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1,440,765.

C. W. BUCKLEY.

URINAL.

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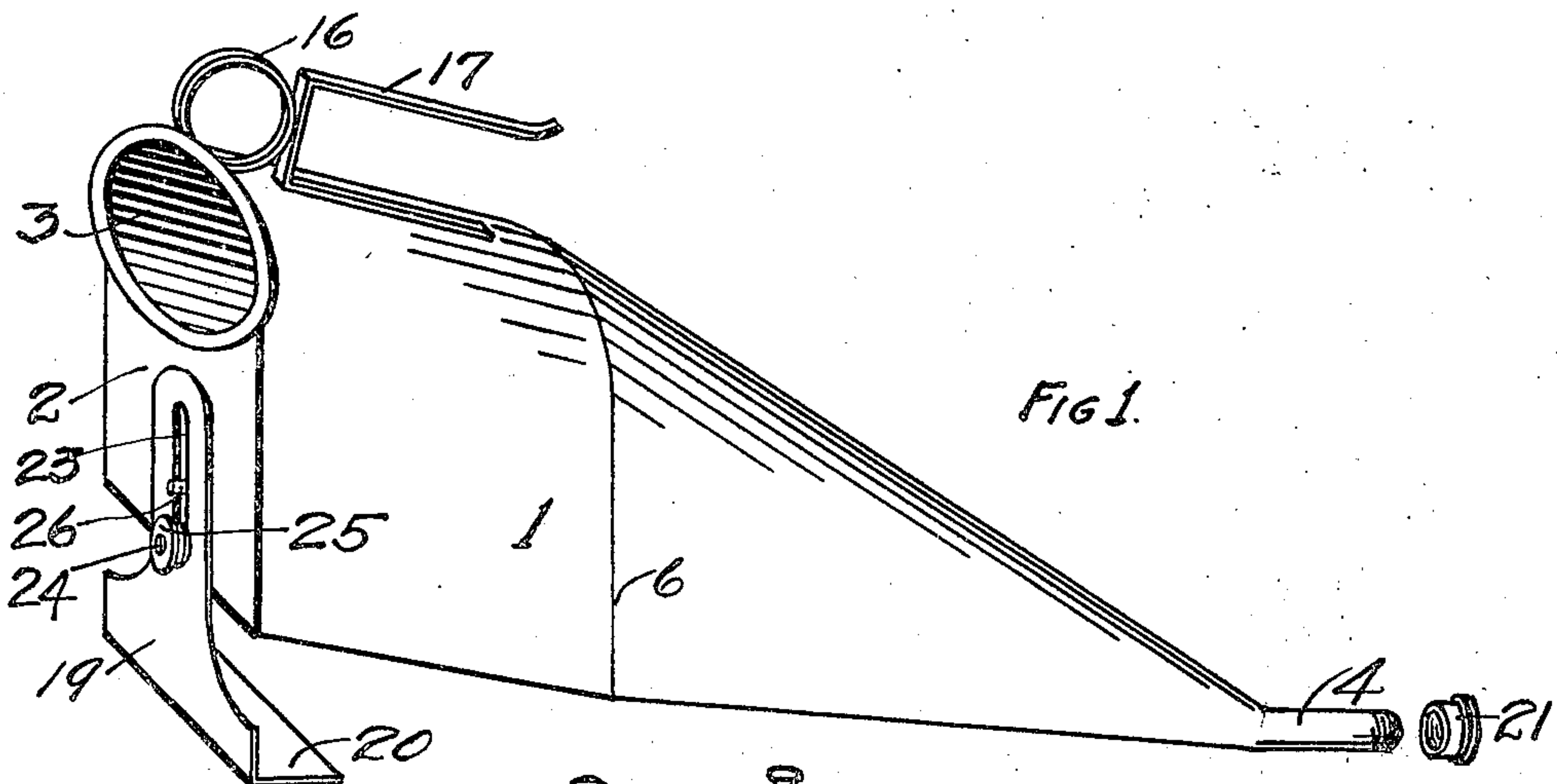


Fig. 1.

