

No. 664,796.

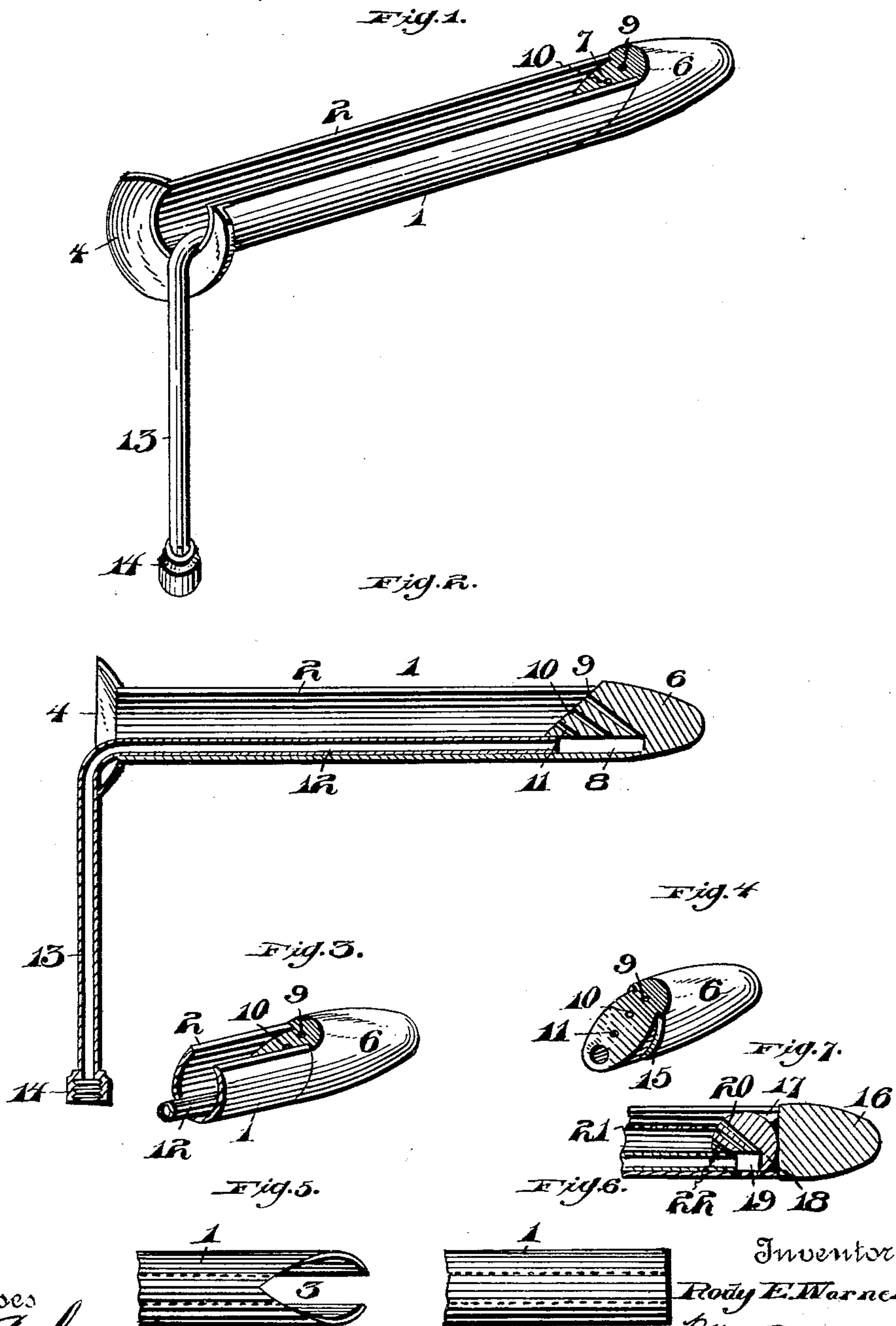
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R. E. WARNER.

RECTAL IRRIGATOR AND INSUFFLATOR.

(Application filed Apr. 2, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## RECTAL IRRIGATOR AND INSUFFLATOR.

SPECIFICATION forming part of Letters Patent No. 664,796, dated December 25, 1900.

