

No. 866,180.

PATENTED SEPT. 17, 1907.

C. T. BALL.
COMBINED APPLICATOR AND DILATOR.
APPLICATION FILED JUNE 13, 1907.

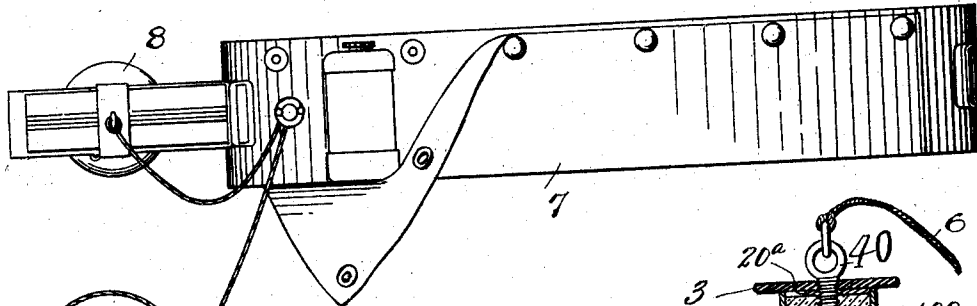


Fig. 1.

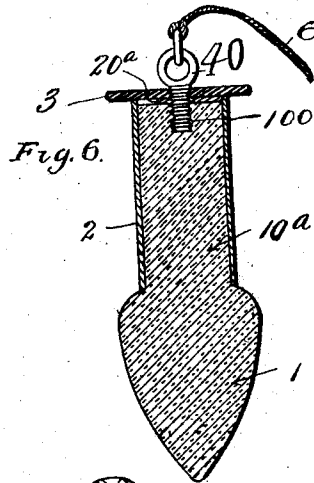


Fig. 6.

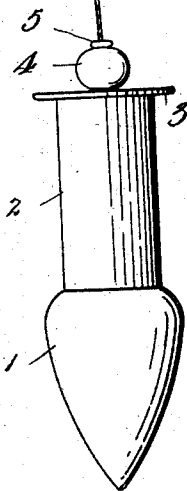


Fig. 3.

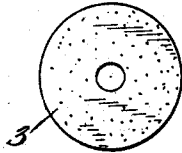


Fig. 4.

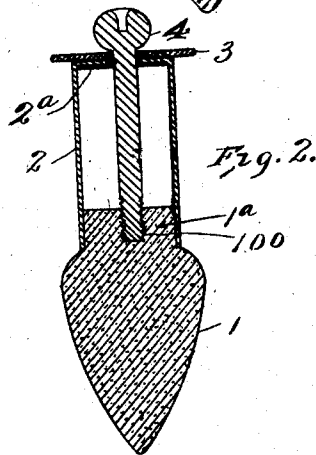
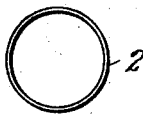
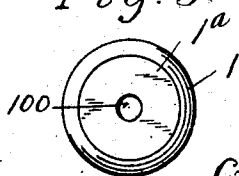


Fig. 2.

Fig. 5.



Witnesses.

Fay Graham
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Inventor.

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UNITED STATES PATENT OFFICE.

CUTLER TAYLOR BALL, OF DECATUR, ILLINOIS.

COMBINED APPLICATOR AND DILATOR.

No. 866,180.

Specification of Letters Patent.

Patented Sept. 17, 1907.

Application filed June 13, 1907. Serial No. 373,863.

To all whom it may concern:

Be it known that I, CUTLER TAYLOR BALL, a citizen of the United States, and a resident of Decatur, in the county of Macon and State of Illinois, have invented a certain new and useful Combined Applicator and Dilator; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to surgery, and more especially to that class of devices designed for treating certain parts or organs of the human anatomy by the application of a medicament thereto; and the invention comprises the use of an applicator, dilator, pessary, suppository, or the like; in connection with a source of electricity such as a medical belt, and a connection between this source and the instrument itself so as to impart a gentle current to the organ being treated at the same time that the medicament is having its effect thereon.

