

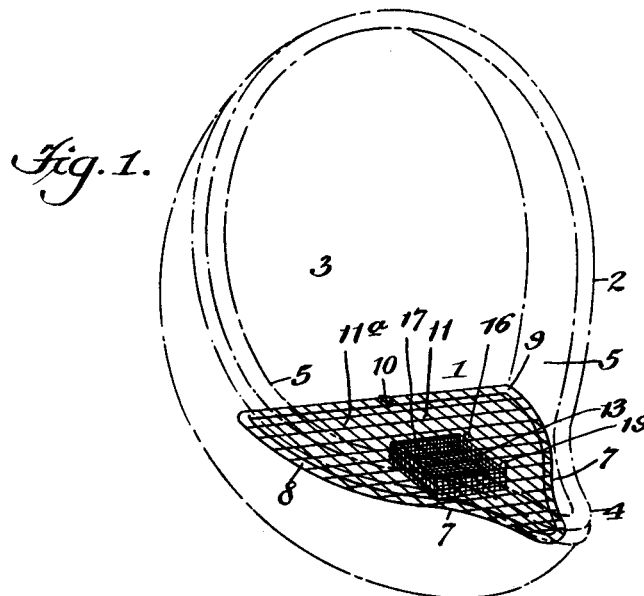
No. 675,947.

Patented June 11, 1901.

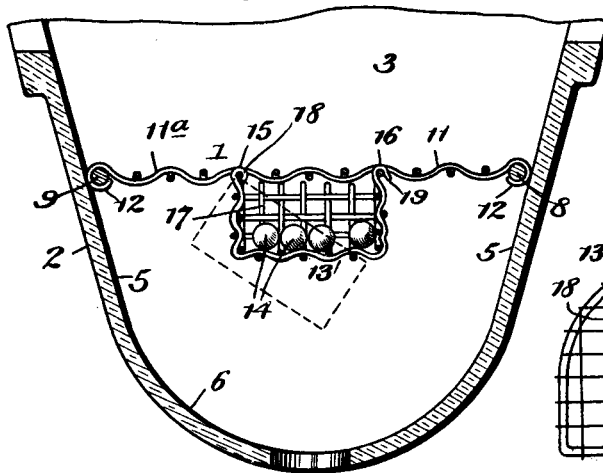
R. G. HACH.  
URINAL STRAINER.

(Application filed Feb. 9, 1901.)

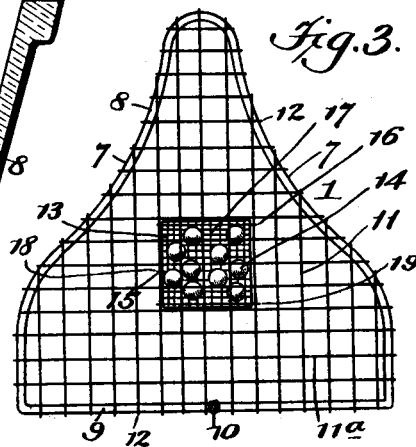
(No Model.)



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*A. R. Appleman*  
*J. M. Hactor*

INVENTOR

*Richard G. Hach,*  
BY *J. R. Little*  
his ATTORNEY.

# UNITED STATES PATENT OFFICE.

RICHARD G. HACH, OF NEW YORK, N. Y.

## URINAL-STRAINER.

SPECIFICATION forming part of Letters Patent No. 675,947, dated June 11, 1901.

Application filed February 9, 1901. Serial No. 46,644. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD GEORGE HACH, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Urinal-Strainers, of which the following is a specification.

This invention relates to urinal-strainers; and it has for its object to provide an improved device of this class which shall possess a number of advantageous features conducive to superiority from a sanitary standpoint and which shall be superior in point of durability, effectiveness in operation, and general efficiency.