Application filed April 2, 1900. Serial No. 11,137. (No model.)

*To all whom it may concern:*

Be it known that I, RODY E. WARNER, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rectal Irrigators and Insufflators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rectal irrigators and insufflators, and is particularly adapted for washing as well as impregnating sores, ulcers, or other conditions of disease within the rectum with various solutions and compositions.

The objects of the invention are, first, to construct an irrigator and insufflator of this character designed to be used in cleaning the interior of the rectum; second, to provide an irrigator and insufflator that may be used without a speculum; third, to provide an irrigator and insufflator that will not clog in the use thereof and which permits of a free discharge of the solutions and compositions from the rectum; fourth, to provide an irrigator and insufflator which when operated will cause the compositions or solutions injected through the same to come into contact with the ulcers, sores, or other diseased tissues in the rectum, and, fifth, to provide an irrigator and insufflator that can be easily inserted and removed from the rectum and which may be easily cleansed.

The invention particularly aims to construct an irrigator and insufflator with means to permit of the flow of fluids or compositions in such a manner that when discharged therefrom will come into contact with the sores, ulcers, or other diseased parts in the rectum, thoroughly impregnating and cleansing the former and permitting surplus fluid or composition to flow outwardly through the irrigator or insufflator.

The invention further aims to construct a rectal irrigator and insufflator which shall be extremely simple in its construction, strong, durable, and efficient in its use, and comparatively inexpensive to manufacture.

Briefly described the invention consists of a slitted tube or shell terminating into a conical-shaped end and provided with a reservoir

registering with a series of discharge-ports and a supply-tube secured to the inner face of the tube or shell and connected at one end to said reservoir and at its opposite end to a source of supply.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter described, and particularly pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a perspective view of my improved irrigator and insufflator. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a perspective view of a modified form, broken away. Fig. 4 is a perspective view of the cone-shaped end of the modified form. Fig. 5 is a bottom plan view of the forward end of the slitted tube, showing the cut-away portion in which the cone-shaped end is seated. Fig. 6 is a bottom plan view of the forward end of the slitted tube of the modified form. Fig. 7 is a vertical sectional view of a modified form of the forward end of the irrigator and insufflator.

Referring to the drawings by reference-numerals, 1 indicates the outer shell or tube cylindrical in form, and which is slitted at the top thereof, as at 2. The forward end of the shell or tube 1 is provided with a V-shaped cut-away portion 3, and the rear end is formed with an outwardly-extending annular flange 4 to arrest the inward movement of the shell 1 when inserted into the rectum.

Mounted within the forward end of the shell or tube 1 is the substantially cone-shaped head 6, having its rear end formed in an inclined manner, as at 7. The periphery of the head 6, near its rear end, is cut away in an inclined manner, forming a shoulder or offset, against which engages the edge of the V-shaped cut-away portion 3. The portion of the head 6 which extends within the shell or tube tends to prevent the collapsing of the latter and is welded or otherwise secured thereto in any desirable manner, and when in position the end of the shell or tube engaging the offset



of the head will be upon the same plane, making to all intents and purposes a single body. The head 6 is further provided in the lower side thereof with a recess 8, which may  
5 be of any desirable size and forms a reservoir for the reception of the liquids or compositions from a source of supply.

The reference-numerals 9, 10, and 11 indicate a series of rearwardly-extending discharge-ports arranged a suitable distance apart upon an inclination and having one end opening into the shell or tube and the opposite end communicating with the reservoir 8.

Connected at one end of the reservoir 8 is  
15 a supply pipe or tube 12, which is suitably secured to the bottom of the inner face of the tube or shell 1 and extends outwardly therefrom and has a portion thereof bent at an angle in relation to the tube or shell 1, as at  
20 13. This angular portion forms a handle to permit of the insertion of the irrigator and insufflator in the rectum. The outer end of the tube 12 is provided with a coupling or union 14 for connecting the former to a suitable source of supply.

In the modified form set forth in Figs. 3, 4, and 5 the construction of the irrigator and insufflator is the same as shown in Figs. 1, 2, and 6, with the exception that the shell or  
30 tube is not provided with the V-shaped cut-away portion. The end of the tube engages an annular offset or shoulder 15, formed upon the cone-shaped head.

