(No Model.)

J. CLIFFORD.

STRAINER OR GRATE FOR BASIN OUTLETS, &c.

No. 506,668.

Patented Oct. 17, 1893.

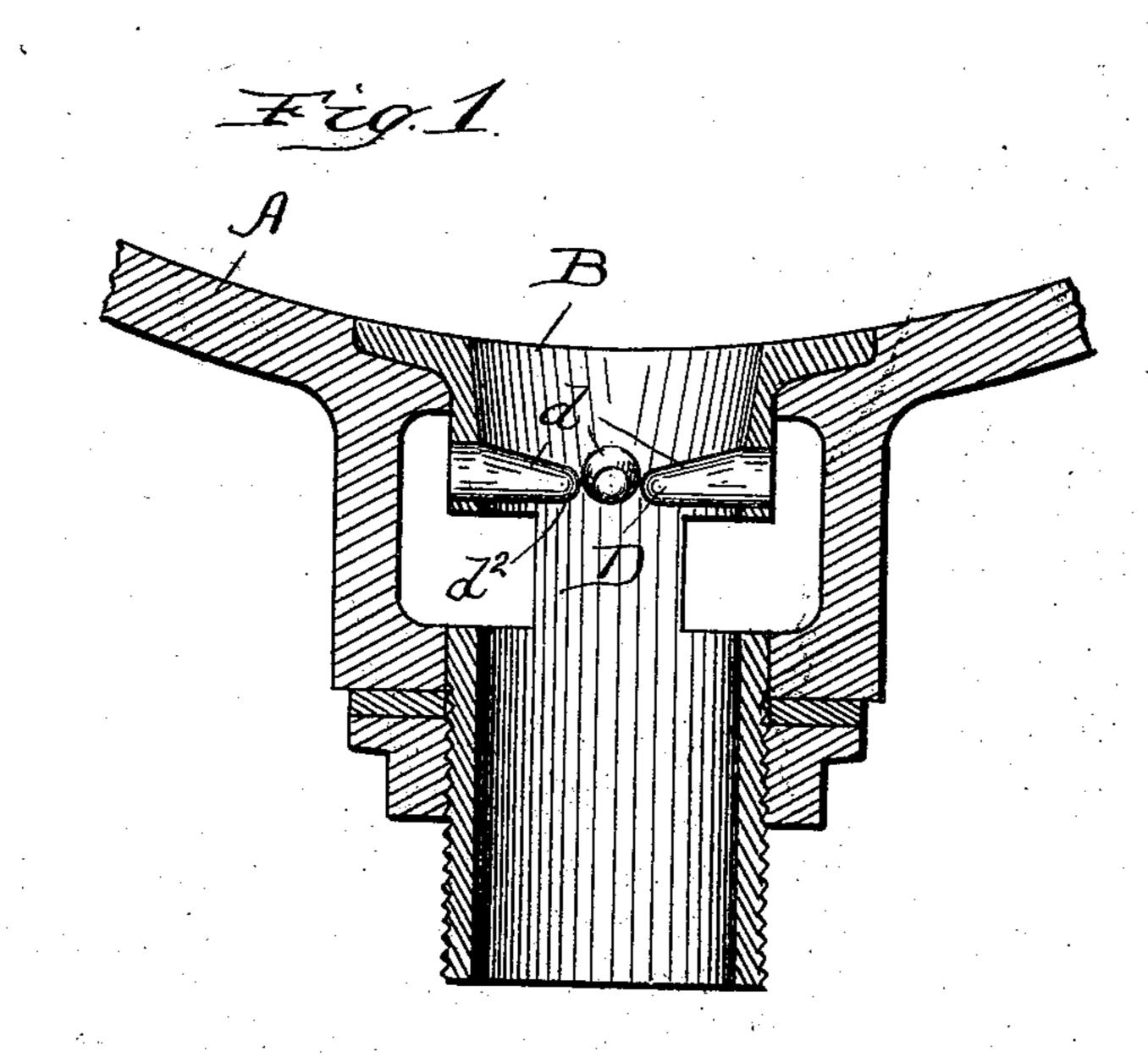
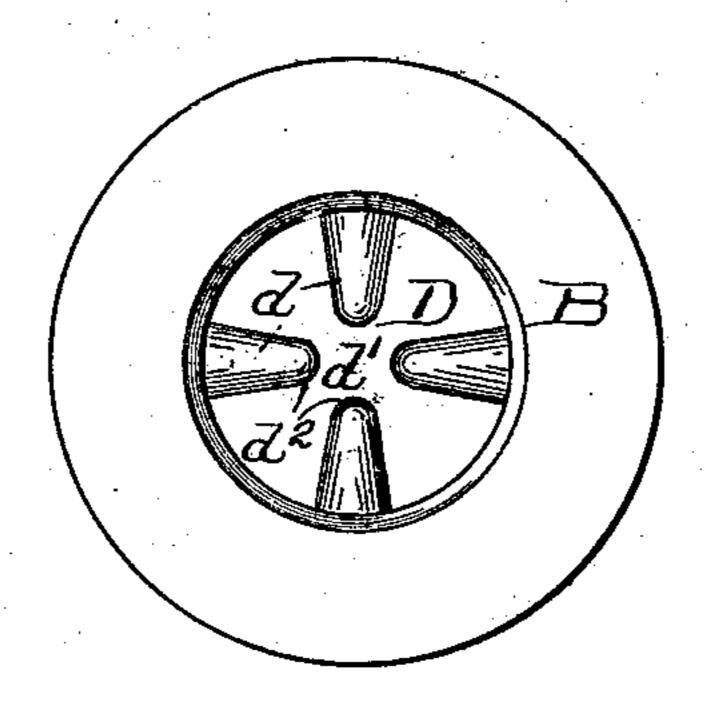