In the drawings, Figure 1 is a perspective view of my improved urinal-strainer, the urinal-bowl being shown in dotted lines. Fig. 2 is a detail longitudinal sectional view of the bowl and strainer, taken upon a vertical plane. Fig. 3 is a detail plan view of the strainer in detached position.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, 1 designates my improved urinal-strainer, which is illustrated in Fig. 1 as fitted into the urinal-bowl 2, which is of ordinary form and embodies the broad back portion 3, the contracted or narrow front portion 4, and the forwardly-converging curved sides 5. The inner walls of the bowl converge downwardly, as at 6, in the customary manner, and the edge portion 7 of the improved urinal-strainer is formed to exactly fit the inner curved contour of the inner walls 6 of the bowl and to be supported by the downward convergences of said walls in a predetermined horizontal plane.

The edge formation of the strainer is maintained in permanence by a rigid frame 8, which in the preferred form of construction consists of a single length of stiff large-diameter iron or steel wire 9, which is securely joined at its ends, as at 10.

The foraminous body portion 11 of the strainer consists of a sheet of wire-netting 11<sup>a</sup> of suitable mesh, and the wire ends are bent about the frame 8 and securely crimped or compressed thereon, as at 12. When the strainer is in place in the urinal-bowl, it extends across the entire interior of the bowl in the proper horizontal plane and prevents

the passage into the space beneath the same of all articles or objects of too great bulk to pass through the mesh of the netting 11. The discharge-pipe of the urinal-bowl is thus protected against stoppage.

The strainer 1 is further provided with a cage or basket 13, in which camphor-balls 14 or other suitable disinfectants may be placed for the customary purposes, and this cage or basket is preferably hinged beneath the central portion of the strainer, as at 15, at one side and is adjustably connected with the same at the opposite side by suitable devices 16.

In the preferred form of construction the cage or basket 13 is open at the top and box-like in form, and its sides and bottom are formed of wire-netting 17, similar to the wire-netting 11<sup>a</sup> of which the body portion 11 of the strainer 1 is composed. The hinge connection at 15 of the cage or basket 13 with the body portion 11 of the strainer may be effected by forming a plurality of wire ends of the wire-netting 17 into looped hinge members 18, which are engaged with one of the strands of the wire-netting 11<sup>a</sup>. The connection devices 16 may consist of hooks 19, which may be formed integral with the wire-netting 17 by twisting together into suitable form a number of the strands of the wire-netting 17. The top of the cage or basket 13 is open, and when the hooks 19 are disengaged from the wire-netting 11<sup>a</sup> of the strainer the cage or basket may be readily swung downwardly upon its hinge connection 15 to permit of removing or replacing the disinfectants or cleaning the cage or basket.

The operation and advantages of my improved urinal-strainer will be readily understood.

The strainer fits accurately throughout its entire edge portion 7 the curved inner walls of the urinal-bowl 2 and prevents the passage beneath the same of any objects of sufficient bulk to clog or obstruct the discharge-passage of the urinal-bowl. The rigid frame 8, which maintains the edge portion 7 in permanent flat and non-yielding condition, prevents any buckling or bending of the strainer which might otherwise occur and defeat the purpose of the device. The method of securing the wire-netting 11<sup>a</sup> to the frame 8 by

crimping the edges of the former tightly about the latter is superior in point of positiveness, strain resistance, and general durability. The cage or basket 13 effectually  
5 retains the camphor-balls 14 or other disinfectant from misplacement and passage downward through the discharge-pipe of the urinal-bowl 1, and in this function is particularly useful when the camphor-balls become  
10 disintegrated or broken. The maintenance of the camphor-balls in a position above the discharge-pipe of the urinal-bowl also prevents obstruction of the latter by the camphor-balls with respect to the discharge of  
15 the contents of the urinal-bowl.

The entire device is simple and inexpensive in construction and effectively serves the uses required of a device of this class.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation  
20 of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I

therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the  
30 following claim.

Having thus described my invention, I claim and desire to secure by Letters Patent—

An improved urinal-strainer, comprising a  
35 foraminous body portion, and a foraminous open-top disinfectant cage or basket hinged beneath the same and provided with means for maintaining the same in raised position whereby the body portion of the strainer constitutes a closure for the cage or basket, said  
40 foraminous cage or basket consisting of wire-netting, and the hinge connection between said body portion of the strainer and the cage or basket consisting of suitably-bent  
45 wire ends of said wire-netting.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

RICHARD G. HACH.

Witnesses:

J. R. LITTELL,  
GEO. VAIL HUPPERTZ.