health until two years ago, when she complained of a feeling of heaviness and pain over the left eyebrow. This was followed by ptosis and external strabismus of that eye, which persisted for some months. About six months ago, she was seized with intense pain in the right heel and ankle, accompanied by numbness of the thigh and in the toes. Ten weeks ago, she had what was supposed to be scarlet fever, the attack commencing with a shivering-fit, which lasted from half-an-hour to an hour; this was followed by a burning heat and red rash all over, and terminated in a fit of profuse sweating. There was also severe pain across the loins, high-coloured urine, and great thirst afterwards. Similar attacks recurred about once a week, latterly only once a fortnight; the last was five days ago. There was no history or sign of congenital syphilis. No similar attacks had occurred in any others of the family, or amongst the people in the neighbourhood.

On examination, the child was seen to be anæmic, and appeared feeble, depressed, and fretful. The tongue was much furred, and rather dry. There was no albumen in the urine; the temperature was normal. Physical examination of the chest and abdomen disclosed nothing abnormal. The spleen could only just be felt on deep inspiration. On the day of admission, the child had a shivering-fit, and the nurse who saw it described her as looking cold, and that her legs trembled; the attack lasted about ten minutes. Two grains of quinine were given with ten minims of liquid extract of bark three times a day, and, there being no return of the seizures, she was discharged at the end of three weeks convalescent.

REMARKS.—The first notable point in these cases is the occurrence of the scarlet rash observed in the first and in the fifth. In the first, the eruption was so distinct, and apparently so typical, that it was at once assumed without question to be the eruption of scarlatina; and undoubtedly the occurrence of this rash, together with high fever, greatly obscured the diagnosis at the outset. In the fifth case, the original attack was set down as scarlatinal, and its possible malarial character only transpired on cross-examination afterwards. So far as I can ascertain, although there is often some flushing of the face, such general scarlet eruption does not occur in adults. I have never previously observed it in the intermittent fevers of children, nor can I discover any instance of its occurrence on record. Its development is, however, entirely consistent with what we see in children in analogous conditions. In them, the sharp pyrexia of various acute disorders is frequently attended at the outset with a cutaneous hyperæmia so well marked and so general as to be often mistaken even by experienced practitioners for the eruption of scarlatina. I have seen it in empyema; it is not uncommon in the traumatic fever which follows operations or injuries; and it is met with in various other febrile disorders. This pyrexial erythema is usually partial—not, indeed, in well-defined patches; but it is only distinct on certain parts of the body, such as the neck, chest, and abdomen, for example; and fades away insensibly into the surrounding skin. I have never seen it so bright and deep in colour, nor so uniform, as in this instance; and the pathological conditions in ague would appear to be favourable to the abnormal development of cutaneous hyperæmia. There is marked vascular disturbance, and the contraction of the cutaneous vessels during the cold fit is followed by excessive relaxation during the hot stage which succeeds it. Hyperæmia of the superficial vessels so extreme as to constitute a distinct scarlet rash appears, however, to be the exception. It was observed only in the first case, which was the most severe; and in the fifth.

Another point of much interest is the long period of latency which intervened between the exposure to the malarious poison and the first manifestation of the disease. Such lengthened incubation is by no means unknown. Attacks of remittent fever contracted in a tropical climate sometimes make their first appearance after the return of the patient to England; and similarly ague occasionally appears for the first time in a person resident in some dry healthy locality, but who visited a marshy district months before, where the disease was undoubtedly contracted. Yet this long term of quiescence of the poison after its reception, and the apparent extreme variability of its duration, are most remarkable, for they are far beyond the limits met with in any other disorder dependent upon the entry of a material poison into the body, except only that most fearful and strange disease of all—hydrophobia. In it, not months merely, but years even, may elapse between the primary infection and the development of symptoms. Ague stands in this respect between it and the contagious fevers.

I mentioned at the outset that ague had been unusually rife from the autumn of 1876 until the present time. In addition to the four cases here recorded, there has been, I believe, one other in the Children's Hospital under the care of one of my colleagues. For several years previously, I have not met with a single instance. Dr. Ralfe, Physician to the *Dreadnought* Hospital at Greenwich, informs me that it has been

exceptionally prevalent amongst seamen and the boatmen of the Lower Thames. He states, moreover, that not only have intermittent fevers of irregular character, and relapses of ague caught elsewhere, been much more numerous than common, but that cases of primary ague contracted on the Thames, which were formerly rarely seen, have of late become of comparatively common occurrence. Thus the total number of cases of ague admitted into the *Dreadnought* Hospital during the year ending October 1876 was thirty-nine; while during the succeeding twelve months ending October 1877 the number admitted under Dr. Ralfe's care alone was thirty-seven. There would probably be an equal number under the other physician, Dr. Leach; so that the total cases of ague have probably nearly doubled during the last year. Amongst the thirty-seven cases under the care of Dr. Ralfe, there were five of primary attack contracted on the Thames. The explanation of this reappearance of ague seems to lie in the excessive rainfall. The marshy lands artificially drained were deprived of their power of producing the paludial poison; the constant rains of the last two autumns have restored the lands to their former marshy condition, and malaria has temporarily developed again as in the old præ-drainage era.