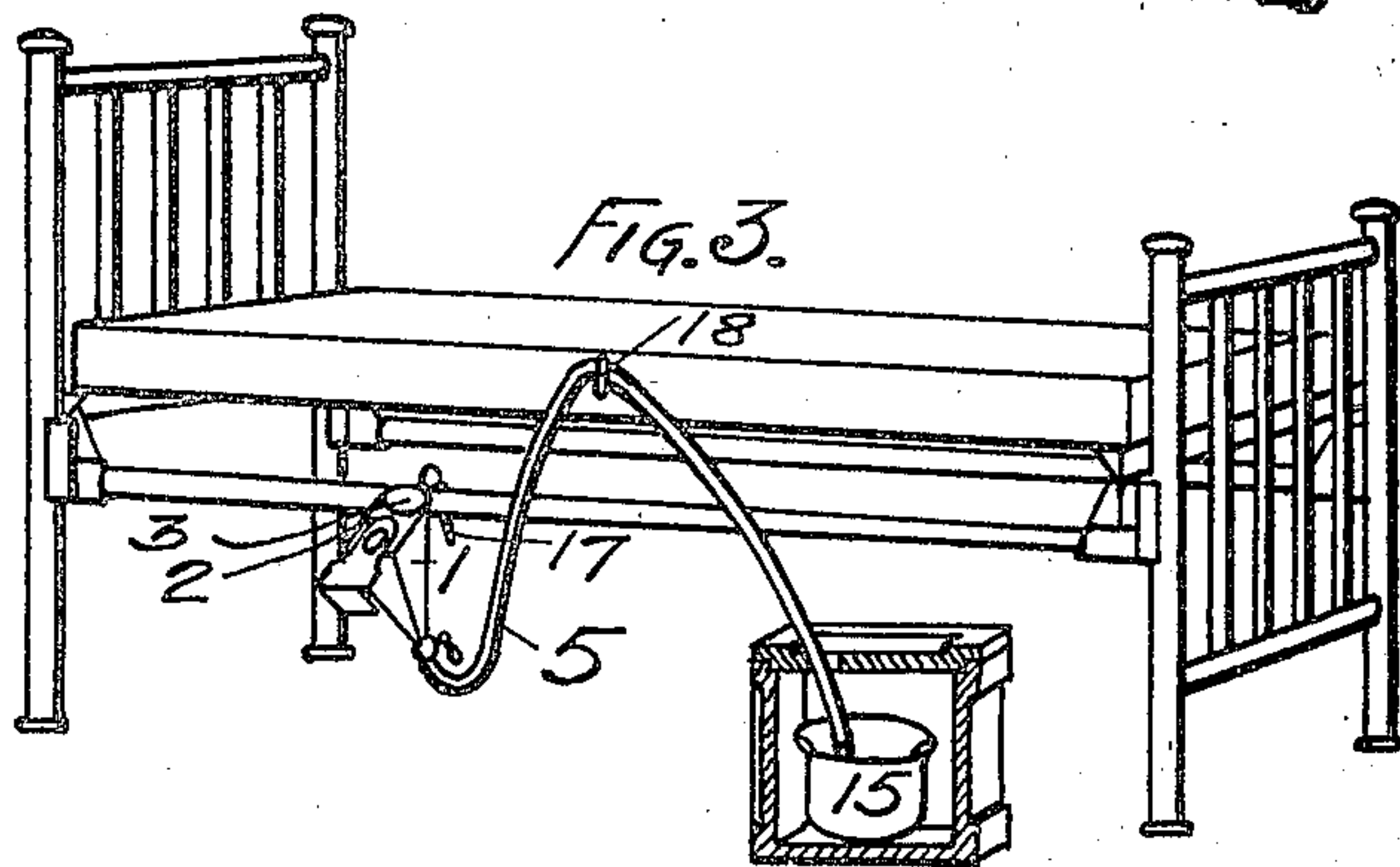


Fig. 3.

