

ON A
NEW MODE OF EFFECTING ARTIFICIAL
RESPIRATION.

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To the Editor of THE LANCET.

SIR,—The following document cannot fail to interest your readers.

Artificial respiration is the *sine quâ non* of our treatment of suspended animal animation by drowning, strangulation, &c., and the *only* efficient mode of accomplishing it is, I believe, that here described.

“Attended at St. George’s Hospital, to witness some experiments made on the new method of producing artificial respiration without the aid of a bellows, as proposed by MARSHALL HALL, M.D., &c.

“The mouth and one nostril were carefully closed by means of sticking-plaster, to prevent the possibility of air finding its way through them. In the other nostril was inserted a caoutchouc tube, about three feet long, at the end of which was fixed a bent glass tube of the same size, into which was poured a teaspoonful of water.

“The operator then took hold of the subject (which was lying in the prone position) by the left shoulder and hip, and gently raised it, until the whole body was resting on the right side. This movement caused the air to enter the glass tube, creating bubbles in the water as it passed on into the lungs; and on the body being slowly replaced on the stomach, the air was freely expelled from the lungs, and caused the same agitation in the water as it made its exit through the glass tube.

“Judging from the agitation of the water, the quantity of air which passed into the lungs must have been considerable, and quite sufficient for the purpose of artificial respiration.

“The great advantage of inflating the lungs by means of the rotatory movement, or raising the body by the one shoulder and hip, is the readiness with which one person can perform the operation, in the absence of any other assistance.

“This experiment appeared to be perfectly satisfactory.

“The other method was then tried, by raising the subject by the two shoulders, until the stomach was freed from any pressure, on the table, and then gently lowered down again. This movement produced precisely the same results as the rotatory, but required more strength to perform it.

“HERBERT WILLIAMS,
Superintendent R.H.S., Hyde-
park Receiving-house.

“Feb. 6th, 1856.”

In the *supine* position, the tongue *falls* backwards, and closes the glottis. All inspiration is therefore impossible.

In the *prone* position, the tongue *falls* forwards, and leaves the glottis freely patent. Inspiration is therefore possible.

Respiration is *effected* by placing the patient in the prone position, and turning *on the side* fully, and rather more, alternately. In the former position, pressure is made on the thorax and abdomen equal to the weight of the body, and expiration takes place. In the latter, that pressure is removed, and *in-spiration* occurs.

These movements being made alternately, gently and equably, sixteen times a minute, and no more, respiration is efficiently performed, and this without bellows, syringe, or any apparatus, all of which are not only unnecessary, but, for reasons which cannot now be detailed, dangerous.

I trust soon to send you a fuller set of *New Rules for the Treatment of Asphyxia*. In the meantime, this short communication may not be without its utility.

I am, Sir, your obedient servant,

Princes-street, Hanover-square,
Feb. 20th, 1856.

MARSHALL HALL.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.* lib. 14. Proœmium.

MONTHLY REPORT
OF
OPERATIONS PERFORMED AT THE METROPOLITAN
HOSPITALS.

GUY’S HOSPITAL.

THE return for the month, sent to us by Mr. Wallace, the house-surgeon of Guy’s Hospital, shows that during the time between the 1st and 31st of January, there were twenty-two operations.

AMPUTATIONS.

CASE 1.—A man of cachectic constitution, aged forty-six, with compound fracture of the tibia and fibula, at the junction of the middle and lower third. On the 3rd of January, Mr. Cock performed amputation below the knee, the skin having ulcerated, and the soft part sloughed. The patient died five days after amputation, and twelve days after injury.

CASE 2.—Primary amputation of the humerus, about three inches below the shoulder, by Mr. Poland. The patient, a male aged forty-seven, had suffered extensive injuries. The arm was only attached to the trunk by a small portion of muscle, skin, and nerves, and some vessels which were uninjured. He was found, also, to have dislocation of the left hip; fracture of eleven ribs on the left side, and four on the right; and partial dislocation of the tibia of the right extremity backwards, with rupture of posterior and external ligaments, and fracture of the upper part of the fibula, which was drawn up by the biceps. He died three days after the operation.

CASE 3.—A man, aged twenty-eight, with ununited fracture of the tibia and fibula. The ends of the bones had been for some time previously sawn off, for the purpose of inviting reunion. On the 15th of January, Mr. Birkett performed amputation below the knee. The patient is recovering.

CASE 4.—A man, aged fifty-eight, with compound fracture of radius and ulna. Attempts, that were of no avail, were made to save the upper arm. Extensive sloughing and gangrene having appeared, Mr. Birkett, on the 17th of January, (three weeks after the injury,) performed amputation at the upper third of the humerus. The patient died six days after the operation.

CASE 5.—A female, aged twenty, with malignant disease below the knee. The malignant growth had been twice removed, but had returned. On the 20th of January, Mr. Birkett performed amputation above the knee. After the operation, sloughing of the soft parts took place, so that two inches of bone are now left protruding. Patient recovering.

CASE 6.—A female, aged fifty-three, with diseased knee-joint of three years’ duration. Mr. Hilton performed amputation above the knee. Patient recovering.

HERNIA.

CASE 1.—A female, aged sixty-five, with strangulated umbilical hernia. Strangulation had existed for five days. On the 26th of January, Mr. Callaway performed herniotomy. The patient died twenty-four hours after the operation. The intestine was gangrenous.

CASE 2.—A female, aged eighty-one, with strangulated inguinal hernia. Strangulation had existed twelve hours. On the 30th of January, Mr. Callaway performed herniotomy, the patient dying two days after the operation.

CASE 3.—A female, aged forty-five, with strangulated femoral hernia, that had existed seventy-two hours. On the 31st of January, herniotomy was performed by Mr. Birkett. The bowel was returned without the sac being opened.