In the modified form of construction shown  
35 in Fig. 7 I provide a solid cone-shaped head 16, with a flat lower face 17, the head being secured to the shell in any desirable manner, and arranged within the shell 1 and abutting against the flat face of the cone-shaped head  
40 is a sphere 18, provided with a reservoir 19, and the discharge-ports 20, 21, and 22 of a similar construction and arrangement, as heretofore referred to. The supply-tube 12 is secured to the reservoir 19. The discharge-  
45 ports of the cone-shaped head and sphere are arranged in the manner shown for the following reasons: that it is desirable to have the fluid or compositions discharged from the head or sphere backwardly against the sores,  
50 ulcers, and diseased tissues in such a manner that the former will come into direct contact and thoroughly impregnate and wash the latter. The surplus fluid or composition will then flow outwardly through the shell or tube  
55 1. I have found from practice that the ulcers, sores, or other diseased tissues usually form at about the same place within the rectum—that is to say, two, two and one-half, and three inches from the lower end of the  
60 same—and by arranging the discharge-ports a suitable distance apart they will cause the liquid or composition to be directed in such a manner that one of the sprays will come into contact with the sore, ulcer, or diseased tissue, while the other sprays will flow downwardly over the ulcer, sore, or diseased tissue. By forming the rear face of the cone-shaped

head in an inclined manner or using the sphere in the shell the least possible friction is created, and catching and pinching of the  
70 tissues is prevented when inserting or withdrawing the irrigator and insufflator. By providing the supply-tube with the angular end it will enable a patient to use the same without the assistance of any one.

The supply-tube for the liquid or composition is adapted to be connected to a syringe, pump, or other device for forcing the fluid or composition outwardly through the cone-shaped head or sphere.  
80

It is thought the many advantages of my improved construction in an irrigator and insufflator can be understood from the above description, taken in connection with the drawings, and it will be noted that changes  
85 may be made in the details of construction without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by  
90 Letters Patent, is—

1. In an irrigator and insufflator, a cylindrical shell slitted from end to end and provided at its rear end with a stop-flange, a cone-shaped head secured to the forward end of  
95 said shell, said head provided in its lower face with a reservoir and in its rear end with rearwardly - extending inclined discharge-ports communicating with said reservoir and shell, and a supply-tube secured within the  
100 shell with its forward end communicating with the reservoir and its rear end projecting outwardly from the shell and bent at right angles thereto, substantially as described.

2. In an irrigator and insufflator, a cylindrical shell slitted from end to end, said shell provided at its rear end with a stop-flange and having its forward end cut at an incline, a cone-shaped head secured to said inclined forward end of the shell, said head having its  
110 rear end cut at an incline conforming to the incline of the forward end of the shell, a reservoir located within said head, discharge-ports communicating with said reservoir and with the shell, and a supply-tube connected  
115 to the reservoir with its part outside the shell bent at right angles thereto, as and for the purpose specified.

3. In an irrigator and insufflator, a cylindrical shell having a stop-flange formed integral with its rear end and its forward end cut at an incline, said shell being slitted throughout its length, a solid cone-shaped head provided with an inclined rear face, said head rigidly secured to said shell, a reservoir  
120 located within the head, a series of rearwardly-extending inclined discharge-ports communicating with said reservoir and shell, and a supply-tube secured within the shell and connecting with said reservoir, substantially as  
125 described and shown.

4. The combination with a cylindrical shell slitted from end to end and having its rear end provided with an integral stop-flange, of



a solid cone-shaped head carrying a reservoir and provided with discharge-ports communicating with the reservoir and shell, and a supply-tube arranged within the shell, said supply-tube connected at its forward end to the reservoir with its rear end bent at right angles to the shell, as and for the purpose specified.

5. The combination with a cylindrical shell slitted from end to end, of a solid cone-shaped head rigidly secured to the forward end of said shell and carrying a reservoir communicating with the shell, rearwardly-extending inclined discharge-ports arranged in said head to register with the reservoir and shell, and a supply-pipe or tube arranged within the shell with the forward end connected to the reservoir and the portion outside the shell bent at right angles thereto to form a handle, substantially as shown and described.