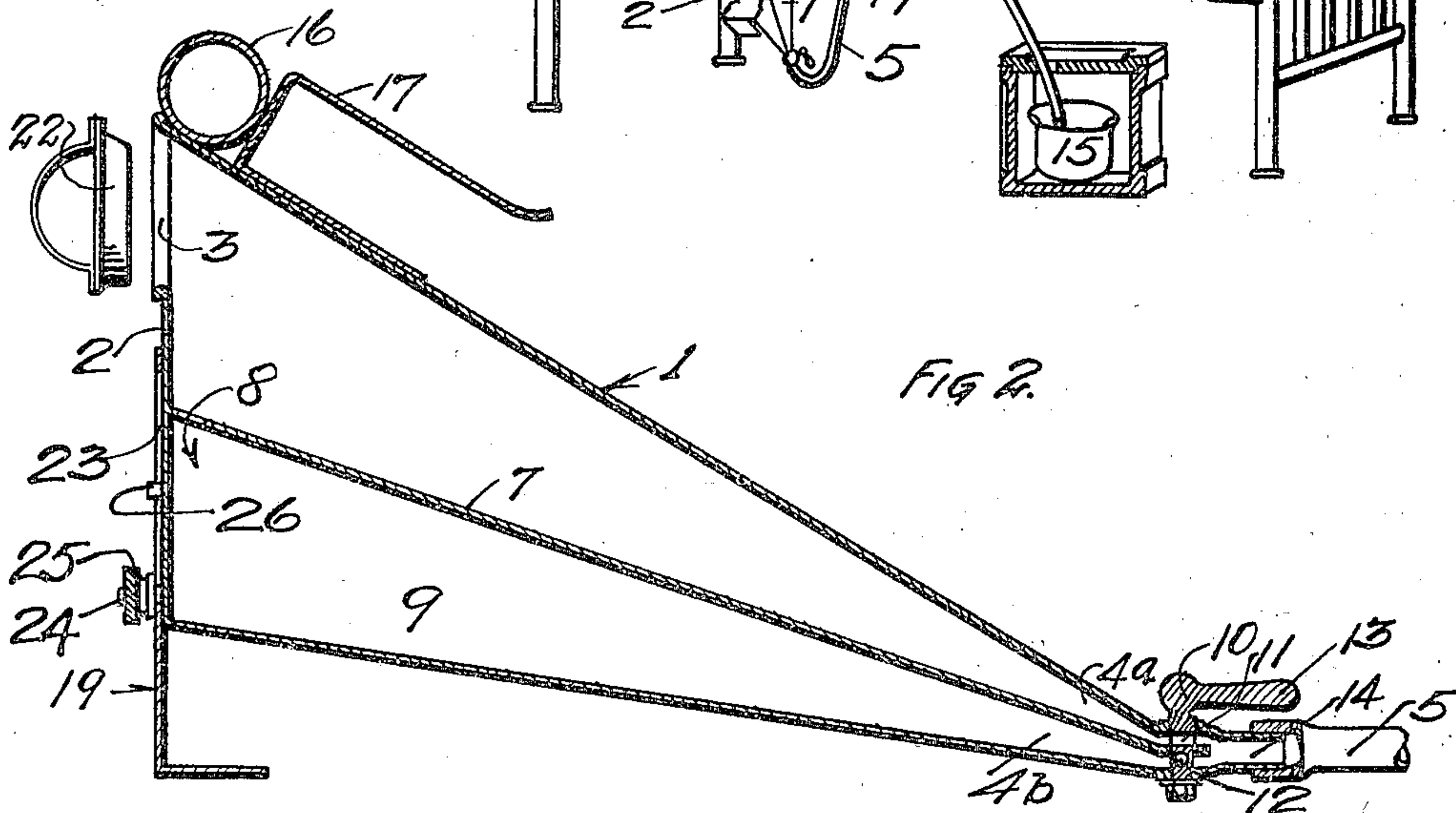


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

CLAUDE W. BUCKLEY, OF MEMPHIS, TENNESSEE.

URINAL.

Refiled for abandoned application Serial No. 181,710, filed July 20, 1917. This application filed May 26, 1919. Serial No. 299,732.

To all whom it may concern:

Be it known that I, CLAUDE W. BUCKLEY, a citizen of the United States residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Urinals, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates more particularly to devices to be used by invalids or other persons without the necessity of arising from a recumbent position. It is more especially designed for the use of males but may also be readily used by females by adding flange.

