

push the bladder further toward the midline and the peritoneal fold upward.

It is advisable to fill the bladder to a moderate degree,—as with about 200 c. c. of boric acid solution. When the outer margin is located, it is advisable to empty the bladder, as the filled organ rather obstructs the field of operation. A retractor now holds the bladder toward the right and exposes the cervix for the incision. A finger is introduced immediately into the mouth of the child to rotate the head and a short forceps delivers the child. Now follows the manual removal of the placenta through the wound, though some operators advise the natural route for removal of the placenta. The suture of the cervix, preferably a continuous suture, is quickly done. The bladder is replaced and the muscles and skin are united in the usual way. A small drain, which is removed in from one to three days, depending on the amount of drainage, is advisable, but is not absolutely essential.

Note:—Since presenting the above paper I have performed two more operations of this kind with very satisfactory results; both children living, and both mothers making uneventful recoveries.

DISCUSSION

Dr. W. D. Haggard, Nashville, Tenn.—I have had no occasion to employ the extra-peritoneal method. I had gotten the impression that it was very difficult to do. The eight or ten cases of Caesarean section which I have done have been clean cases and there has been no mortality. In cases where futile attempts have been repeatedly made by forceps and where a patient was infected this method can be easily used from what I gather from the essayist. They are the very cases that are so notoriously dangerous for intra-peritoneal Caesarean section. The child is thus given the opportunity for life, and, of course, the mother is given her best chance also. It is well known if we do the ordinary transperitoneal operation in the infected cases the mortality is extremely high.

It seems to me that this type of approach would enable one to extend the benefits of Caesarean section to the infected and the frequently manipulated and potentially infected cases, and if so it, therefore, ought to be of great value.

Dr. Kohlmann (closing).—It seems to me, gentlemen, that this procedure, though difficult, is a very important one, and I believe will have a future. It took some time and long consideration for me to make up my mind to do the operation. But, as you see in my record, after employing it I felt that the procedure was not so difficult as I had feared. One fact especially

struck me as an advantage; there is less bleeding than in the high transperitoneal incision on account of the cervix's being greatly thinned out.

I want to draw your attention to one point which I did not emphasize sufficiently, and which in one case made me change to a low transperitoneal incision. To locate the bladder it is advisable to fill the bladder with 2 % boracic acid solution—about 160 c. c. But as soon as the bladder is located it is necessary to evacuate the fluid, as the distended bladder obstructs the field of operation.

A NEW DEVICE FOR RE-ESTABLISHING AND MAINTAINING SUSPENDED RESPIRATION*

By J. HARRIS PIERPONT, M.D.,
Pensacola, Fla.

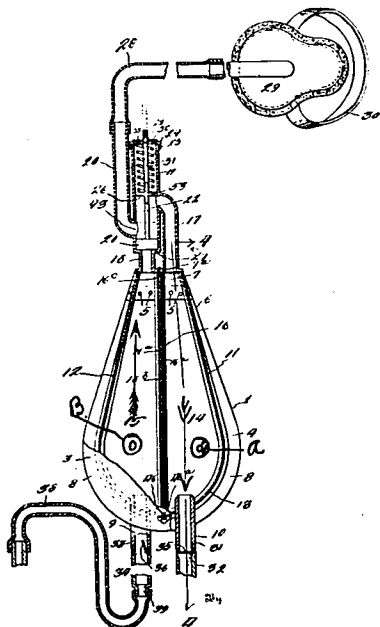
Being deeply interested in the subject of artificial respiration as applied to resuscitating those who have ceased to breathe from unnatural causes, my experiments in this field of endeavor covering a period of two years have resulted in the construction of a device for re-establishing and maintaining suspended respiration. It affords me great pleasure to present this device to you upon this occasion.

The cardinal points to bear in mind in all attempts to re-establish respiration are in their order of importance: (1) the immediate action on the part of the operator; (2) the use of an appliance which will most nearly correspond to the normal function of the lungs; and (3) being sure that respiration has not ceased for a period of more than twelve to fifteen minutes.

When a person ceases to breathe spontaneously, there is no time in which to send to a distant station for a device to be used in resuscitation. Action must be immediate and properly applied, for it is a well-established fact that a few seconds only may prove to be the determining factor in saving a human life. The physician needs an apparatus which is always at hand, can be easily and quickly applied, and operates perfectly in simulating natural respiratory efforts. The device should

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combine lightness of weight, compactness of structure, and be within the financial reach of the general practitioner. These requirements, together with others of a lesser degree of importance, will be found



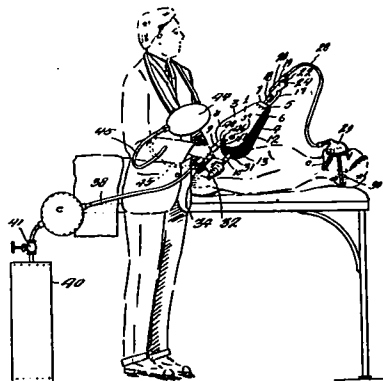
in the Pierpont pulmotor, which is here briefly described.

