analogies for its treatment drawn from our knowledge of bronchitis are not merely unfruitful but misleading. In the therapeutics of consumption we have given up directing our medicinal treatment to the bronchial mucous membrane, and I am unable to see why we should still base our climatic treatment on a theory which we thus implicitly acknowledge to be unsound. Hippo, paregoric, and squills have almost disappeared from our treatment of phthisis; and climatic sanatoria, which soothe the patient's cough at the expense of his appetite and strength, must follow them into deserved oblivion. The consumptive does not die of his cough. He dies of progressive wasting. We have thrown aside expectorants and anodynes in favour of good food, exercise, and such aids to nutrition as cod-liver oil, hypophosphites, maltine, &c., and we must, when possible, choose climatic resorts which are tonic and stimulant rather than those that are mainly sedative. The vital point about any climate is, will it promote nutrition? In early uncomplicated cases with vigorous circulation I think the mountain climates offer the best hope. If the circulation be feeble, or if there be much nervous irritation, the choice will lie between the sea voyage and residence in such dry inland resorts as Upper Egypt or the interior plains of Australia. The sea voyage has the great recommendation that it rarely does harm, except in those very advanced cases which are beyond the reach of all treatment. If the patient objects to the mountains and shrinks from the long sea voyage, I think Algeria or Morocco should be preferred to France or Italy. Let me say, in conclusion, that climatic change is a snare instead of a help, a curse rather than a blessing, if it be regarded as a complete therapeusis in itself, and as enabling the patient to dispense with the usual lines of treatment and his customary precautions. Climate is not a specific. At best it is only a condition of cure, and we may expect it to be effectual only when the patient's food, habits, occupation, and mode of life are wisely regulated so as to facilitate its beneficent influence.

Belfast.

TRACHEOTOMY.

BY WALTER WHITEHEAD, F.R.C.S.E., F.R.S. ED., SURGEON TO THE MANCHESTER ROYAL INFIRMARY, ETC.

THE operation of tracheotomy is in many cases confessedly a difficult one to perform. This is emphatically shown by the amount of literature written upon the subject, by the many different ways which have been described and practised, and also by the many dangers warned against. My excuse for proposing any change in the methods usually adopted is the simplicity of the plan I have to suggest, and the ease and success which have invariably attended its performance.

The operation is performed as follows. The head of the patient being bent well back over a pillow, an incision is made in the usual situation, but of rather greater length than is common. The incision extends through the skin and fascia, as deep as the interval between the sternohyoid muscles. The scalpel is now laid aside, and the raspatory used, not only to separate the sterno-hyoids, but to split the strong fascia which runs down from the hyoid bone to enclose the isthmus of the thyroid gland. This bone to enclose the isthmus of the thyroid gland. fascia is split to a distance extending from the upper limit of the incision down to the isthmus below-that is, supposing it is desired to open the trachea above the isthmus. The split fascia is then pushed to right and left with the raspatory. Should there be any difficulty in doing this, the fascia is separated to some extent on each side from the upper border of the isthmus. Proceeding carefully, the isthmus itself can be pushed down and the trachea exposed to the necessary extent. If the trachea is to be opened below the isthmus we proceed in a similar manner, remembering that here, however, we have between the fascia and the trachea a quantity of areolar tissue in which lies the inferior thyroid plexus of veins. The front of the trachea can in this way be cleared perfectly, and, since the method is bloodless, the rings of the tube are seen glistening white at the bottom of the wound. The trachea can now be fixed readily between the left index finger and thumb, and opened to the desired extent. There is little or no difficulty in introducing the cannula, since the trachea can be so steadily fixed and the incision into it so clearly seen.

The above method resembles in many particulars the

"bloodless" method of Bose, but in the latter operation the scalpel is used to a much greater extent than in the opera-tion here advocated, and when the scalpel is not to be used the use of the director is advised. But the walls of the veins in this region are very thin, and the sharp edges and point of the director have been frequently known to tear these vessels and rob the operation of its bloodless character. This tearing of the veins is much less likely to occur if the raspatory is used. Moreover, the above operation with the raspatory is not only suitable for cases where the surgeon has abundant time at his disposal, but is advised even in emergency tracheotomy; since, although perhaps a little more time is required to reach the traches, the certainty that when once reached it can be quickly opened and entered is a distinct ultimate gain. is urged in favour of the operation is-firstly, the ease with which it can be performed; secondly, the small number of instruments required; and, thirdly, the manner in which it meets the four difficulties usually enumerated—viz., of reaching the trachea, of hæmorrhage, of opening the trachea, and of introducing the cannula. Again, it avoids, in an especial manner, those dangers met with when the operation is performed, as it too often is, practically in the dark, from the bleeding, and the not sufficient separation of the parts; thus it is impossible, in this operation, that the cannula should be pushed down between the trachea and the fascia lying in front of it, or that it should be thrust, as has actually happened, into the internal incomes a consideration of the constant of the consta internal jugular vein. Our resident surgical officer, Mr. J. Collier, who is frequently called upon to perform tracheotomy in emergencies, has definitely adopted the operation described since seeing me open the trachea some months since for the extraction of a gun cap accidentally inspired into the trachea.

Manchester.

THREE CASES OF

STONE IN BOYS; REMOVAL BY SUPRA-PUBIC CYSTOTOMY.

> BY THOMAS WALKER, SURGEON TO CLAYTON HOSPITAL, WAKEFIELD.

CASE 1.—Arthur M——, aged three years, was operated on by me on August 2nd. Dr. Wright administered chloroform. I was assisted by Mr. Eskrigge, house-surgeon, and Mr. J. W. Walker, Dr. Holdsworth also being present. The bowel having been emptied by an enema, and chloroform given, an indiarubber rectal bag was introduced, and three ounces of warm water injected into it. A catheter was then passed, and the bladder gently distended with a warm solution of boracic acid, the catheter removed, and a tape tied round An incision, about two inches and a half long, was made through the skin above the pubes and the tissues separated with the finger-nail and knife down to the bladder; two hooks were introduced into the bladder, when a little fluid escaped. A small opening was made between the hooks, which was enlarged by the finger, and the stone, which was easily felt, removed. The bladder was then which was easily felt, removed. explored and washed out with warm boracic acid solution. The wound in the bladder was closed with fine catgut sutures. Four stout silk sutures were inserted in the external wound, the lower one being left untied in case all the urine did not flow by the natural passage, as no catheter was left in. However, as he passed urine three times during the first night, the remaining suture was tied next day. During the operation no artery or large vein was met with. There was very great tenesmus to expel the rectal bag during the latter part of the operation, which brought down the peritoneum into view in the upper part of the wound. On the fifth day a sudden rise of temperature occurred, with symptoms of extravasation extending into the scrotum, which, I think, was owing to the vesical wound not being entirely healed when the catgut sutures became absorbed, consequently the urine escaped into the tissues. On removing the external sutures however the tissues. On removing the external sutures, however, the urine passed through a small hole at the lower part of the wound, and the symptoms of extravasation quickly subsided. Two incisions were also made into the scrotum, to relieve the swelling. The calculus was of uric acid, weighing eighty-nine grains.

The following notes of the case were kindly supplied by the