The objects of my inventions are to provide a device which will rest on and can be moved to any portion or position on the bed and which when so used will readily drain to a receptacle beneath one side of the bed, and to provide such a device with means of adjustment whereby the draining angle of the device may be readily varied. A further object is to provide means whereby the device may be closed off if it be necessary to remove or change the drainage tube, or if it be desired to use the device as an ordinary urinal separate from the tube, and to provide further means whereby, if the drainage be accidentally cut off, an auxiliary chamber will come into use, if needed to prevent overflow, with means of draining this auxiliary receptacle.

I accomplish these objects as will be more fully hereinafter set forth in the drawings, specifications and claims.

In the drawings:—

Figure 1 is a perspective of the urinal in its preferred form.

Figure 2 is a longitudinal section on the center line showing a modification.

Figure 3 is a perspective of an iron frame bed, showing the urinal hung on one of the side rails of the bed, with a flexible tube leading from the same to a vessel beneath the bed.

Referring now to the drawings in which the various parts are designated by reference numerals,

1— is the receptacle or urinal closed at its larger section or mouth by an end 2, 2— having an opening 3— through the upper

portion thereof and having its opposite or smaller end terminating in a tube 4, 4— adapted to be slipped into the end of a rubber tube 5— (Figures 2 and 3). It will be noted that the opening 3 is at the extreme top of the end 2, so that in case it should be desired to empty the urinal through that end, there would be no flange or other obstructions to interfere. 22 is a cover which may be used to close the opening 3 if it be so desired.

The receptacle 1— may be tapered from the larger end 2— to the smaller end 4—, or if desirable to increase the capacity and to eliminate all possibility of urine spattering outside, may be carried partway, say to the point 6— (Figure 1—) of uniform size, and tapered from there to the smaller end.

The receptacle 1— may be a single chamber, or as shown in Figure 2— in section, may be divided into two chambers by a partition 7—. In this case an opening 8— is formed in the partition 7— so that in case the upper chamber fails to properly drain, it will overflow into the lower or overflow chamber 9—. Both the upper chamber and the lower chamber 9— terminate at their smaller ends 4^a, 4^b, in a double valve 10— which has openings 11— and 12— respectively at right angle to each other. These openings are adapted to register with the openings 4^a, 4^b, respectively. The valve 10— has a single terminal 13—, with one opening 14— therethrough, connected to both the upper and lower openings 11— and 12—. The tube 5— leads from the terminal 13— to a vessel 15— situated below the bed (Fig. 3).

The valve 10— is normally so turned that the upper channel 4^a is left open into the tube 5— and the lower channel 4^b is closed. Should the overflow chamber 9— come into use it may be drained by turning the valve stem at right angles until the opening 12—, registers with the opening 4^b, and after draining should be again closed.

If desired a valve may be placed on the end 4— (Fig. 1) or the end 4— may be entirely closed, either by a permanent closure, not shown, or by a cap 21—which is adapted to slip over or screw on the end of the tube.

16— is a ring fastened to the larger end of the receptacle 1— by which it may be

lifted, and 17— is a hook-handle to be used as a handle, or to slip over the rail of the bed as a hook, to support the receptacle when not in use. If desired, the tube 5—
 5 may be fastened to the mattress by a pin 18— so that it will be in proper position to drain when the receptacle is put into use.

The drainage angle of the vessel may be varied by means of a support 19— having
 10 a foot portion 20— adapted to rest on the bed. This support 19— is provided with a slot 23— which embraces and slides on a threaded post 24— projecting from the end 2— and is held in position by a thumb nut
 15 25— on the said post. A pin 26— also projecting from the end 2— through the slot 23— serves as a guide.

By loosening the thumb nut 25— the support 19— may be lowered or raised and the
 20 draining angle increased or decreased, as may be desired. This support may be made stationary if desired, or it may be entirely removed and the larger end be supported by hand to provide drainage.