It consists of a double-acting hand bellows having a capacity in each compartment of the average amount of tidal air, a spring-valve in the head of the bellows which directs the current of air to and from the lungs, the air, or super-oxygenated air, being fed through the handle of the bellows at 9.

When the chamber is full the bellows is closed, using two seconds of time with an adult subject and less time for infants and children. The current of air is thus driven against the base of the valve 21 in the head of the bellows which, when thus actuated, is lifted above the port 43 and passes into the supply tube 28, leading to a face mask 29. The face mask has been previously applied after drawing out the

patient's tongue by means of a self-retaining forceps (Pierpont), and closing the mouth upon the protruding tongue. The mask is held in position by an elastic band or steel spring so that air can not escape from the mouth.

The air enters the lungs through the nose, larynx, trachea and bronchial tubes. As soon as the bellows is closed, the pressure on the valve 21 ceases and the counter-spring 25 throws it back into position, thus opening the ports 43 and 22; and the vacuum produced in opening the bellows draws the exhausted air from the lungs, which upon the next compression is forced out through the handle, 10. At the time the bellows is being opened the vacuum produced draws a new charge of air into 15, and the exhausted air from the lungs. The valve indicated by "A", and fixed in the wall of compartment 14 by being half turned, opens several small ports so that the patient can breathe through the instrument without the necessity of removing the face mask, when it is thought natural respiration has been established. Another method of action is thus also provided, as chamber 14 is cut out and the air after being forced into the lungs can be expelled by manual pressure exerted upon the chest and abdomen, if this method is



preferred. The instrument can also be used for so-called mouth to mouth breathing by not operating the bellows at all, but by blowing through the handle 9 and using manual expression of the air from the patient's lungs.

The valve at B in 15 is a safety pressure device for automatically holding the lung pressure at and below 15 cm. water gauge.

Any percentage of oxygenated air can be used, but in my opinion normal air is all-sufficient if used soon enough.

The slightly curved rod attached to handle 9 and running through handle 10, not shown in diagram, serves the purpose of keeping the apparatus closed; and a more important one,— that of regulating the amount of air used for patients of different ages, from the new-born to the adult.

Your attention is called to an article written by Professor Yandell Henderson, of the Yale University School of Medicine, which is most illuminating upon this subject, and which will be found in the July 1st. number of the *Journal American Medical Association*.

A MORE RADICAL VS. CONSERVATIVE OPERATION UPON THE PELVIC ORGANS*

By C. N. COWDEN, M.D., F.A.C.S.,
Nashville, Tenn.

It is an every-day occurrence as we scan the pages of medical literature to see some gynecologist report a large series of cases upon which he has so skillfully and successfully operated. After reading his reports, we are usually impressed with the fact that he is entirely satisfied with the results of his work. Especially is this true of the men who are beginning their surgical career and have not had time to observe the *end* results of their work. All of his patients made a good primary recovery; for the mortality rate after work of this kind should be practically nil.

The question arises: Are the patients and family physicians as well satisfied as he is with his brilliant work? We must remember the fact that the patient has one specific thing that brings her to the operating table, and what gratification or satisfaction is this to her that she has had a classical operation done upon some of

her internal organs only to discover that she has the same pain that has made her an invalid or a semi-cripple for many years? How many of these patients who have been "successfully" operated upon pass on to the family physician, the neurologist or perhaps to another surgeon, who makes the discovery that she has been operated upon for the wrong thing, and what she needs is *more* surgery?

I do not intend to bring before you any statistics or make a detailed report of my failures, but I want every one present to go back over his own work and see if it has, at all times, been satisfactory to all parties. It is a good rule to study one's unsuccessful cases in order that we may guard against the possibilities of future error. Until within the most recent years, and it is familiar to many who are present, surgery of the pelvic organs was only directed to saving of the patient's life, with the one exception, the idea promulgated by Battey.

Battey, one of the eminently distinguished sons of Georgia, whose name was heralded around the world, was one of the many thousands of practitioners who encountered in their every-day work a variety of diseased conditions of the pelvic organs in women that proved rebellious to all remedial agents or methods of cure. And when they came in contact with one of these semi-invalids, it was the custom then to encourage them to bear their suffering as best they could, and to look forward hopefully to the menopause, when the natural change of life might be expected to remove the cause of their suffering and restore them to health. In many cases death relieved them before the change, or in others serious structural lesions developed that rendered nature's cure impossible. But not infrequently they did secure relief after the climacteric and their health would become permanently restored. This fact was noted by Battey and he reasoned with himself if the change of life is the only hopeful remedy to be relied upon, why not produce it by the hand of the surgeon? Thus in Rome, Ga., Battey wrote the first chapter in the literature upon this subject that was in a short time destined to engage the attention of the leading men of the world. Like every innovation, it

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