

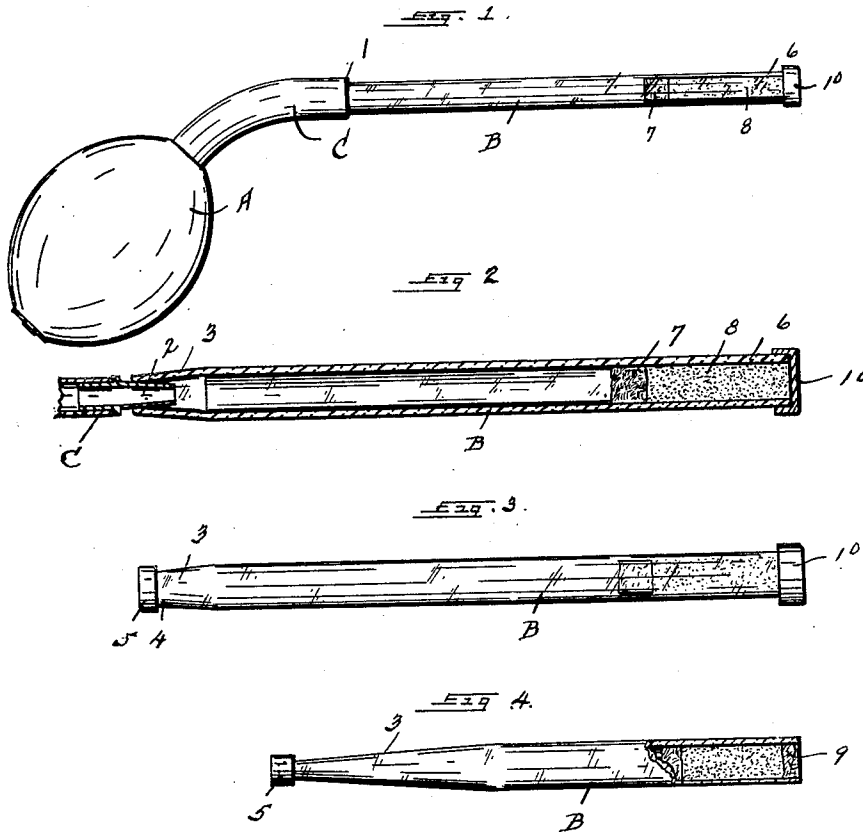
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B. REES

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CARTRIDGE FOR MEDICINAL APPLICATIONS

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Inventor

Byron Rees.

By

R. M. Thomas

Attorney

UNITED STATES PATENT OFFICE

BYRON REES, OF SALT LAKE CITY, UTAH

CARTRIDGE FOR MEDICINAL APPLICATIONS

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My invention relates to surgical instruments and more particularly to cartridges for medicinal application of powders to various portions of the human anatomy.

5 A further object is to provide a cartridge which will be filled at the factory with the proper proportions of combination powders for different diseases and afflictions of the body and which cartridge when used may then be thrown away.

10 A still further object is to provide an economically manufactured device for treating the human body and which device will be sanitary, as it is never used but once.

15 A still further object is to provide an air pressure force feed for powders when it is desired to distribute them over an area within the human body, which powders will be put up in sanitary glass tubes, having both ends sealed to keep the powder dry and which tube after use will be thrown away. The powder will be carried in the tube so that it will remain in one compact position and the end of the tube will be closed by a cap, and the end of the powder will be held by a soluble cellulose pad or wad. When the air is forced through the tube the pad will force all of the powder from the end of the tube, thereby providing absolute means of forcing a measured dose of powder from the tube onto or into the affected parts.

25 These objects I accomplish with the device illustrated in the accompanying drawing in which similar numerals and letters of reference indicate like parts throughout the several views and as described in the specification forming a part of this application and pointed out in the appended claims.

30 In the drawing in which I have shown the best and most preferred manner of building my invention Figure 1 is an elevation of the device. Figure 2 is a longitudinal section of the cartridge. Figure 3 is a side elevation of a loaded cartridge before it is attached to the bulb. Figure 4 is an elevation of a modified cartridge, parts shown sectioned with the closure cap not used showing a cellular pad or plug in the end.

35 In the drawing I have shown the bulb A, by which the powder is blown from the tube

or cartridge B, as connected therewith by a tube C. The end of the tube may be forced over the end of the cartridge as at 1, or the tube may be provided with a tapered metal end 2, said end adapted to be pushed into the end of the cartridge tube B, and held therein by friction. One end 3 of the tube may be constricted to allow the tube C to be forced thereover or the end may be enlarged to allow a larger tapered end 2 to be placed therein. The bulb B and the tube C are of the conventional style and may be taken from other medical instruments if desired. The cartridge tube B is made of glass or other suitable material and has the end 4 onto which the tube is to be secured closed by a cap 5. Into the end 6 of the tube, I then force a plug of soluble cellulose 7, or other similar material, and then fill the end of the tube with the desired dosage of powder 8. Another plug 9 of cellulose may then be inserted into the end of the tube to hold the powder in place or the end of the tube may be closed by a cap 10.

40 This provides a sanitary means of treating with powder, wherein a tube is used only once and then discarded. The powder in the tube is completely cleaned therefrom by the plug 7. The plug or plugs are soluble in the body secretions and moistures and do not injure the part being treated. The plug tends to raise pressure and gives quick explosive effect which aids in spreading the powder.

45 It will be obvious that a plug of some other material might be used in the tube and when the tube is used in places where it is not desired to leave the plug it may be withdrawn by means of thread being carried therewith.

The tubes may be wrapped and sold in separate sterile packages or in series of any number in a package.

Having thus described my invention I desire to secure by Letters Patent and claim:

1. In a device of the class described the combination of a tube; a pad of soluble material carried therein; a dosage of medicine carried in said tube adjacent said pad, having the end of said tube closed by a cap.

2. In a cartridge for use in medicinal treatments the combination of a tube having spaced

apart soluble plugs securing a predetermined medicinal dosage in said tube; and means to force said plugs, and dosage from said tube by air pressure.

- 5 3. In a device of the class described the combination of a tube having one end open and the other end tapered to a smaller opening than the diameter of the tube; a soluble pad inserted into the open end of said tube;
- 10 a dosage of medicine placed within said tube adjacent said pad; a cap for the end of said tube to enclose the open end and retain the medicine therein; and an air pressure bulb having the tube provided with a tapered met-
- 15 al end to be inserted into the tapered end of the tube to force air currents through said tube and force the medicine and pad out of the tube onto the parts desired after the cap has been removed.
- 20 4. In a device of the class described the combination of a tube; means to introduce air pressure into one end thereof; a pad of soluble material placed in said tube near the open end thereof; a dosage of medicine placed in said
- 25 tube adjacent said pad; a cover for the open end of said tube.

In testimony whereof I have affixed my signature.

BYRON REES.

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