6. In an irrigator and insufflator, a slitted shell, a cone-shaped head connected to said shell with its rear face formed at an incline, a reservoir arranged in said head and provided with a series of discharge-ports, and a supply-tube connected at one end to said reservoir and adapted to be connected at its opposite end to a source of supply.

7. In an irrigator and insufflator, a shell slitted from end to end, a cone-shaped head connected to the forward end of said shell, a reservoir arranged in said head and provided with a series of inclined discharge-ports, a supply-tube connected at one end to said reservoir, and means carried by the opposite end of said supply-tube for connecting the same to a source of supply.

8. The combination of the cylindrical shell slitted from end to end, the solid substantially cone-shaped head secured to the forward end of said shell, the reservoir located at the rear end of the head, the rearwardly-extending inclined discharge-ports communicating with said reservoir and the shell, and the supply-tube secured within the shell with its forward end connected to the reservoir and the portion outside the shell bent at right angles to form a handle, substantially as shown and described.

9. The combination, of the slitted cylindrical shell having the stop-flange formed integral with its rear end, the substantially cone-shaped head rigidly secured to the forward end of said shell, the reservoir located at the rear of said head, the discharge-ports communicating with said reservoir and shell, and the supply-tube secured to the inner face of the shell opposite the slit in said shell, said tube having its inner end connected to the reservoir and the portion outside the shell bent angularly to form a handle, substantially as shown and described.

10. The combination of the slitted shell having a stop-flange formed integral with its rear end, the substantially cone-shaped head rigidly secured to the forward end of said shell,

the reservoir carried by said head, the rearwardly-extending inclined discharge-ports arranged within the head and communicating with said reservoir and shell, and the supply-tube secured within the shell, said tube having its forward end connected to the reservoir and the portion outside the shell bent at right angles thereto with a coupling on its free end, as and for the purpose specified.

11. The combination with the slitted shell, of the substantially cone-shaped head secured to the forward end of said shell, the reservoir carried by said head, the discharge-ports arranged within the head and adapted to discharge the fluid from the reservoir at the rear face of the head, and the supply-tube connected to said reservoir, as and for the purpose specified.

12. The combination, of the cylindrical shell slitted from end to end, the supply-tube secured within the shell with the portion outside of the shell bent at right angles thereto, the substantially cone-shaped head secured to the forward end of said shell, the reservoir located at the rear of said head and connected to said supply-tube, and the discharge-ports so arranged as to discharge the fluid from the reservoir at the rear of said head, substantially as shown and described.

13. The combination of the slitted shell, the substantially cone-shaped head secured to the forward end of said shell, the series of rearwardly-extending inclined discharge-ports arranged within said head, the supply-tube in communication at one end with said discharge-ports, and the means carried by the opposite end of said supply-tube for connecting the same to a source of supply.

14. The combination with the slitted shell, the substantially cone-shaped head secured to the forward end of said shell, the series of rearwardly-extending inclined discharge-ports arranged within said head, the supply-tube in communication at one end with said discharge-ports, the means carried by the opposite end of said supply-tube for connecting the same to a source of supply, and the stop-flange formed integral with the rear end of said shell.

15. In an irrigator and insufflator, a slitted shell, a head secured to the forward end thereof and provided with a series of rearwardly-extending inclined discharge-ports, a supply-tube secured within said shell and having a portion thereof extending from said shell at an angle thereto, said supply-tube having its forward end connected to said head and in communication with said discharge-ports, and a coupling secured to the rear end of said tube for connecting the same to a source of supply.

16. In an irrigator and insufflator, a slitted shell, a head secured to the forward end of said shell and provided with a series of discharge-ports, a stop-flange formed integral with the rear end of said shell, a supply-tube



arranged within said shell and having its forward end connected to said head and in communication with said discharge-ports and having a portion extending from the said shell  
5 at an angle thereto, and a coupling secured to the rear end of said tube for connecting the same to a source of supply.

In testimony whereof I affix my signature in the presence of two witnesses.

RODY E. WARNER.

Witnesses:

JOHN NOLAND,  
N. L. BOGAN.