(No Model.)

J. WIEDMANN.

CATCH BASIN.

No. 377,056. Patented Jan. 31, 1888.

FIG. 1.

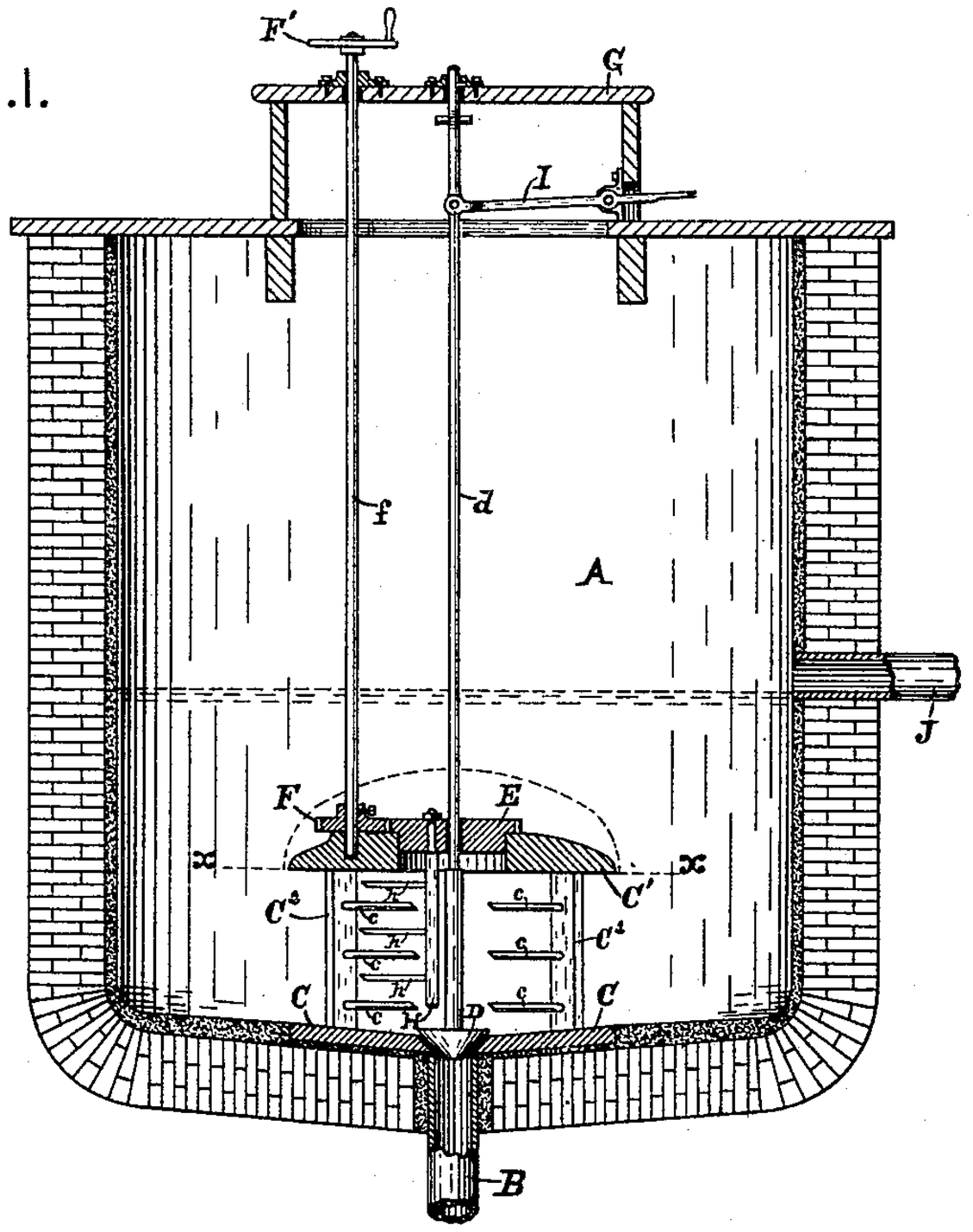
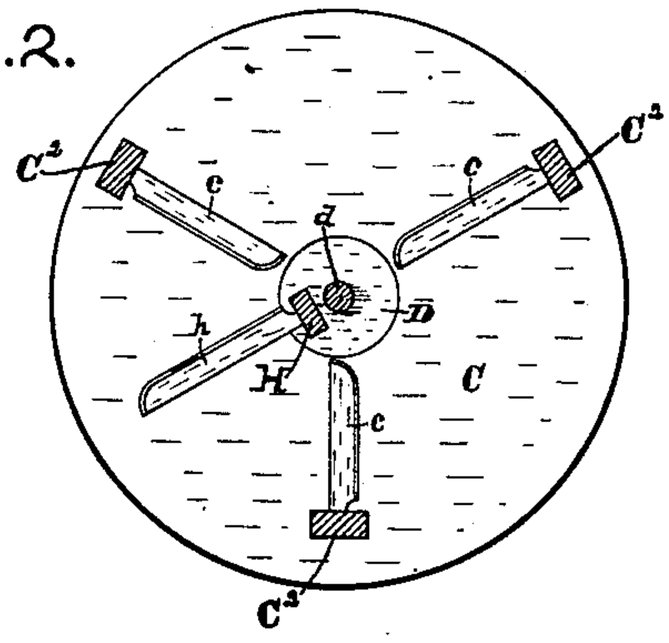


FIG. 2.



