(No Model.)

M. B. SMITH.

DEVICE FOR ADMINISTERING ANÆSTHETICS.

No. 414,454. Patented Nov. 5, 1889.

Fig. 1.

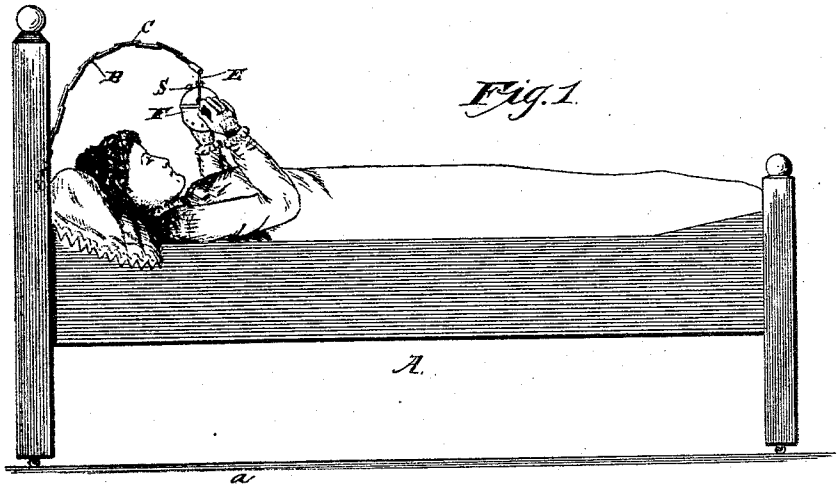


Fig. 2.

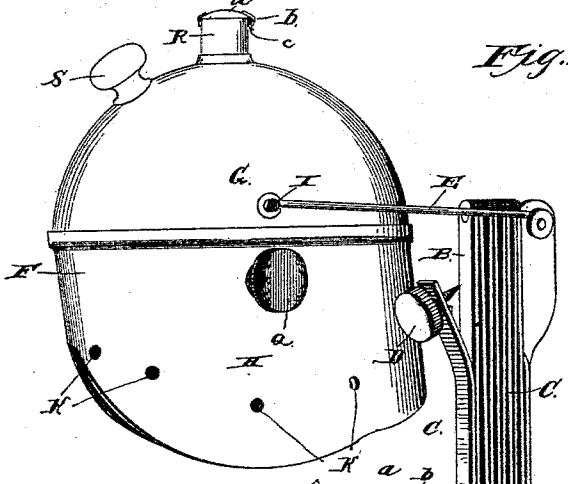


Fig. 3.

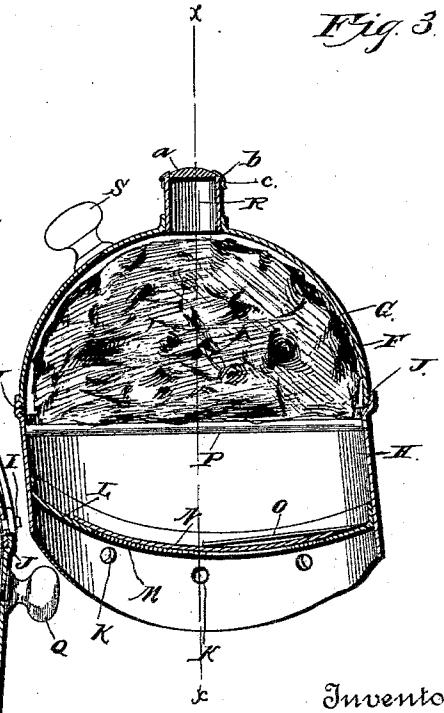
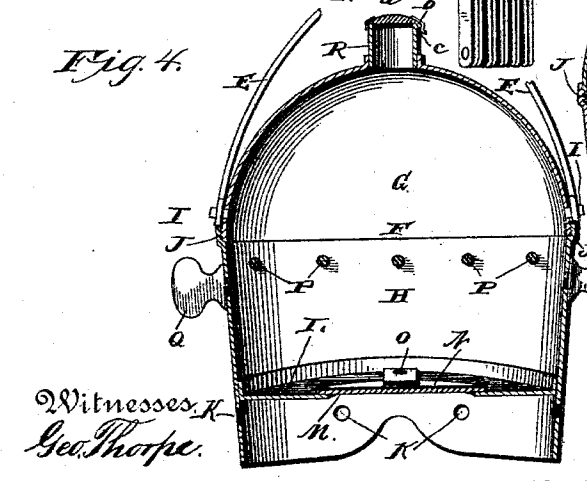


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

MARK BARTON SMITH, OF McPHERSON, KANSAS.

