

No. 683,419.

Patented Sept. 24, 1901.

E. E. BURSON.
URINAL SCREEN.

(Application filed Jan. 25, 1901.)

(No Model.)

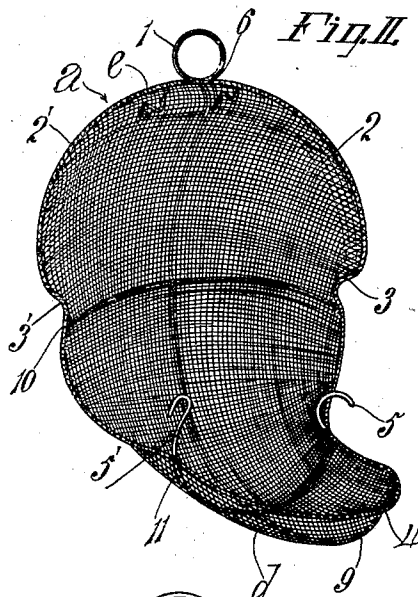
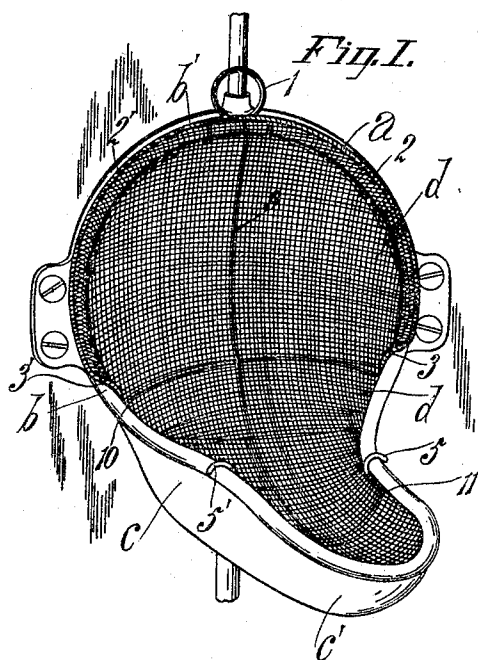
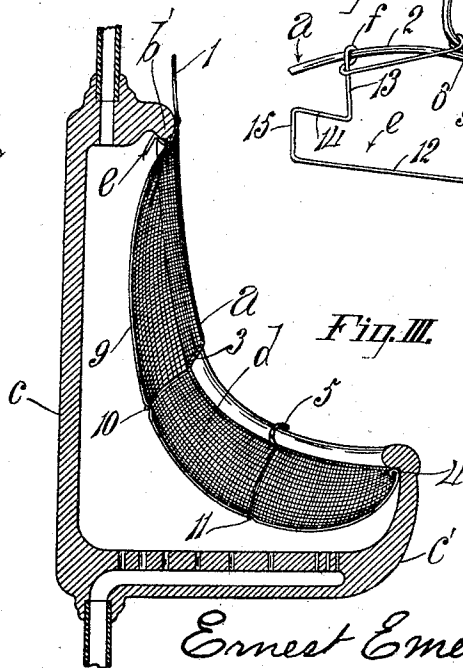
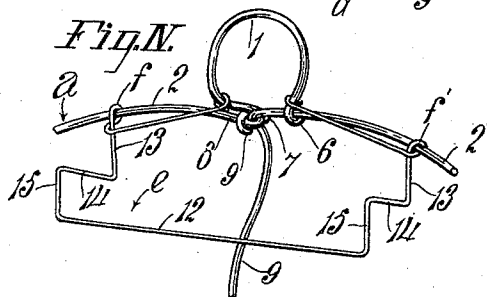
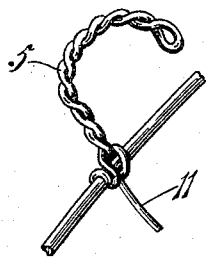


Fig. V.



Witnesses

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UNITED STATES PATENT OFFICE.

ERNEST E. BURSON, OF LOS ANGELES, CALIFORNIA.

URINAL-SCREEN.

SPECIFICATION forming part of Letters Patent No. 683,419, dated September 24, 1901.

Application filed January 25, 1901. Serial No. 44,719. (No model.)

To all whom it may concern:

Be it known that I, ERNEST EMERSON BURSON, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Urinal-Screens, of which the following is a specification.

The object of my invention is to produce a urinal-screen which can be readily applied to urinals of a standard construction in such a manner that the rim of the screen will be concealed from view throughout the lower portion of the screen, which extends in the projecting portion of the urinal.

It is also an object to so construct the screen that when fitted in place it will be firmly held free from the urinal except at the rim of the opening, and will not be liable to be accidentally displaced.

In urinals as ordinarily constructed the rim of the urinal is usually formed in an overhanging bead. In my invention I provide for fastening the screen in place by means of this bead, the screen being formed to fit outside of part of such bead and inside another part.

Another object of my invention is to make a strong simple urinal-screen which is adapted for ready application to and withdrawal from the urinal, and which is cheap and simple of manufacture, and which will collect the cigar-stubs and other rubbish which may be thrown into the urinal and will conduct the same down into the snout or front projection of the urinal out of the way of the liquid and ready to be removed when the screen is withdrawn from the urinal.

The accompanying drawings illustrate my invention.

