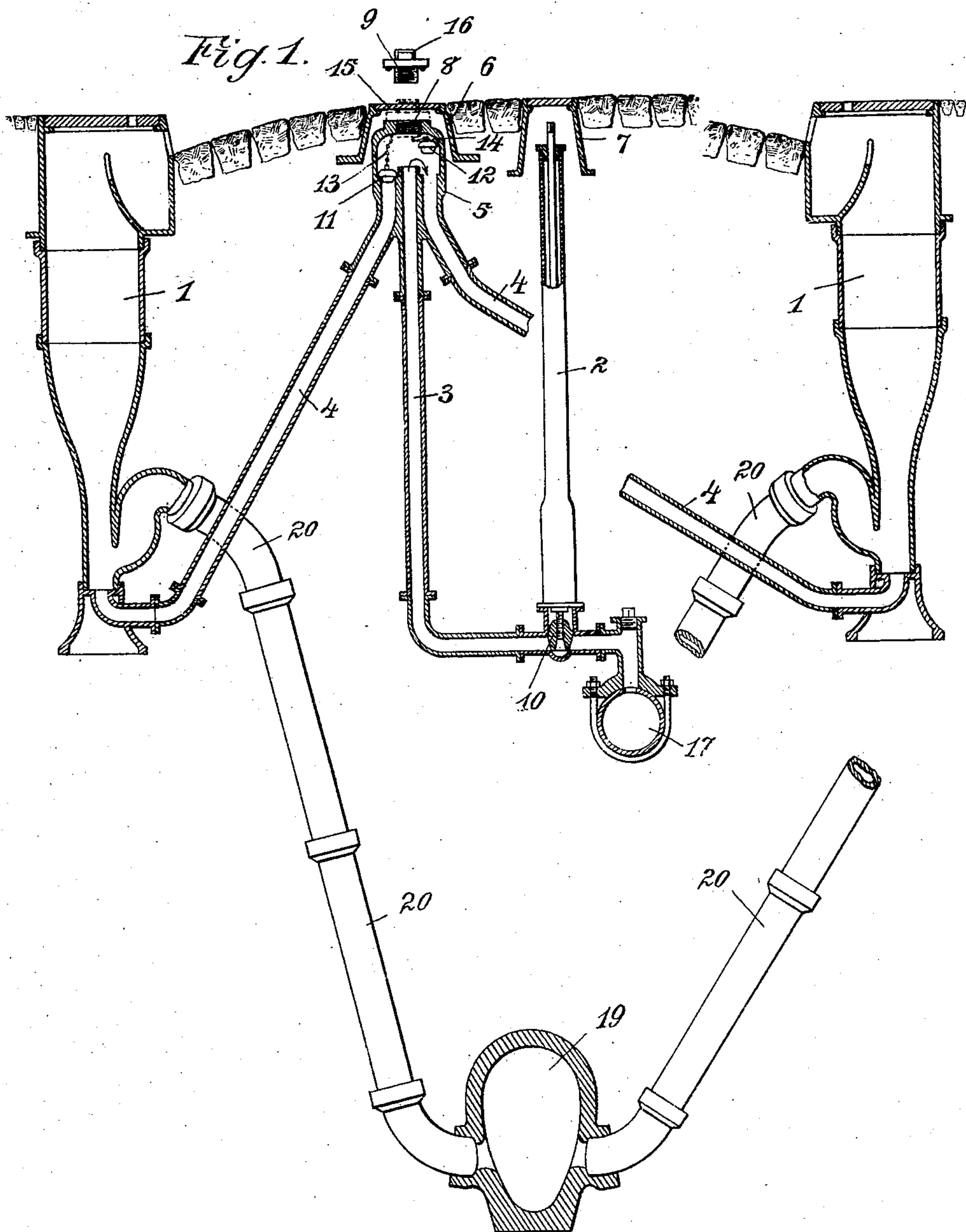


No. 881,458.

PATENTED MAR. 10, 1908.

E. BINDEWALD.
FLUSHING DEVICE.
APPLICATION FILED DEC. 31, 1907.

2 SHEETS—SHEET 1.



Witnesses:

E. C. Schuermann.

Inventor:

Eugen Bindewald
by James Goldberger, atty.

