the eye accommodating itself to its altered state, and adjusting itself to the focal length of the other eye—a power which I cannot see the possibility of it possessing; for although we may grant that the cornea may perhaps become so much more convex, yet this can scarcely take place to such an extent as to compensate for the want of the dense double convex lens, whose especial function it is to converge the rays of light. On the contrary, I think it certain, that in viewing small bodies or near objects the impression made upon the eye from which the lens has been removed is so very weak, from the necessarily feeble and undefined image formed, that the sensorium, in having the sensation from the perfect image transmitted to it, takes no cognizance of it, even supposing the impression be strong enough to excite the retina and optic nerve to action; precisely as is the case with the eyes of many persons who squint, as was long ago shown by Dr. Reid and others.

A CASE OF TRACHEOTOMY,

PERFORMED FOR THE EXTRACTION OF A STONE FROM THE RIGHT BRONCHUS, AND TERMINATING SUCCESSFULLY.

By EDWIN CASSON, Esq.,

Surgeon to the Bradford Infirmary.

[*Read before the Provincial Medical and Surgical Association, Thursday, Aug. 3, 1843.*]

April 12, 1843. Rebecca Beaumont, a private patient, aged six, was playing with a small pebble in her mouth, when it accidentally passed into the trachea. When first seen, it was observed that, upon her making a strong effort to cough, a noise was heard in the trachea, as if a foreign body were passing up the tube to a certain point and then falling. Percussion was performed, and both sides of the chest were equally sonorous; but when the stethoscope was applied, the respiratory murmur could be heard only on the left side. The passage of air into the right lung was completely obstructed. There was not much dyspnoea, nor did the child complain of any pain; the most distressing period was when she made an effort to cough; the substance then appeared to be just large enough to fill the trachea, and brought on a sense of suffocation.

13. Passed a rather tranquil night, but towards morning had a violent fit of coughing, which produced symptoms of suffocation for some time; respiration quickened; pulse 130; little or no action of the respiratory muscles of the right side; slight pain in the chest about two inches below the clavicle; on applying the stethoscope, respiration could now be heard slightly in the upper part of the right lobe of the lung, but not at its lower and sternal side, which I suppose was caused by the substance having passed lower down the right bronchus. Six leeches to be applied, and a dose of castor oil given; afterwards the following medicine:—

Tartar emetic, half a grain;
Ipecacuanha wine, twenty minims;
Saline mixture, four ounces. A tablespoonful to be taken every third hour.

Chloride of mercury, six grains;
Ipecacuanha, one grain. To be divided into six powders, one to be taken between each two doses of the mixture.

To be kept in the recumbent posture, perfectly still and quiet.

Evening: Breathing quick, but less pain; appears more composed; skin moist; bowels relieved; pulse 100.

14 (Good Friday), Nine, a.m. Had a comfortable night; symptoms more favorable; coughed several times, but only once to move the stone so as to induce suffocation, when it was heard to pass up and down the trachea several times.

Noon: Not quite so well; respiration quicker; pulse 120. To give the medicines more frequently, and apply warm fomentations.

4, p.m.—Cough more frequent; sense of suffocation very severe. The friends now began to despair of the child's recovery, and were, therefore, willing that she should undergo the operation, the necessity of which had before been explained to them.

Having provided the instruments most likely to be required, I placed the child upon her father's knee, and sat on a chair opposite, one of my friends holding back her head firmly against the shoulder of her father, her extremities having been previously secured; I then made an incision from near the thyroid gland downwards to the sternum, about one inch and a half in length, cutting through the integument and cellular substance. I next carefully divided the fascia, which was firmer than I had expected, and, from the position of the neck, had the appearance of a partially inflated bladder. Underneath I could perceive a congeries of veins; these I was fortunate enough, with a little dissection, to push to one side, as well as a branch of an artery that crossed the trachea obliquely upwards to the thyroid gland. Placing the index finger of my left hand upon the upper edge of the sternum, and pressing my nail against the trachea so as to steady it, I then pierced it with a small pointed scalpel between two of the rings, and cut upwards until I had divided three of them; for the moment I both heard and saw the stone pass swiftly up and down. Finding that the opening was not sufficiently large, I again placed my finger, not only as a guide for the scalpel, but also to keep down the thymus gland, which rose up at almost every expiration, and forced before it some cellular tissue, preventing me from dividing another ring. This being done, and the opening into the trachea enlarged, I introduced the smallest sized lithotomy scoop, and caught the stone during an expiration, but was not able to extract it before I was compelled to withdraw the instrument to allow the patient to breathe. Having failed in another attempt, though the stone was all the time playing between the scoop and rima glottidis, and my friends distended the opening by drawing outwards both sides of the trachea with a pair of small double hooks belonging to a strabismus case, I afterwards introduced a pair of dressing forceps downwards into the right bronchus, but with no better success, though I occasionally felt it beat up against the point of the instrument. I then made use of a small pair of polypus forceps; but though I laid hold of the stone, it slipped before I could withdraw them. Seeing that the little patient soon recovered after each attempt that I made, and that the more the passage was obstructed the greater was the muscular action during expiration, and the more forcibly was the stone dislodged from its position,

I resolved to lay the patient upon her back, with her shoulders elevated, and her head a little depressed. I then introduced a pair of slightly curved polypus forceps down the right bronchus, about three inches from the external opening. The passage being obstructed, the attempt to expirate was so great that the stone was instantaneously driven with considerable force between the blades, but though I immediately and successfully closed them, it was only caught by the extreme points of the instrument. The quantity of frothy mucus that was ejected, or rather sputtered out, when either the stone was dislodged or an instrument introduced, and the short space of time that was allowed for each attempt, from the severe symptoms of suffocation and the violent action of the diaphragm, made the operation not only difficult, but extremely distressing to witness.