Figure I is a perspective view of my newly-invented urinal-screen in place in the urinal. Fig. II is a perspective view of the screen detached. Fig. III is a vertical mid-section of a urinal with my screen applied ready for use. Fig. IV is an enlarged fragment to illustrate the construction of the upper end of the frame and retaining-catch of the screen. Fig. V is an enlarged fragmental detail of one side of the frame of the screen, illustrating the construction of the hooks for hooking over the sides of the urinal.

a indicates the border member of the

screen-frame. This member is preferably formed of a single wire formed at one end in a ring forming a handle 1 for the screen, thence bent laterally and downwardly on a wide radius approximately through a quadrant to form a shoulder 2 of approximately the form of the upper portion *b'* of the rim of the urinal *c*, thence bent downwardly and rearwardly to form an offset 3 to pass around the lower portion *b* of the rim of the urinal *c*, thence bent downwardly and forwardly and then rearwardly in a loop 4 to form a contracted snout of the screen, and thence being bent reversely on the other side of the screen to form an offset 3' and shoulder 2', corresponding to that described, and being brought through an eye 6 formed on the end of the wire which forms the handle 1 and there formed in a hook 7 to hook in the loop 8, which is formed by the bent frame beneath the handle 1 of said frame.

9, 10, and 11 indicate bracing-wires underneath the screen-netting *d*.

9 indicates the mid-wire of the frame, bent to form eyes at its ends around the border-frame at the handle 1 and at the end of the snout 4.

10 indicates a cross-wire having its ends bent around the border-wire below the offsets 3 and 3'.

11 indicates a cross-wire bent at its ends around the border-wire and extended upward and outward beyond the border-wire to form hooks 5 5'. These hooks clamp over the top of the bead *b* of the urinal and hold the screen firmly in place under the bead and up off of the bottom of the urinal, so that the floor of the urinal is kept perfectly free from obstruction.

The bars 9, 10, and 11 afford a strong support for the netting *d* of the screen.

e indicates a catch formed of wire bent around the border-wire at the upper end of the screen-frame and projecting rearwardly to extend under the upper ledge or bend *b'* of the urinal. This catch is preferably made of spring-wire formed in a loop 12 at the rear of the border-frame, bent thence at *f* and *f'* over the border-wire *a* of the frame on the opposite sides of the ring 1, thence bent backward under the frame and around the rear of the limbs of the loop 12, and thence to the

ring 1, to which the ends are fastened, thus to form a spring for the catch.

The loop 12 of the spring-catch *e* is bent at 13 to extend down substantially parallel with the plane of the upper portion of the shoulders 2 2' a short distance—say an inch or three-fourths of an inch—and the loop is then bent rearwardly and slightly upwardly at 14 to extend up beneath the crown *b'* of the bead and is then bent downwardly, as at 15, to engage the urinal-rim to spring the catch while the screen is being put in place.

In practical use to apply the screen to the urinal the attendant will grasp the screen by the handle 1 and insert the forwardly-projecting narrow portion or snout 4 of the screen into the snout *c'* of the urinal, thus bringing the hooks 5 5' above the ledge or bead *b* of the urinal, and then the handle 1 is pressed back toward the urinal, thus bringing the loop of the catch underneath the ledge or bead *b'*, the outer bend 15 of the loop first engaging with the bead *b'*, and thus springing the loop down and allowing it to be inserted beneath the ledge *b*. When the shoulders 2 2' engage with the bead *b b'*, the catch-loop *e* will clasp the bead *b'* and prevent withdrawal of the screen except upon the application of considerable force for that purpose. When the attendant wishes to empty the screen of cigar-stubs or other rubbish collected in the same, he will grasp the handle 1 and draw the top of the frame away from the top of the urinal, thus withdrawing the catch *e* from beneath the bead *b'*. Then by an upward movement the screen will be fully withdrawn and can readily be emptied into a suitable receptacle.

The wire-netting *d* may be soldered or otherwise secured at its edges to the border-frame *a*, and may be fastened to the mid and cross wires 9 10 11 by ties (not shown) or by any other suitable means.

It is to be understood that I do not limit my screen to the specific form of construction shown and described, but that the ring, the hooks, the catch, and other features may be varied as desired without changing the character of the invention.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A urinal-screen provided with a broad upper portion to fit over the outside of the upper portion of the urinal, and said screen being bent and contracted at the lower portion

to fit into the horizontal portion of the urinal, and furnished with hooks to hook over the rim of the snout of the urinal.

2. A urinal-screen having a broad upper portion to fit outside the upper portion of the rim of the urinal, and said screen being contracted and bent at the lower portion to fit inside the horizontal portion of the urinal, and provided with hooks to hook over the rim of the horizontal portion of the urinal; and a rearwardly-projecting catch at the upper end of the screen to catch under the upper portion of the rim of the urinal.

3. A urinal-screen, the rim or border of which is formed in a bow at the upper portion and is bent rearwardly at the lower end of the upright portion to form offsets on the opposite sides of the screen-border, and then bent downward and forward and contracted to fit in the snout of a urinal and provided at the snout portion with two oppositely-arranged hooks to extend over the rim of the urinal-snout to support the snout portion of the screen in the snout of the urinal.

4. A urinal-screen comprising a frame having a border member composed of a wire formed at one end in a ring to form a handle; thence bent laterally and downwardly on a wide radius approximately through a quadrant to form a shoulder approximately of the form of the upper portion of the urinal-rim; thence bent downwardly and rearwardly to form an offset to pass around the rim of the urinal; thence bent forwardly and then rearwardly in a loop to form a contracted snout to fit beneath the rim of the snout of the urinal; thence being bent to form an offset and shoulder corresponding to that first described, and fastened to the ring; a wire-netting formed in a receptacle, the edge of which is fastened to the said frame; and bracing-wires fastened to the border-wire and extending under the screen-netting; one of said wires being bent around the border-wire and extended and bent to form hooks to hook over the rim of the urinal.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, at Los Angeles, California, this 15th day of January, 1901.

ERNEST E. BURSON.

Witnesses:

JAMES R. TOWNSEND,
W. M. BOWEN.