THYROTOMY FOR THE REMOVAL OF GROWTHS IN THE LARYNX.

By W. PUGIN THORNTON,

Surgeon to the St. Marylebone General Dispensary.

I SHOULD be glad to have an opportunity of making some remarks on the paper relating to a case of thyrotomy for the removal of growths in the larynx, which was brought forward by Professor Lister and Dr. Burney Yeo at the meeting of the Clinical Society on February 22nd, and was reported in the *BRITISH MEDICAL JOURNAL* of the following week.

There was a point of considerable surgical interest in the treatment of Mr. Lister's case, on which no discussion took place. I refer to the method of drawing together the split halves of the thyroid cartilage by passing a silver wire not only into their substance, but completely through their walls. It was on the second or third day after the operation, on seeing the man in King's College Hospital, that I first learnt the value of such a measure, Mr. Lister very kindly explaining the case to me at the bedside of the patient, and subsequently ordering him to show how good a voice he had. I confess it was with horror that I witnessed the man's attempts to speak; for it has always been my custom, in cases of thyrotomy, to close the thyroid cartilage by passing the sutures only into the substance, taking special care that the wire should not enter the cavity of the larynx. In the twenty-seventh volume of the *Transactions* of the Pathological Society, I have related the appearance of the larynx taken from a boy three years and a quarter after thyrotomy. With this patient, aged 2½ years, owing to his constant fits of passionate crying, the divided portions of the cartilage could not be kept closely together, although the sutures were on one occasion reapplied; and, after the child's death (of general marasmus following whooping-cough, which had attacked other members of the family), they were found united by fibrous tissue, so that there was free movement between them. Doubtless, had I used a suture in Mr. Lister's manner, I should have obtained a cartilaginous union.

Mr. Lennox Browne, speaking in favour of thyrotomy, mentioned three accidents which might occur in attempts to remove laryngeal growths through the mouth, and which he had, he said, personally observed. They were as follows: 1. Spasm of the larynx, resulting from the introduction of instruments, and requiring immediate tracheotomy; 2. Removal of normal tissue, leading to ulceration; 3. Injury to the laryngeal cartilages, especially the arytenoid, resulting in paralysis, caries, and death of the patient. Mr. Browne might have added a fourth consequence which will occur in the removal of growths by forceps, if a portion of the growth is left behind—namely, acute inflammation in the larynx—and especially if the residue is large and happens to become bruised by the instrument. This *contretemps* may necessitate tracheotomy very shortly after the operation.

The three accidents doubtless may occur in the practice of any one who uses the laryngoscope; but I feel confident that the greater the skill of the operator the less likelihood there is of their occurring, and therefore the value of the operation should be estimated by the degree of excellence and consequent ratio of result which we know may be attained. I can but remember the high degree of dexterity which I was accustomed to see displayed in the removal of laryngeal growths by forceps, and which was but rarely, in my recollection, followed by any serious conditions—certainly not in a degree sufficient to warrant

the idea that those practising in throat-diseases should think otherwise than of persevering in the carrying out of the intralaryngeal operation, so that in time the highest degree of manipulative skill may be reached which is attainable. It may be that many have not the opportunity of such constant practice in removing laryngeal neoplasms, as would be necessary to perfect themselves in the operation. I would suggest to those who feel the want of practice through the scarcity of laryngeal growths, that they can materially add to their dexterity by accustoming themselves to use a blunt-pointed right-angled probe in the larynx, touching any point previously decided upon.

The removal of growths by the mouth is necessitated in many cases for which thyrotomy would not be permissible, but in which entire relief may be given to the patient by the intralaryngeal plan of operation. Looking to the opinion of some of the best known laryngoscopists abroad, we find Dr. Fauvel of Paris, in his recent work on *Throat Diseases* (page 177), strongly supporting the removal of growths by the mouth; and Professor Bruns of Tübingen, in his work on all cases on record to the end of 1877 of the extirpation of laryngeal growths by the intralaryngeal and extralaryngeal methods, and which was referred to at the meeting by Dr. Semon, shows how great a preference ought to be given to the former operation. Neither do the statistics of Professor Bruns support the statement of Mr. Browne, in which he says, when comparing the two plans of operation, "there was a much greater tendency", after removal of laryngeal neoplasms *per vias naturales*, "to recurrence than was generally supposed; and the recovery of the voice was by no means so complete as was generally thought to be the case by those who had not had an opportunity of personally witnessing the results"; for Dr. Bruns points out that, in twenty-one out of thirty-nine cases of thyrotomy for benign growths, there was a recurrence of the neoplasms; whilst, on the other hand, out of ninety cases of the intralaryngeal operation there were thirty recurrences: again, out of thirty-nine cases favourable for thyrotomy, in only eighteen was the voice restored, whilst in the remainder it was completely lost or very slightly improved by the operation; but by the removal of benign growths by the intralaryngeal method, a very general success was attained.