Witnesses
Frank L. Millward
Mary L. Murray

Inventor
John Wiedmann
By his Attorney Geo. J. Murray

UNITED STATES PATENT OFFICE.

JOHN WIEDMANN, OF CINCINNATI, OHIO, ASSIGNOR TO AUGUST X. SCHWEBEL, OF SAME PLACE.

CATCH-BASIN.

SPECIFICATION forming part of Letters Patent No. 377,056, dated January 31, 1888.

Application filed November 9, 1887. Serial No. 254,668. (No model.)

To all whom it may concern:

Be it known that I, JOHN WIEDMANN, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Catch-Basins, of which the following is a specification.

This invention is an improved catch basin, and relates more particularly to an improved means for breaking up the more solid substances, so that the basin is not liable to clog, and can be readily cleansed whenever desired.

The invention consists in certain novel arrangements and combinations to accomplish this result, all of which will be first fully described in connection with the accompanying drawings, and then particularly referred to and pointed out in the claims.

Referring to the drawings, Figure 1 is a central vertical section of a catch-basin provided with my improvements. Fig. 2 is a transverse section of the central cage and its connections, taken through line *x x*.

Referring to the parts, which are represented by similar reference-letters wherever they occur throughout the various views, A represents a basin of ordinary construction, the bottom being preferably inclined toward the central discharge-pipe B, which leads to the sewer. Directly over this central discharge is placed a cast-iron cage, the base C of which is firmly embedded in the cement floor or bottom of the basin. The periphery of the bottom is beveled from the top outward, and the top of the basin is dished toward the center opening, the edges of which form a seat for the vertically-moving valve D. The top of the cage, C′, is connected to the bottom by three pillars, C^2, which are provided with cutting-blades *c*, which project radially inward. The whole cage, including the top, bottom, and intervening pillars with their cutting-blades, is preferably cast in a single piece.

The top of the cage, C′, is centrally perforated to receive and furnish a bearing for the downwardly-projecting hub of the cog-wheel E. The projecting cogged rim of this wheel rests upon the top C′, and its teeth mesh with a pinion, F, which is secured upon the shaft *f*, which extends up through the seat G, and is provided at the top with a hand-wheel, F′, by which the shaft-cog and pinion are rotated. The cog-wheel E is centrally perforated to allow the valve-rod *d* to slide through it. The wheel E has also one or more angular perforations to receive one or more shafts, H, which shafts carry cutting-blades *h*, which project radially outward in a position to pass the stationary inwardly-projecting cutters *c*, when the wheel is revolved, the two sets of blades acting together as breakers to dispose of the larger or more solid substances, which would be likely to clog the discharge-pipe. The top C′ is perforated to form the lower bearing for the shaft *f*. Its upper bearing is on top of the seat. The valve-rod *d* also projects through the seat, to insure a vertical movement for seating and unseating the valve D. The valve is raised by means of treadle-arm I, which projects through the side of the seat in a convenient position to be operated by the foot by the person who may be turning the wheel F′, in order that as fast as the heavy matter is broken up it may, before settling, be discharged.

I have shown in dotted line, Fig. 1, a light sheet-metal housing to keep all the substances from the cogs which would be liable to clog them, and at J, I have represented the overflow, which is also to be connected to the sewer-pipe.

What I claim is—

1. In a catch-basin, the combination of the centrally-located cage, composed of top, bottom, and connecting pillars, having inwardly-projecting cutters all cast in one piece, and the top of said cage perforated to furnish a bearing for a hubbed wheel, the wheel carrying cutters to coact with said stationary cutters, said wheel fitted in the top opening of said cage, substantially as shown and described.

2. The combination, as specified, of the basin A, the centrally-located cage, having bottom C, top C′, the vertical pillars C^2, having cutters *c*, the hubbed cog-wheel E, fitted to revolve in the top, and carrying shafts H, having radially-projecting cutters *h*, the pinion F, shaft *f*, and hand-wheel F′, for revolving said cog and cutters, substantially as shown and described.

3. The combination, substantially as specified, of the basin, the centrally-located cage with cutter-blades projecting inwardly, a valved opening at the bottom, and a perforated top, to receive a wheel carrying revolving cutters to coact with the said stationary cutters, the said wheel being centrally perforated for the valve-rod *d*, the valve D, rod *d*, and the valve-actuating treadle I, with the pinion F, its shaft, and hand-wheel for revolving the inner cutters, for the purpose set forth.

JOHN WIEDMANN.

Witnesses:
MARY L. MURRAY,
GEO. J. MURRAY.