To this end the invention consists in the construction set forth below, and shown in the drawings wherein—

Figure 1 is a general elevation of the complete invention; Fig. 2 is a central vertical section through the instrument; Fig. 3 is a plan of the shield; Fig. 4 is a plan of the sleeve; Fig. 5 is a plan of the body; and Fig. 6 is a central vertical section of a slightly different form of the instrument.

The instrument proper, best shown in Figs. 2 and 6, comprises a body with a head 1 of ovoid configuration or shaped substantially like the ordinary form of suppository, and a cylindrical shank 1^a having a threaded hole 100 as shown in Figs. 2 and 6. In Fig. 2 the shank is shorter than that numbered 10^a in Fig. 6. This body may be of glass, hard rubber, or other non-conducting material, but it is not beyond the province of my invention that it should be of metal and hence a conductor of electricity, and therefore I do not limit myself in this particular.

The numeral 2 designates a cylindrical sleeve of metal which at its lower end is slipped onto and tightly embraces the shank of the body, whether the latter be long or short. In Fig. 2 the upper end of this sleeve is closed as at 2^a by a cap or plate, and in Fig. 6 a plate 20^a extends radially inward from one side of the sleeve past its center. Through this plate is passed a screw 4 which makes electric contact with it and whose threaded end takes into the hole 100 in the shank of the body; and between the head of the screw and the upper end of the sleeve is preferably clamped a shield 3 as of fiber or other non-conducting material

The numeral 7 indicates broadly an electric or galvanic battery in the form of a belt such as is worn upon the body, and 8 is an absorbent pad included in the battery, carried by this belt and intended to contact with the flesh. From this pad leads a wire 6 which connects either directly with the screw as seen in Fig. 6 or with a plug 5 which is inserted into a socket in the screw as seen in Fig. 1—the construction being such in any event that there shall be a current from the pad through the wire, the screw, and the plate, to the shield.

In use, the head 1 of the body is lubricated with some suitable medicament such as oil and is inserted in or applied to the organ to be treated. The electric connection is made with the belt, the latter placed on the body, and the pad saturated with a medical solution to which is added alcohol or some other liquid which will evaporate under the action of the heat of the body—the purpose being that in a reasonable time the pad will dry out and the circuit will cease to flow. Said circuit leads from the pad, to and through the instrument, to the part being treated, and returns through the patient's body to the point of starting. Obviously if the body 1 is of a non-conductor, the current reaches the patient only through the sleeve 2, whereas if it is of a conducting material the entire surface of the body and the head of the instrument will convey the current gently to the organ being treated and will distribute it over a larger surface in case such organ is sensitive.

What is claimed as new is:

1. The herein described applicator, the same comprising a body, a metallic sleeve thereon, a screw connecting the parts, and a plate connecting the sleeve and screw; combined with a source of electricity, and a wire connecting said source and screw.
2. The herein described applicator, the same comprising a body having a head and a cylindrical shank, a sleeve surrounding the shank and having a plate at its upper end, and a screw passing through said plate and sleeve and taking into the shank; combined with a source of electricity, and a wire connecting said source and screw.
3. The herein described applicator, the same comprising a body having a head and a cylindrical shank, a sleeve surrounding the shank and having a plate at its upper end, a screw passing through said plate and sleeve and taking into the shank, and a non-conducting shield between the head of the screw and said plate; combined with a source of electricity, and a wire connecting said source and screw.
4. The herein described applicator, the same comprising a body having an enlarged head and a reduced cylindrical shank, a sleeve whose lower end surrounds the shank and whose upper end is closed by a plate, a non-conducting shield covering said plate, and a screw passing through the shield and plate and taking into the shank; combined with a source of electricity, and a wire connecting said source and screw.

5 The herein described applicator, the same comprising a body of non-conducting material consisting of an enlarged head and a reduced shank, a sleeve of conducting material surrounding the latter, a shield of non-conducting material across the upper end of the sleeve, a screw passing through the shield and sleeve and taking into the shank, the screw having a socket in its upper end, and an electrical connection between said sleeve and screw; combined with a source of electricity, a wire leading from

said source, and a plug on the wire adapted to fit said 10 socket.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

CUTLER TAYLOR BALL.

Witnesses:

J. N. BALL,
EDW. EAKIN.