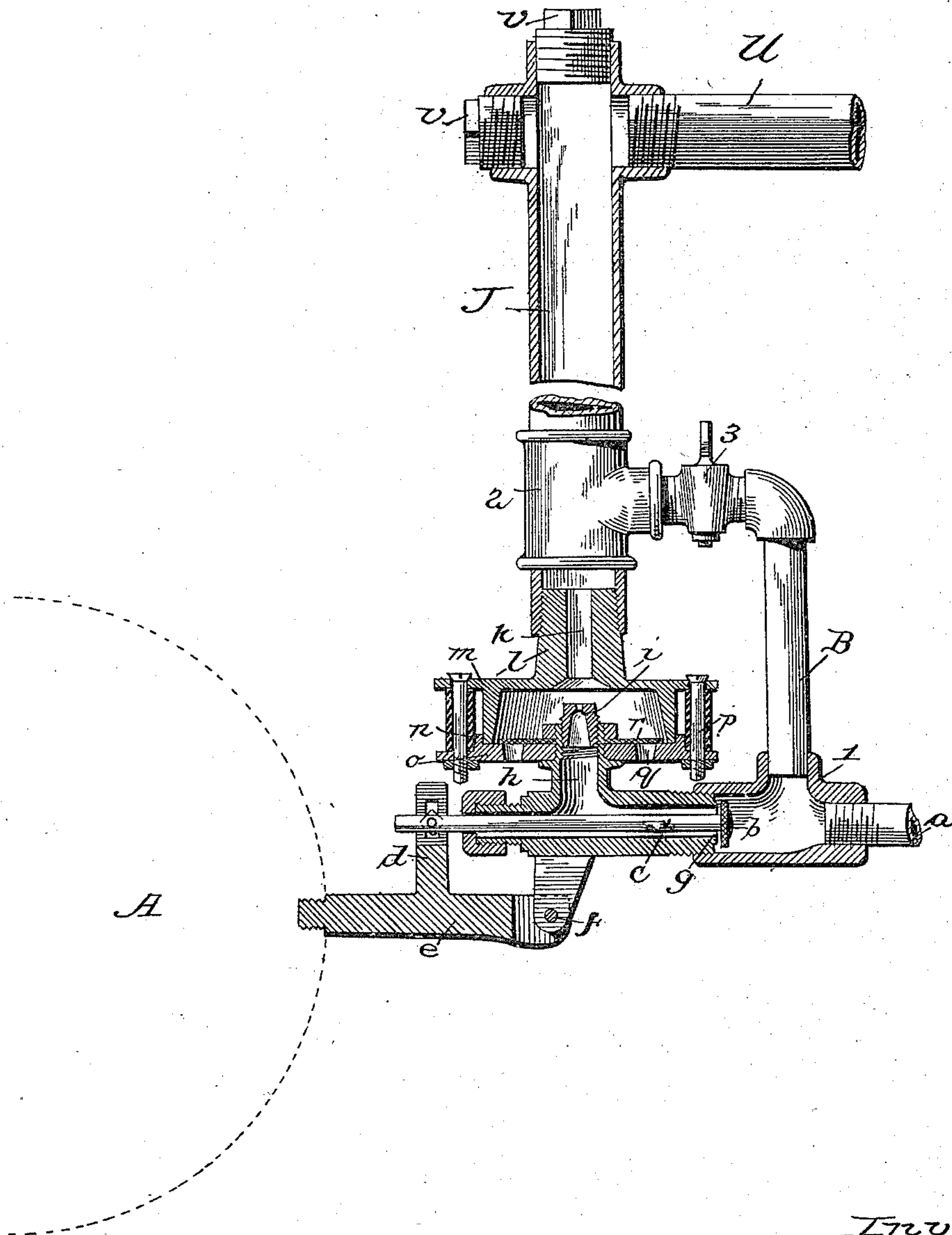


(No Model.)

W. LEE.
CELLAR DRAINER.

No. 573,014.

Patented Dec. 15, 1896.



Attest
William Hall
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Inventor
Wm. Lee
by Walter Donaldson &
Attys

UNITED STATES PATENT OFFICE.

WILLIAM LEE, OF ALTOONA, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF FIVE-SIXTHS TO E. O. GEESEY AND C. S. MYER, OF SAME PLACE.

CELLAR-DRAINER.

SPECIFICATION forming part of Letters Patent No. 573,014, dated December 15, 1896.

