

SOUCHON (ED.)

A new apparatus for
administering anesthetics

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Reprint



A NEW APPARATUS FOR ADMINIS- TERING ANESTHETICS.

IN FACE AND MOUTH OPERATIONS.

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[Dr. Souchon applied for a patent for his anestheticizer to test the originality of his invention. Having succeeded in this, he now waives all his rights and privileges in all cases where the patent is used for medical purposes only.]



SOUCHON'S ANESTHETIZER.
GEO. TIEMAN & Co., MANUFACTURERS, 107 PARK ROW, NEW YORK.

This new apparatus has for its object to force the vapor alone of anesthetics into the pharynx through a tube passed into the nose or mouth, or to force the vapor into a cone.



I call this apparatus by the newly coined word, "anesthetizer," because such a device requires really a new word to express its mode of action, which is active since the vapor is *forced* out of the receptacle into the patient by an agent which is outside of the patient, who is himself passive; whereas inhalers are passive and require the exposure to the air of the anesthetic for their proper working, and require also an active coöperation from the patient.

It consists of a receptacle or bottle of suitable size with a stopper traversed by two tubes, an inlet and an outlet tube, *neither of which dips into the liquid anesthetic, but stops close to the stopper.* The two tubes are of the same diameter throughout and at both extremities, about one-quarter of an inch more or less.

The inlet tube is connected with a compressible bulb which is fixed at *both ends* to the receptacle by a simple metallic frame, so that the apparatus can be readily held and worked with one hand, leaving the other hand free to take care of the pulse.

A ring adapted to the frame on the side opposite to the bulb, and through which a finger is passed, assists in the working.

The outlet tube from the stopper is provided with a rubber tube of suitable length which is connected with a cone, or is introduced through the nose or through the mouth into the lower pharynx.

The receptacle or bottle is filled one-third full only with an equal mixture of chloroform and ether.

It is emptied by simply removing the cork or through a funnel.

To guard against any possibility of forcing the liquid anesthetic through the outlet tube, and also to guard against any spilling, so as to enable the anesthetist to lay the bottle on the bed or table without any apprehensions as to the consequences, it may be

well to fill loosely the bottle with absorbent cotton to imbibe and hold the anesthetic; a sponge or any absorbent material will do as well.

Without such an efficient and simple apparatus it is impossible to make a *daily practical success* of maintaining anesthesia in all operations on the face or its orifices, when otherwise the cone or mask has to be removed every few minutes to uncover the field of the operation to enable the operator to proceed. Soon after the inhaler is removed, the patient recovers from the effects of the anesthetic and the operator has to stop to allow the cone or mask to be applied over the face. With this anesthetizer anesthesia is maintained uninterruptedly.

It is a great saving of time, pain, bleeding and shock to the patient, thereby contributing materially to the saving of life in operations which for the most part are long and bloody and often bring the patient to death's door. It is also a great saving of mental strain to the surgeon who can proceed rapidly and uninterruptedly with the operation.

After the patient has been *anesthetized in the ordinary manner*, the nasal tube should be introduced down into the *lower pharynx*, otherwise the patient breathing through the mouth may not inhale sufficiently of the anesthetic.

By compressing the bulb at the onset of an inspiration is best; this rule compels a closer watch over the respiration.

By compressing the bulb more or less rapidly and thoroughly, the amount of the anesthetic is regulated; this must be borne in mind lest too much anesthetic be given. It does not require much anesthetic to maintain the anesthesia after the *patient has been well anesthetized*.

This apparatus was employed throughout a whole

operation by the author in a case of tumor of the superior maxilla which was operated upon by Dr. A. W. de Roaldes. It was the case of a boy 11 years old where a portion of the right superior maxilla had to be gouged for a most interesting case of odontoma. The patient was anesthetized by the ordinary method, but from the moment the operation began, the anesthesia was kept up by the above means, for over an hour, to the thorough satisfaction of all present. The operator did not stop one minute during the operation until it was completed. The anesthesia was complete all the time. At one time the head had been lowered (Rose's position), and kept in that position quite a long time, without interfering with the administration of the anesthetic. Barely three-quarters of an ounce of chloroform and ether was used.

The apparatus was also used in the amphitheatre of the Charity Hospital on a patient from the service of the author (Ward Two). It was the case of a mulatto adult whose chin and lower jaw had been shot off, leaving a large gap which had to be closed by a plastic operation. Dr. Matas was kind enough to operate while the author administered the anesthetic with his apparatus. The operation was performed before the class of Tulane Medical College and of the members of the Polyclinic. The anesthesia lasted one hour and three-quarters with perfect satisfaction. No bad after effects followed in *either* of the two cases. The apparatus was later on used in other cases with equal satisfaction.

Dr. A. L. Metz, Demonstrator of Practical Chemistry in the Tulane Medical College, says that there are *eight parts of air to one of chloroform* forced out of the receptacle at each compression of the bulb when chloroform alone is used.