DEVICE FOR ADMINISTERING ANÆSTHETICS.

SPECIFICATION forming part of Letters Patent No. 414,454, dated November 5, 1889.

Application filed January 30, 1889. Serial No. 298,081. (No model.)

To all whom it may concern:

Be it known that I, MARK BARTON SMITH, a citizen of the United States, residing at McPherson, in the county of McPherson and State of Kansas, have invented new and useful Improvements in Devices for Administering Anæsthetics, of which the following is a specification.

My invention relates to improvements in devices for administering anæsthetics; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a bedstead and my improved device applied thereto. Fig. 2 is a perspective view of the device, showing it arranged in a small compass for carrying; and Fig. 3 is a detail sectional view of the cup. Fig. 4 is a section on the line *x x* of Fig. 3, with the sponge removed.

Referring to the drawings by letter, A designates a bedstead of the usual or any preferred construction.

B designates a spring, which is made in a series of small sections C, which are pivotally connected at their ends, as shown. The lower link or section of the spring is provided at its free end with a set-screw D, which is forced into the head-board of the bedstead to secure the device thereto. To the upper end of the upper section C of the spring I pivot the ends of the diverging supporting arms or rods E E, between the outer ends of which I pivotally mount the cup F, which contains the anæsthetic. The cup is made in two sections G H, as shown, and is mounted between the ends of the supporting arms or rods by having the lugs or trunnions I on the side of the section G engage suitable bearing loops or eyes at the ends of the said arms or rods. The two sections of the cup are connected by a screw-thread J, so that the section H can be easily removed to facilitate the insertion of the sponge to contain the anæsthetic. The section H is provided with an approximately-elliptical edge, so as to fit over the mouth and nose of the patient, and near said edge it is provided with a series of transverse perforations K, to permit access of the air to the vapor before it is inhaled. The section H is also provided with a partition L, having a central opening M, and having a valve N on its inner side adapted to cover said opening. The said valve is held normally over said opening by a small spring O, secured to the partition and bearing upon the valve. A series of cross bars or rods P are secured within the section H of the cup, so as to hold the sponge off the valve, and the section is further provided on its outer side with the handles Q, which are to be grasped by the patient when applying the device. The section G of the cup is bowl-shaped, and is provided at the center of its convex surface with a small inlet-tube R, through which the anæsthetic is fed into the cup, and the said section is provided with a single handle S, so that the device can be applied with a single hand, if so desired.

My device is intended for use in surgical operations, and is designed more especially for use in cases of child-birth.

The device is secured to the bedstead so that the cup will hang over the head of the patient, as shown in Fig. 1. The patient draws the cup downward, so that it will cover the mouth and nose, the nose bearing against the valve, so as to open the same, and thus allow the vapor to be inhaled. When insensibility has been produced, the handles are released, and the spring then raises the cup from the head of the patient.

The anæsthetic is held in the cup by a sponge placed therein, and is fed thereto through the inlet-tube, as before stated. This inlet-tube is provided at its open outer end with a small lid or cap *a*, which has a spring-latch *b* at one side, which engages a lug *c* on the side of the inlet-tube, so as to hold the lid over the tube and prevent the escape of the vapor.

My device is very simple and efficient, and when not in use can be folded into a small space, as shown in Fig. 2. The construction of the spring also enables the user to adjust the device to the desired height.

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

1. A device for use in administering anæsthetics, comprising a spring adapted to be secured to a bedstead and an anæsthetic-hold-

ing cup loosely hung on the free end of said spring, as set forth.

2. The combination of the spring, the supporting-arms pivoted to the free end of said spring, and the cup having the lower ends of said arms pivoted to its sides, whereby the cup may be readily accommodated to the position of the patient's head, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MARK BARTON SMITH.

Witnesses:
JNO. M. KIRKBRIDE,
M. B. WEAVER.