which will remove slight obstructions, but more serious ones cannot be dislodged by this means, and the apparatus herein described is intended to meet its deficiencies and to dispense with the necessity for expensive apparatus of the air or water pump variety.

In the drawings hereof, Figure 1 illustrates one form of the invention in position for operation within a basin. Fig. 2 illustrates an elevation of the parts, partly in section. Fig. 3 illustrates a medial sectional view of the overflow-stopper. Fig. 4 illustrates a modified construction.

A represents a rubber tube adapted to fit over or be fitted to one of the faucets.

B is a hollow dome-shaped part, which may be made of metal or other suitable material. It has a hollow neck C at its apex, which con-

nects with the rubber tube, and at its rim there is preferably formed an inverted gutter D, in which is seated a sealing-ring E, of rubber, leather, or equivalent material.

F is a stopper adapted to be placed over the overflow-holes. It may be of metal formed into the desired shape and provided with a sealing-ring G, the same as before, but since the contour of sides of basins, sinks, and tubs where the overflow-openings are made are apt to vary considerably I prefer to make this stopper of some suitable flexible material—as, for instance, entirely of rubber or leather, or a plate of flexible metal may be faced with rubber, or simply provided with a sealing-ring, the same as shown. This stopper is preferably connected with the other part of the apparatus by a chain H, so that it will not become misplaced or lost.

The operation is as follows: The dome is placed in the basin, sink, or tub, so as to cover the drain-pipe opening and pressed down upon it, so that the rubber ring D will seal the joint. Then the end of the rubber tube having been connected to one of the faucets, the water is turned on, and by its pressure the obstruction is forced away. It sometimes happens, however, that the obstruction will not yield readily, and then the water will back up and come out at the overflow-opening. If so, the stopper F is placed over those openings and pressed firmly against them, so as to prevent the escape of the water. When this is done, the entire pressure of the water-head will be exerted upon the obstruction, and it will be, in practically all cases, swept away.

In Fig. 4 I show a somewhat more convenient construction of the device when circumstances will permit of its beneficial use—as, for instance, in hotels and office-buildings, where there are many basins, &c., all of the same size, with which the device will be made to fit. In this form the two sealing or stopping devices B and F, which may be of such special construction as preferred, are mounted at the opposite ends of a suitably-shaped rigid frame I, which may be made of metal, hard rubber, or equivalent material, and it is provided with a hand-rest K, upon which the operator may press with force by resting

the ball of his hand on the rest K, and thus secure the sealing of the joints at the drain and overflow pipes. The rubber pipe will connect with the faucets in this case the same as in the other.

It will be obvious to those who are familiar with such matters that modifications may be made in the details of construction of the parts in both forms of my invention without departing from the essentials thereof. I

therefore do not limit myself to such details.

I claim—

1. A pipe-cleaning apparatus embodying a rigid frame having at one end, a device for covering a drain-pipe, and at the other, a flexible stopper or pad adapted to conform to the shape of and to close the overflow-openings, and a tube adapted to connect with a faucet at one end, and at the other opening into the

device which covers the drain-pipe, for the purposes set forth.

2. A pipe-cleaning apparatus embodying a rigid frame provided with a hand-rest, and having at one end a device for covering the drain-pipe, and at the other, a flexible device adapted to conform to the shape of and to close the overflow-openings, and a tube adapted to connect with a faucet at one end, and at the other opening into the device which covers the drain-pipe, for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 29th day of January, A. D. 1897.

ATHOL B. MACKLIN.

Witnesses:

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A. BODINE MORRISON.