W. H. CRUTCHER & G. C. DAVIS.

GLASS IRRIGATOR.

APPLICATION FILED JAN. 17, 1914.

1,113,757.

Patented Oct. 13, 1914.

Fig. 1.

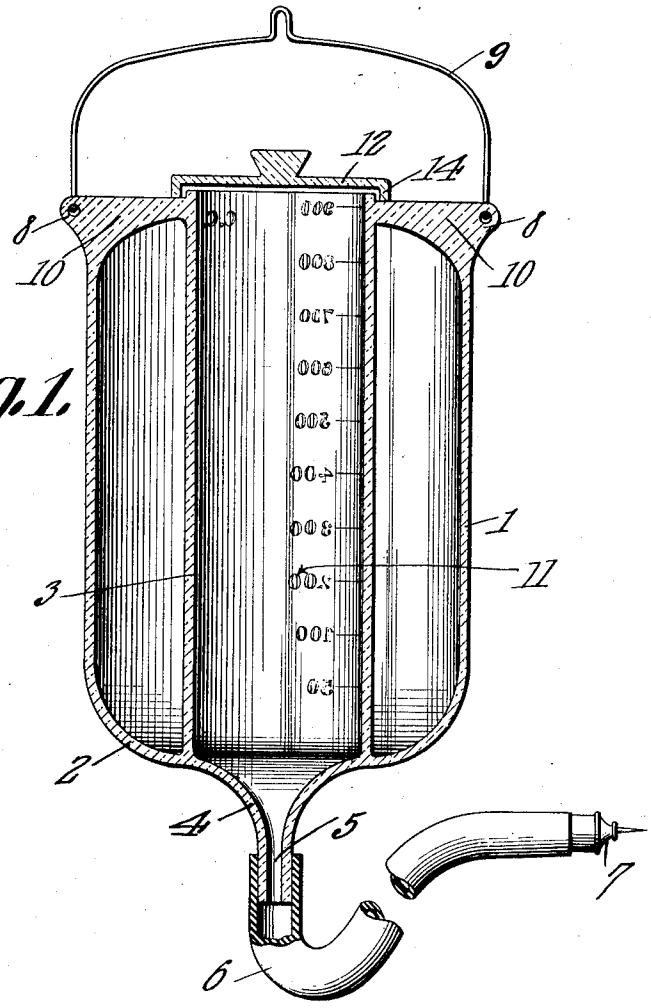
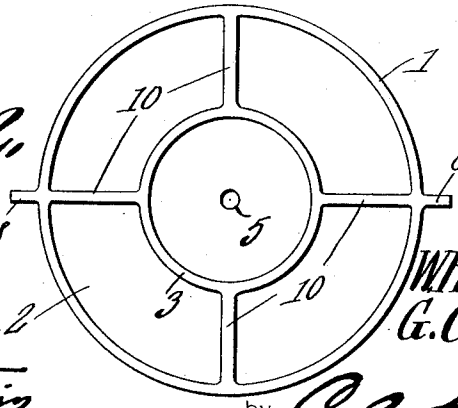



Fig. 2.




Witnesses

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# UNITED STATES PATENT OFFICE.

WILFORD H. CRUTCHER AND GLENN C. DAVIS, OF INGLESIDE, NEBRASKA.

## GLASS IRRIGATOR.

1,113,757. Specification of Letters Patent. Patented Oct. 13, 1914.

Application filed January 17, 1914. Serial No. 812,817.

*To all whom it may concern:*

Be it known that we, WILFORD H. CRUTCHER and GLENN C. DAVIS, citizens of the United States, residing at Ingleside, in the county of Adams, State of Nebraska, have invented a new and useful Glass Irrigator, of which the following is a specification.

The device forming the subject matter of this application is a tank or container adapted to hold liquids which are injected into the human system at a temperature approximating body heat.

One object of the present invention is to provide a container or tank so constructed that a solution of any desired sort may be kept warm while the same is being used.

Another object of the invention is to reinforce and strengthen a device of the class described.

The invention aims to provide a means whereby the solution will be protected and be maintained sterile and, at the same time, be permitted to flow away.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawing:—Figure 1 shows the invention in vertical longitudinal section; Fig. 2 is a top plan, parts being removed.

The container herein disclosed preferably is fashioned from a glass and comprises an outer tube 1 and a bottom 2 to which is secured an inner tube 3 which may be graduated as indicated at 11. The capacities of the two tubes may be varied as circumstances may require. In the bottom 2 of the container there is an outlet 5 taking the form of a nipple 4 to which may be secured a flexible pipe 6 terminally provided with a needle 7. Ears 8 are formed upon the outer tube 1 adjacent its upper end, the ears 8 supporting a suspension device of some sort, such as a bail 9. Radial arms 10 connect the tubes 1 and 2 adjacent their upper ends. Certain of the arms 10 are alined with ears 8. A closure 12 for the inner tube 3 may be provided, the closure terminating in a depending flange 14, and the lower edge of the flange 14 resting upon the arms 10. In this manner, the body portion of the closure 12 is spaced apart slightly from the upper edge of the inner tube 3.

In practical operation, the fluid which is to be handled is placed in the inner tube 3, the graduations 11 being employed for determining the amount of fluid which is to be injected. Hot water is placed between the tubes 1 and 3, so that the contents of the tube 3 is water jacketed and maintained at a temperature approximating body heat. The contents of the inner tube 3 flow away through the pipe 6 and by means of the needle 7 is injected into the circulatory system of the patient.

The arms 10 may be omitted if desired but when employed they exercise three functions. First, they serve to sustain and strengthen the inner tube 3; secondly, since certain of the arms 10 are alined with the ears 8 which support the bail 9, the weight of the entire container and its contents is evenly distributed; third, the arms 10 engaging the flange 14 of the closure 12 serve to space the closure slightly apart from the upper edge of the inner tube 3, to the end that air may enter the inner tube and permit the solution within the inner tube to flow away readily.

Having thus described the invention, what is claimed is:—

1. A tank adapted to be used for the injection of a warm liquid into the human system and comprising an outer tube having a bottom, a portion of the bottom being depressed, prolonged and diminished in diameter to form an integral, tapered, pipe-receiving nozzle, there being an inner tube within the outer tube and connected integrally with the bottom along the line of union between the nozzle and the bottom, the inner tube forming a reinforcement for the bottom, the tubes being of approximately the same height, and both tubes being open at the top, the outer tube constituting a water jacket for the inner tube.

2. In a device of the class described, a container including an outer tube and a bottom; an inner tube connected with the bottom, the bottom having an outlet communicating with the interior of the inner tube;

arms extending between the tubes; ears on the outer tube and alined with certain of the arms; and suspension means connected with the ears.

3. In a device of the class described, a container including an outer tube and a bottom; an inner tube connected with the bottom, the bottom having an outlet communicating with the interior of the inner tube; arms extending between the tubes; and a closure for one tube supported by the arms and spaced by the arms from the top of said tube to afford an air inlet.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

WILFORD H. CRUTCHER.
GLENN C. DAVIS.

Witnesses:
L. B. NORRIS,
M. O'MEARA.