25 While I have illustrated and described the preferred form or construction for carrying my invention into effect, this is capable of a wide range of modification without departing from the spirit of my invention. I
 30 therefore do not wish to be limited to the details of construction herein set forth, but desire to avail myself of such variations and modifications as fairly fall within the scope of the appended claims.

35 What I claim and desire to secure by Letters Patent in the United States is:—

1. A device of the class described, for use in connection with a bed, comprising a tapering vessel, an end closing the mouth of the
 40 same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath said vessel adapted to support the same in a draining position and having its smaller end
 45 adjacent to the smaller end of the said vessel, a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends, a valve at the termination of the two smaller ends adapted nor-
 50 mally to close one and keep open the other of the said ends and adapted to reverse the opening and closing, a support beneath the said overflow chamber, means of adjusting the said support to varying heights, a re-
 55 ceptacle, and a flexible tube leading from the said valve to the said receptacle.

2. A device of the class described, for use in connection with a bed, comprising a tapering vessel, an end closing the mouth of the
 60 same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath the said vessel adapted to support the same in a draining position and having its smaller end
 65 adjacent to the smaller end of the said ves-

sel, a communicating opening from the said vessel to the said overflow chamber, adjacent to the said closed ends, a valve at the termination of the two smaller ends, the said valve having a rotatable stem with
 70 openings at right angles and adapted normally to close one and keep open the other of the said ends and when rotated to reverse the said opening and closing, a receptacle, and a flexible tube leading from the said
 75 valve to the said receptacle.

3. A device of the class described, for use in connection with a bed, comprising a tapering vessel, a tapered overflow chamber with closed mouth beneath the said vessel adapted
 80 to support the same in a draining position, and having its smaller end adjacent to the smaller end of the said vessel, a communicating opening from the said vessel to the said overflow chamber adjacent to the said
 85 closed ends, a valve at the termination of the two smaller ends adapted normally to close one and keep open the other of the said ends and adapted to reverse the said opening and closing, a receptacle, and a flexible tube
 90 leading from the said valve to the said receptacle.

4. A device of the class described, for use in connection with a bed, comprising a tapered vessel, a tapered overflow chamber, with
 95 closed mouth, beneath the said vessel adapted to support the same in a draining position and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said
 100 overflow chamber adjacent to the said closed ends, a valve at the termination of the two smaller ends, the said valve having a rotatable stem with openings at right angles and adapted normally to close the one and keep
 105 open the other of the said ends and when rotated to reverse the said opening and closing, a receptacle, and a flexible tube leading from the said valve to the said receptacle.
 110

5. A device of the class described, for use in connection with a bed, comprising a tapered vessel, having a partially closed mouth, a support adapted to rest on the horizontal surface of the bed, to hold the vessel in a
 115 draining position while in use, and means for adjusting the support to vary the inclination of the vessel, a valve at the smaller end of the vessel, a receptacle, and a flexible tube leading from the said valve to the said
 120 receptacle.

6. A device of the class described, for use in connection with a bed, comprising a tapering vessel, having a partially closed mouth, a supporting leg projecting below the
 125 said tapering vessel and adapted to rest on the horizontal surface of the bed, to hold the said vessel in a draining position while in use, a receptacle, a flexible tube leading from the vessel to the said receptacle, and means for
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closing the smaller end of the said vessel when the vessel is detached from the said tube.

7. A device of the class described, for use in connection with a bed, comprising a tapering vessel, a tapering overflow chamber with closed mouth beneath the said vessel adapted to support the same in a draining position, and having its small end adjacent to the small end of the said vessel, a communicating opening from the vessel to the overflow chamber adjacent to the said closed end, and a closure valve.

8. A device of the class described, comprising a tapering vessel, an end partially closing the mouth of the same, a tapered overflow chamber with closed mouth beneath the said vessel, adapted to support the same in a draining position, having its smaller end adjacent to the smaller end of the said vessel, a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends, a receptacle, and a flexible tube leading from the said ends to the said receptacle.

9. A device of the class described, comprising a tapering vessel, having a partially closed mouth, and a support comprising a leg projecting below the said tapering vessel and terminating in a foot adapted to rest on the horizontal surface of the bed, to hold the vessel in a draining position while in use.