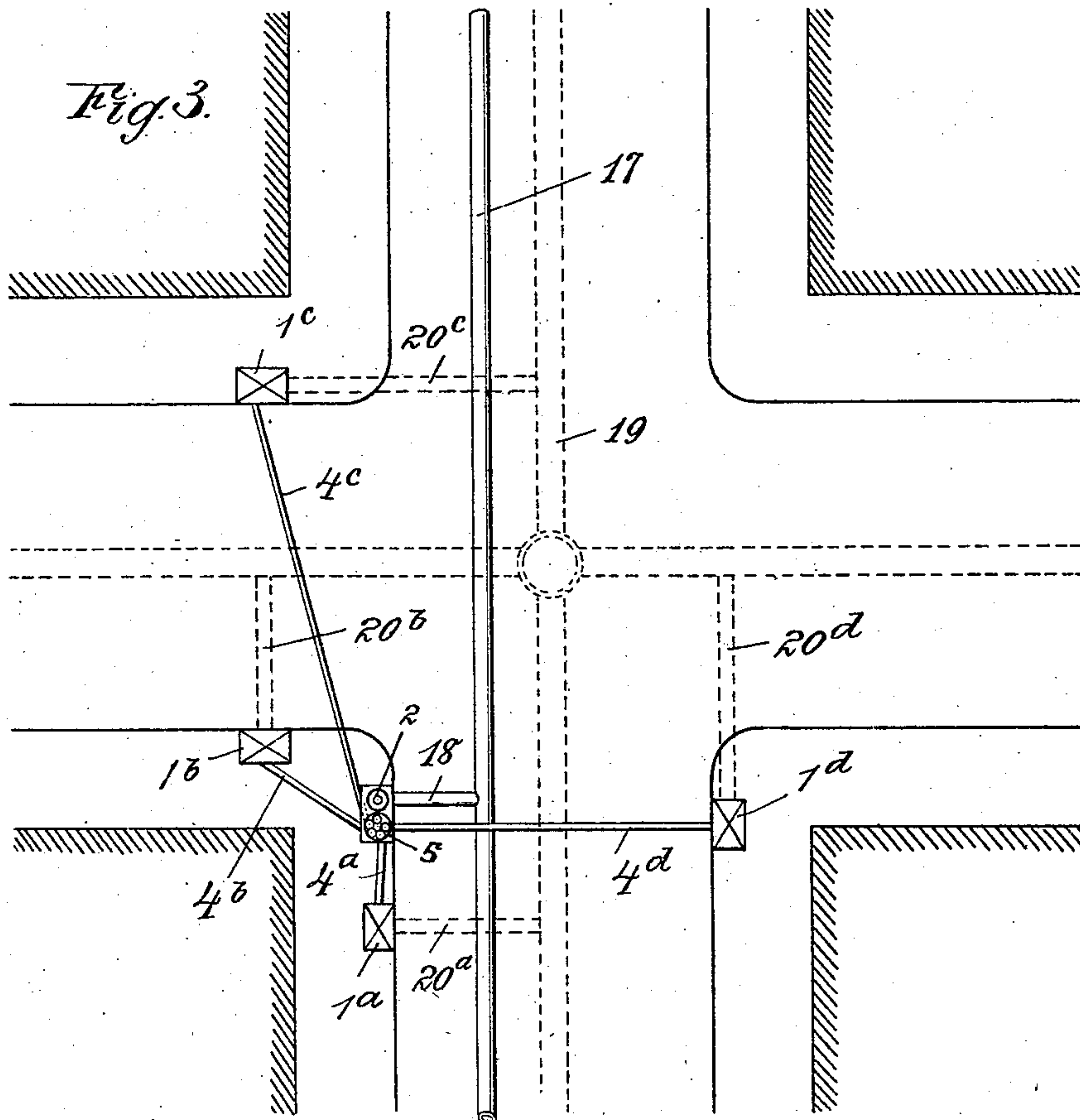
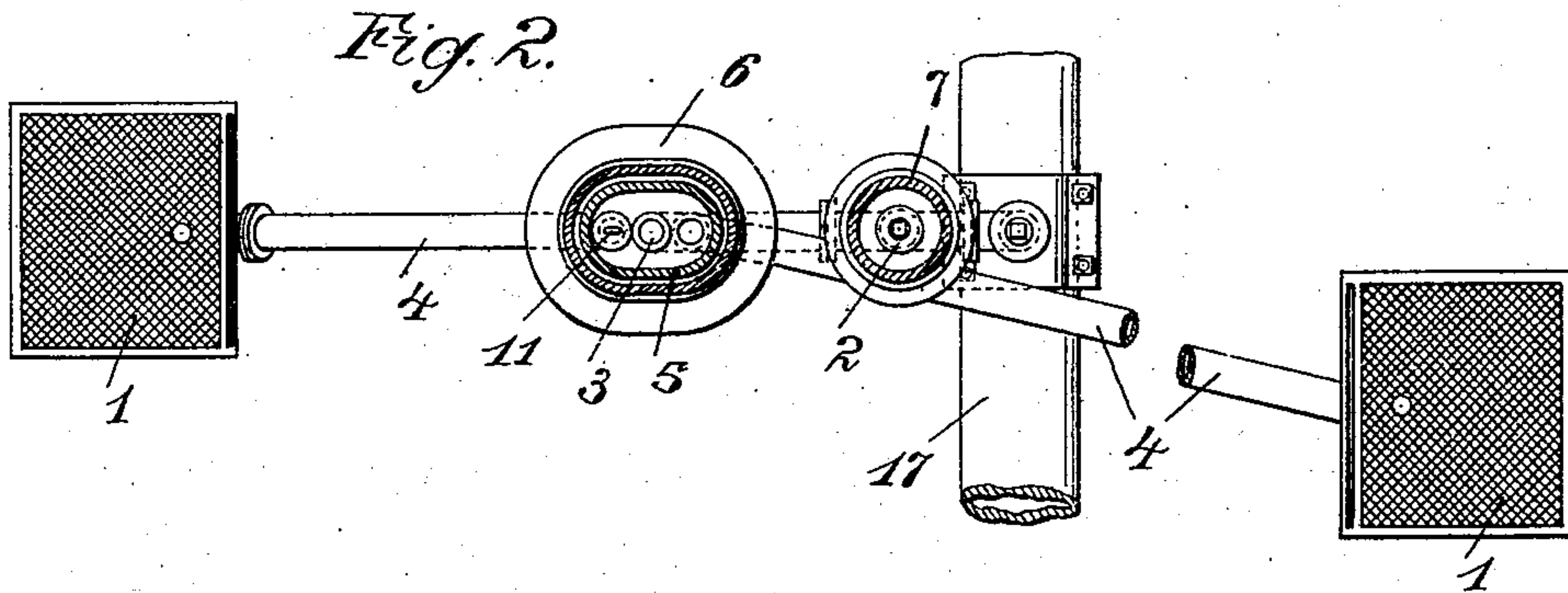
No. 881,458.