The edges of the external wound were brought together by a single suture and straps of adhesive plaster. The patient was immediately put to bed, with her head and shoulders considerably elevated, in which position she was perfectly easy, and in the course of an hour her breathing had become natural, pulse only 100, and skin moist.

Mixture of acacia, an ounce and a half;
Syrup of poppies, two drachms;
Ipecacuanha wine, twenty-five minims. A teaspoonful whenever the cough is urgent.

15. Has passed a tranquil night; slept two or three hours at a time; skin moist; a little mucus had forced its way through the external opening, on which account the lower strap was removed to allow a freer passage.

Evening: Appears composed; cough easier; pulse about 100; bowels relieved.

16. Bowels not relieved; breathes rather quicker; pulse 100; cough still continues troublesome, and more so when visited.

17. Morning: Not quite so well; slight pain a little below the right clavicle; pulse 120; breathes quicker; skin not so moist. Ordered a blister to be applied over the part, and the following medicine:—

Ipecacuanha wine, half a drachm;
Antimonial wine, two drachms;
Saline mixture, four ounces. A tablespoonful every third hour.

Ipecacuanha, one grain;
Chloride of mercury, four grains;
Prepared chalk, four grains;
Powder of acacia, two grains. Make into eight powders, one to be taken between each two doses of the mixture.

Noon: A considerable quantity of air and mucus escaped through the opening; dressings removed; wound looking well.

Nine, p.m.: Skin moist, and not so hot; pulse about 100; pain only felt during a paroxysm of coughing.

18. Better; skin moist; pain easier; bowels relieved by a senna mixture; expectorates more freely; less escapes by the wound.

Evening: Continues to improve; pulse about 100.

19. Gradually improving; bowels open; wound looking well.

20. Only a small quantity of mucus escapes through the external opening.

21, 22, 23. Going on well; pulse about 80; cough easier; wound closing fast; sits up in bed. The cough mixture to be continued, and the following medicine to be taken:—

Mixture of roses, four ounces;
Spirits of nitric æther, half a drachm;
Ipecacuanha wine, half a drachm. Mix. A tablespoonful three times a-day.

24 to 27. Up; wound nearly closed; no discharge of mucus; occasionally a short cough.

May 2. (Eighteen days after the operation.) Out; wound healed; cough nearly left her; pulse natural; appetite good; the girl in every respect looking well.

From this time the cough gradually ceased, and she still continues in the enjoyment of perfect health.

The stone was a small white pebble, of an irregularly oval form, weighing twenty-one grains, five-eighths of an inch in length, and above three-eighths of an inch across in its broadest part.

The clear and correct diagnosis here obtained by the use of the stethoscope, and its signal failure in Mr. Brunel's case, which occurred about the same time, the change of instruments necessarily had recourse to, and the depth to which the forceps required to be introduced before I could lay hold of the stone, the entire absence of hæmorrhage, with the few unfavorable symptoms, and the little or no suffering after the operation, render this case exceedingly interesting.

CASE

OF

RETENTION OF A FOREIGN BODY IN THE AIR PASSAGES

FOR NINE YEARS AND A HALF.

SUBSEQUENT EXPULSION AND RECOVERY.

By WILLIAM ROSE, Sen., M.R.C.S.

Rebecca Lovegrove, aged six years, in the month of November, 1812, was brought to me by her mother, who stated that the child, nearly a week before, had put a beech mast into her mouth for the purpose of cracking it, when it was suddenly drawn into the larynx, occasioning, as the mother described it, a sense of strangulation, which continued nearly three hours. At this time her breathing resembled, in sound and difficulty, that of a child laboring under croup. On making pressure upon the thyroid cartilage, she complained of a pricking sensation, and the conclusion was, that the mast, by its sharp, triangular edges, was transfixed in that part of the larynx, the concave figure of its sides admitting the passage of air; occasional attacks of coughing, with slight mucous expectoration, were the only accompanying symptoms; the appetite remained good, and no other function appeared disturbed. An emetic was administered without relief, the wheezing sound in respiration, whether asleep or awake, remained the same, and so continued for a year and a half. About this time her health became affected by loss of appetite and the frequent ejection of her food, when, during a violent fit of coughing, which had for some time become more than usually troublesome, the bursting of a vomica was evidenced by the discharge of pus and blood to the amount of half a pint, which at first threatened suffocation. *From this period the wheezing noise ceased* and her respiration became comparatively