Fig. 2.



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JOHN CLIFFORD, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE L. WOLFF MANUFACTURING COMPANY, OF SAME PLACE.

STRAINER OR GRATE FOR BASIN-OUTLETS, &c.

SPECIFICATION forming part of Letters Patent No. 506,668, dated October 17, 1893.

Application filed May 22, 1893. Serial No. 475,070. (No model.)

To all whom it may concern:

Be it known that I, John Clifford, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Strainers or Grates for Basin, Sink, Bath-Tub, or other Outlets, of which the following

is a specification.

My invention relates to improvements in the construction of strainers or grates for the outlets of basins, sinks or bath tubs. Heretofore these strainers or grates have usually been constructed of four or more radial arms united together or crossing each other at the 15 center of the outlet or opening. In this old construction of strainer or guard, considerable difficulty is experienced from the outlet becoming clogged up with material that should pass through the strainer or guard; 20 and it is a matter of difficulty and inconvenience also to clean or free the strainer from such lodged material as the strainers or guards to which my invention relates are customarily depressed somewhat in the outlet 25 opening below the general surface or contour of the bottom of the basin or sink.

The object of my invention is to provide a construction of strainer or guard for the outlets of sinks, basins or bath tubs which will be efficient to arrest all particles or substances that should not pass into the outlet pipe, and which will at the same time obviate the difficulty of clogging, and from which adhering

substances may be readily freed.

To this end my invention consists in connection with the outlet or discharge opening of a basin, sink or other vessel of a strainer or guard therefor comprising a number of projecting pins each made shorter than the diameter of the outlet or opening, so that they do not meet or cross each other at the center, but on the contrary leave a free space at their ends. These inwardly projecting pins or guards are also preferably made slightly conical or tapering or inclined downward as to

their upper surface, so that lodged material may be more readily freed therefrom.

In the accompanying drawings which form a part of this specification, and in which similar letters of reference indicate like parts, 50 Figure 1 is a central vertical section of a basin, sink, bath tub or other outlet provided with a strainer or guard embodying my invention, and Fig. 2 is a top or plan view.

In the drawings A represents the basin or vessel, or a portion thereof, B the outlet bushing secured thereto; and D is the strainer or guard consisting of a series of, preferably four, inwardly or radially projecting pins or projections d, the points or ends of which extend near to, but not quite to, the center of the outlet opening so that a free space d' is left at this point. These pins may of course be cast integral with the outlet bushing B, but they are preferably formed of separate 65 pins secured in suitable openings formed in the bushing B. The pins d are each preferably made slightly tapering and with rounded ends d^2 as is clearly indicated in the drawings.

I claim—

1. The strainer or guard for outlets of basins, sinks, bath tubs or other vessels consisting of a series of separate unconnected inwardly projecting pins or projections shorter than the diameter of the outlet and having a 75 free space at the ends thereof, substantially

as specified.

2. The outlet B furnished with a strainer or grate consisting of a series of separate unconnected inwardly projecting tapering pins 80 d extending near but not quite to the center of the outlet so as to leave a free space at the

center, substantially as specified.

3. The outlet B furnished with a strainer or grate consisting of a series of separate un- 85 connected inwardly projecting tapering pins d extending near but not quite to the center of the outlet so as to leave a free space at the center, said pins d having rounded ends d^2 , substantially as specified.

JOHN CLIFFORD.

Witnesses:
H. M. Munday,
Emma Hack.