PATENTED MAR. 10, 1908.

E. BINDEWALD.
FLUSHING DEVICE.

APPLICATION FILED DEC. 31, 1907.

2 SHEETS—SHEET 2.



Witnesses
E. C. Schuerman
E. C. Schuerman atty.

Inventor
Eugen Bindewald
by *Lemuel J. Haskins*
attorney

UNITED STATES PATENT OFFICE.

EUGEN BINDEWALD, OF KAISERSLAUTERN, GERMANY.

FLUSHING DEVICE.

No. 881,458.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed December 31, 1907. Serial No. 408,858.

To all whom it may concern:

Be it known that I, EUGEN BINDEWALD, city architect, a subject of the German Emperor, and resident of Kaiserslautern, in the Palatinate, Kingdom of Bavaria, Germany, whose post-office address is Kaiserstrasse No. 36, have invented new and useful Improvements in Flushing Devices, of which the following is a specification.

Flushing systems for catch basins, sewers and the like as heretofore constructed and employed are subject to the objection that sewage may pass from the catch basin or sewer into the water main when the following conditions occur, viz; leakage of the cut off valve in the flushing pipe and clogging of the sewage conduit, so that the sewage will rise in the catch basin to the level of the street drain and back up in the flushing pipe, or, a rupture of the water main and clogging of the sewage conduit.

The object of the present invention is to provide means by which any contamination of the water-main by the sewage from the catch basin or sewer is prevented.

With this object in view I arrange the end of the usual stand pipe of a hydrant within a casing which is provided with an opening at the top and which contains besides the stand pipe a certain number of pipes which are open at the top and are connected with the catch basins or sewers to be flushed out. The opening of the casing may be closed by a screw threaded stopper or cap so as to connect the ends of the stand pipe and flushing pipes respectively, in order to flush out the catch basins or sewers. Means are provided for closing one or more of the flushing pipes at their ends within the casing, so as to clean one or more of the catch basins at the same time at will.

In the accompanying drawings:—Figure 1 is a sectional elevation of the improved flushing device as applied to multiple catch basins, Fig. 2 is a plan view, partly in section, and Fig. 3 a schematic plan view of the general arrangement.

1 designates the catch basins connected with a sewer, 2 the hydrant, 3 the stand pipe of the latter.

4 are a number of pipes or conduits leading to the catch basins. In the device shown by Fig. 1 there are only two such pipes 4, but it is evident that there may be provided any convenient or desired number thereof. The upper open ends of the pipes 4 and the open

end of the stand pipe 3 are disposed within a common casing 5, which may be cylindrical in form and is situated at the surface of the road, as shown by Fig. 1. The hydrant or valve spindle 2 may be disposed within the same iron casing 6 as the pipes, or in a separate casing 7 as shown in the drawings, Fig. 1.