Application filed May 23, 1896. Serial No. 592,749. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEE, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Cellar-Drainers, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention is an improvement in cellar-drainers, and I have aimed to simplify the construction and increase the efficiency of such devices by my present invention.

In the accompanying drawing the figure represents, partly in section and partly in elevation, my improved device.

This class of devices being well known I have deemed it unnecessary to show the depression or box in which it is to be used, preferably, and I have simply dotted in a form of float which operates in a well-known manner to render effective the device on the rising of the water. This device is thrown into operation when the water rises, this action lifting the float shown in dotted lines at A and allowing a force of water to operate through the pipe *a*, which is in connection with the watersystem of the city or town. The inflow of the water through the pipe *a* is controlled by a valve *b*, and this valve is on a stem *c*, having a connection by a pin and slot with an arm *d* of the lever *e*, pivoted at *f* and carrying the float A upon its outer end. As the float rises the valve *b* uncovers the passage *g*, and the water rushes through into the passage *h* and through an injector-nozzle *i*, which is directly beneath a passage *k* in a nipple *l*, this passage having a flaring lower end, as shown. The nipple *l* is in one piece, preferably, with a casing *m*, which is in two parts, the top part having a cylindrical wall, the lower edge of which fits within the flange *n* of a bottom plate *o*, the two parts being held together in any suitable manner, but preferably by bolts and screws *p* and suitable washers. This casing *m* forms a chamber into which the injector-nozzle *i* projects, and as the stream of water from the main passes upward from the injector-nozzle into the passage *k* a suction is created and this draws the water from the cellar or depressed box, in which the drainer

may be placed, into the chamber *m* through the opening *q* in the lower plate *o*, and this water mingles with that of the jet and is carried out with it to the place of discharge. A valve *r* covers the openings *q* and prevents any backflow under pressure. This valve may be simply a ring of leather or of any other suitable material or construction and instantly closes under back pressure, thus preventing any flooding of the cellar. The injector-nozzle is an inserted piece having a threaded connection with its support, as shown, and it may be adjusted in relation to the nipple *l*, so as to increase or diminish the power of the jet according to the force of the water from the main.

In order to clean the apparatus, I have provided a by-pipe B, extending between castings 1 and 2 and having a valve 3. Supposing the jet to be stopped or choked in any way the valve 3 is opened and the water passing through B into the exhaust J creates a suction in the chamber *m* and clears the jet, after which the valve 3 may be closed and the drainer operate as before. A horizontal discharge-pipe U connects with the vertical exhaust J, and at the junction of these pipes I provide plugs V V, as shown, which can be removed to clean the pipe of any accumulation.

I prefer to use a glass ball for a float, as this prevents leakage, as in the case of metal floats.

What I claim is—

1. In combination in a cellar-drainer, a chamber having a discharge-nozzle and inlet-openings from the cellar, a jet-nozzle projecting into the said chamber, a valve controlling the inlet-openings and arranged at the base of the inwardly-projecting jet-nozzle, the water-supply pipe connecting with the chamber from below and the valve and float controlling said supply-pipe, substantially as described.

2. In combination in a cellar-drainer, the chamber having the outlet-nipple, and the inlet-openings for the drainage-water, a jet-nozzle extending into the chamber centrally thereof, a passage-way leading from the main or water supply to the jet-nozzle, and the

leather valve arranged about the central jet-nozzle and controlling the inlets into the chamber from the cellar, substantially as described.

5 3. In combination in a cellar-drainer, the chamber *m* having an outlet-nozzle leading therefrom, a jet-nozzle projecting into said chamber, a supply-pipe leading thereto with a valve and float for controlling the same, and
10 the valve-inlet for the chamber leading from the cellar, the said jet-nozzle being adjustable toward and from the outlet-opening, substantially as described.

15 4. In combination with a chamber *m*, having valved inlet-openings, an outlet-passage, an injector-nipple, a valve controlling the

passage to the injector and a valved by-pass, substantially as described.

5. In combination, an inlet-pipe, a valve controlling the inlet-passage, a float operating said valve, a chamber having perforations in its bottom, a valve covering said perforations, a centrally-arranged injector, an outlet-passage above said injector and a by-pass pipe between the inlet-passage and the
25 outlet-pipe, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM LEE.

Witnesses:

J. D. BURLEIGH,
E. O. GEESEY.