10. A device of the class described, for use in connection with a bed, comprising a tapering vessel, a hook-handle thereon, an end closing the mouth of the same, a service opening through the upper portion of the said end, a cover for the said service opening, a tapering overflow chamber, with closed mouth beneath the said vessel adapted to support the same in a draining position and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed end, means at the termination of the two smaller ends adapted to close one and keep open the other of the said ends, and to reverse the said opening and closing, a support beneath the said overflow chamber, receptacle, and a flexible tube leading from the said small ends to the said receptacle.

11. A device of the class described, for use in connection with a bed, comprising a tapering vessel, a hook-handle thereon, an end closing the mouth of the same, a service opening through the upper portion of the said end, a cover for the said service opening, a tapering overflow chamber with closed mouth beneath the said vessel adapted to support the same in a draining position and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said

closed end, means at the termination of the two smaller ends adapted to close one and keep open the other of the said ends, and to reverse the said opening and closing, a support beneath the said overflow chamber, means of adjusting the said support to varying heights, a receptacle, and a flexible tube leading from the said small ends to the said receptacle.

12. A device of the class described, for use in connection with a bed, comprising a tapering vessel, a hook-handle thereon, an end closing the mouth of the said vessel, a service opening, a tapering overflow chamber with closed mouth beneath the said vessel adapted to support the same in a draining position, and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed end, a valve at the termination of the two smaller ends adapted normally to close one and keep open the other of the said ends, and adapted to reverse the said opening and closing, a support beneath the said overflow chamber, a means of adjusting the said support to varying heights, a receptacle, and a flexible tube leading from the said valve to the said receptacle.

13. A device of the class described, for use in connection with a bed, comprising a tapering vessel, an end closing the mouth of the same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath the said vessel, and having its smaller end adjacent to the smaller end of the said vessel; and a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends.

14. A device of the class described, for use in connection with a bed, comprising a tapering vessel, an end closing the mouth of the same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath the said vessel and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends, and a support beneath the said overflow chamber.

15. A device of the class described, for use in connection with a bed, comprising a tapering vessel, an end closing the mouth of the same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath the said vessel, and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends, and means for closing both of the said smaller ends.

16. A device of the class described, for use

in connection with a bed, comprising a tapering vessel, an end closing the mouth of the same, a service opening through the upper portion of the said end, a tapering overflow chamber with closed mouth beneath the said vessel and having its smaller end adjacent to the smaller end of the said vessel; a communicating opening from the said vessel to the said overflow chamber adjacent to the said closed ends, a support beneath the said overflow chamber and means of adjusting the said support.

17. A device of the class described, for use in connection with a bed, comprising a tapering vessel, having a partially closed mouth, a cover for completely closing the same, a support to hold the vessel in a draining position and means of adjusting the support to vary the inclination of the vessel, a handle-hook attached to the said vessel, a drainage opening in the smaller end, a means for closing the same, and a detachable tube leading from the said opening to a receptacle.

18. A device of the class described, for use in connection with a bed, comprising a tapering vessel, having a partially closed mouth, a cover for completely closing the same, a support to hold the vessel in a draining position, and means of adjusting the support to vary the inclination of the vessel, a drainage opening in the smaller end, a means for

closing the same, and a detachable tube leading from the said opening to a receptacle.

19. A device of the class described, comprising a tapering vessel, an end closing the larger end of the said vessel, a service opening through the upper portion of the said end, a supporting member adjustably fastened to the said end and projecting below the same to provide a support to hold the said vessel in a draining position, means for adjusting the position of the said supporting member to vary the draining angle of the said vessel.

20. A device of the class described, comprising a tapering vessel, having a partially closed mouth, a support comprising a leg projecting below the said tapering vessel and terminating in a foot adapted to rest on the surface of the bed to hold the said vessel in a draining position, and means for adjusting the length of the said leg to vary the draining angle, an opening in the smaller end, means for closing the said opening and a detachable tube leading from the said opening to a receptacle.

In testimony whereof, I have hereunto subscribed my name.

CLAUDE W. BUCKLEY.

Witnesses:

W. C. MONTGOMERY,
JACK HARRIS.