The casing 5 is provided at its upper end with a screw-threaded opening 8, which may be closed by a screw-threaded stopper 9. When the stopper 9 is screwed into the casing 5 the stand pipe 3 is connected with the pipes 4 in such a manner that the flushing water may flow from the water-main to the catch basins 1, provided the valve 10 is opened.

In order to make it possible to clean only one, or more of the catch basins as desired, there are provided within the casing 5 a number of stoppers 11, 12, which may be of rubber, and are attached to chains or the like 13, 14 fastened to the upper part of the casing 5.

When it is intended to flush for instance only one of the sewers, Fig. 1, the stopper 11 is inserted in the opening of one of the flushing pipes 4 leading to the catch basins, and the end of the other pipe 4 remains uncovered. Now when the stopper 9 is screwed into the opening 8 of the casing 5 and the valve 10 is opened the water will flow out of the stand pipe 3 to the open pipe 4 only, thus flushing the catch basins connected to the latter pipe. In the same way, when a greater number of catch basins are connected with one stand pipe, two or more pipes 4 may be closed by stoppers such as 11, 12 and the remaining flushing pipes 4 are in open connection with their respective catch basins. When the flushing action has been finished the hydrant or valve 10 is closed again and the stopper or cap 9 is removed from the opening 8, whereupon the casing 6 is covered in the usual manner by a plate or cover 15. Preferably the handle 16 of the cap 9 is made of such size that it extends above the upper edges of the casing 6 when screwed into the opening 8 and thus prevents the casing 6 being closed by its cover-plate 15 before the stopper 9 has been removed. By this arrangement the water-main 17 is prevented from remaining in connection with the catch basins 1 after the flushing has been finished and by placing one of the stoppers 11 or 12 in the end of the stand pipe 3 of the hydrant 2 contamination of the water main by sewage is prevented.

Instead of the casing 5 as shown, which is closed at the top with the exception of the opening 8 for the stopper 9 an open casing may be used which is closed during the flushing operation by a hollow cap which is screwed, by means of an internal thread, upon an external screw thread provided on the open end of the casing.

It is obvious that the hydrant may serve as usual also for fire-extinguishing purposes and for charging sprinkling-machines, in which case a tube or pipe is screwed on to the thread of the opening 8 as usual.

Fig. 3 shows the general arrangement of the improved flushing device. In this figure, 17 designates the water-main which is in connection with the hydrant 2 by a branch pipe 18. The hydrant is connected by pipes 4^a, 4^b, 4^c, 4^d with the sinks or sewers 1 as described hereinbefore. As shown by Fig. 3 four sinks 1^a, 1^b, 1^c, 1^d may be flushed by one hydrant, with which they are connected by means of four pipes respectively. The sinks 1^a, 1^b, 1^c, 1^d are in connection with the main sewage conduit 19 by branches 20^a, 20^b, 20^c, 20^d as shown.

Now what I claim is:

1. In flushing devices for catch basins, sewers and the like, the combination with the hydrant stand pipe, of flushing pipes open at the upper end, the pipes being in connection with the catch basins, a casing in which the open upper ends of the stand pipe and the flushing pipes are contained, and means for connecting the pipes at will with the stand pipe of the hydrant substantially as described.

2. In flushing devices for catch basins, sewers and the like, the combination with the hydrant stand pipe of pipes open at the up-

per end, the pipes being in connection with the sinks, while their open ends are disposed within a casing in which the open upper ends of the stand pipe is contained, said casing having an opening therein and a stopper or cap for said opening substantially as described.

3. In flushing devices for catch basins, sewers and the like, the combination with the hydrant stand pipe of pipes open at the upper end, the pipes being in connection with the sinks, while their open ends are disposed within a casing in which the open upper ends of the stand pipe is contained, said casing having an opening at the top thereof, a stopper or cap for said opening, and means by which one or more of the pipes within the casing may be closed at their open ends; substantially as described.

4. In flushing devices for catch basins, sewers and the like, the combination with the hydrant stand pipe of pipes open at the upper end, the pipes being in connection with the sinks, while their open ends are disposed within a casing in which the open upper ends of the stand pipe is contained, said casing having an opening at the top thereof, a stopper or cap for said opening, and plugs or stoppers for closing the ends of the pipes within the casing at will; substantially as described.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this 4th day of December, 1907.

EUGEN BINDEWALD.

Witnesses:

CARL FRIEDRICH,
HERMAN MELSER.