If I remember rightly, when, by the invitation of Dr. Yeo, I examined his patient's larynx at the Brompton Hospital, I noticed that some portion of the tissues on the right side had been left. Whether they belonged to the ventricular band I could not say; but, this being the case, there would be some clue to the wonderful condition of the man's voice. The interior of his larynx has certainly a most striking appearance; and, if seeing were the only justification for believing, then in that man's throat there would be undeniable clinical evidence of their entire removal, supposing there was no cause to think the vocal cords had not been *in situ* before the operation. This complete enucleation of the intrinsic parts of the larynx should not, in my opinion, be resorted to on the first occasion when thyrotomy is required, unless very urgently demanded; but the opportunity should be given, as in the case of Mr. Lister's patient, for a permanent and complete restoration to an unimpeded respiration and recovery of voice, by simple evulsion of the growths, which result, it has been shown in the annals of thyrotomy, may, though very rarely, be expected. The plan of clearing out the whole of the internal laryngeal structures, which has proved so remarkably successful, may in future, doubtless, often save extirpation of the larynx.

CLINICAL MEMORANDA.

CLINICAL REMARKS ON MR. JOHN DUNCAN'S CASE OF EMPYEMA.

OF the many points of great interest and importance touched upon by Mr. Duncan, in his valuable clinical observations on the case which appeared in the *BRITISH MEDICAL JOURNAL* of April 6th, page 476, I desire to draw attention particularly to two, viz.: the unlooked-for failure of the steam spray-producer, and the later management of cases of empyema treated antiseptically.

The failure of the steam spray is, I believe, of not unfrequent occurrence; and an operator may proceed quite happily for a long time before he discovers that pure steam alone is issuing from his spray-apparatus. Again, the steam-jet may suddenly stop without giving him any warning. A properly fitted hand-ball spray-producer is not open to these objections. Dry air, instead of steam, being used to atomise the lotion, any arrest of the spray is at once detected, and, so long as it is in action, it must be of the right quality. Due warning is given to the operator if, for any reason, the spray have to be intermitted.

A somewhat remarkable case of empyema came under my observation a few months ago, which suggested what may, I think, prove an useful modification of the antiseptic treatment. The case was one of secondary empyema, inactive, and of some months' duration.* After two or three subaqueous tapplings, the pleura was thoroughly evacuated by incision, under the spray, and the usual antiseptic dressings were applied. On the second day, the dressings were renewed; and it was reported by the surgeon that, on withdrawing the tube, only a small quantity of serous fluid escaped. At my next visit, two or three days later, I found that the tube had slipped under the dressings, and, owing to a little delay in the arrival of a new tube that had been ordered, the wound closed. The temperature continuing normal, however, and the fluid that came away on the first removal of dressings having been serous, I determined to let the wound heal and to watch the result. And the result has proved most satisfactory: there has been no reaccumulation, and the free air and what fluid remained have been absorbed, vocal fremitus being now distinct all over the side.

It seems to me, therefore, well worthy of consideration whether, in many cases of empyema, after thoroughly evacuating the fluid antiseptically, and if it be found, at the second or third dressings, that but little fluid have collected, and that little be serous rather than purulent, it would not be better to remove the drainage-tube and allow the wound to heal. By this means, we should save the strength of the patient, lessen the opportunities for accidental admission of foul air to the pleura, and favour the more speedy expansion of the lung, by preventing that periodical collapse which must occur each time the wound is dressed and fresh air admitted. Experience alone can decide as to the value of this method, which has been suggested to me by a happy accident in one case. In cases in which our expectations were disappointed, there would be no difficulty or danger in repeating the operation.

R. DOUGLAS POWELL, M.D., F.R.C.P.,
Physician to the Brompton Hospital for Consumption, etc.

ACTION OF CELERY ON URINE.

THE following peculiar case happened to one of my patients lately. I should like to hear if any of my brother practitioners have ever had a similar experience.

Mrs. M. sent for me at 11 A.M. She had tried to void urine several times during the night and morning, but could not. She was not subject to this "sort of thing". I drew off a pint and a half of hysterical-looking urine, and left. She sent for me again urgently at about 3 P.M. on the same day, complaining of pain, and being unable still to pass her urine. I drew off a full pint, very light-coloured. Again at 11 P.M. I had to use the catheter, and got as much as on the occasion in the morning—clear, otherwise not remarkable. Next day, she was quite well. This woman, strong and healthy, had never been so troubled before. She had had no stimulants through the day, drinking tea and barley-water, and no large quantities of these. Her diet had been ordinary the day previous, except celery—"a whole stick"—of which she was very fond. The frost about the time had made her favourite very delicious; therefore she ate inordinately. It is traditional hereabout that celery acts upon "the water".

W. THURMAND RAMSDEN, L.R.C.P.Ed., Ravensthorpe.

THERAPEUTIC MEMORANDA.

KOUMISS IN THE TREATMENT OF OBSTINATE VOMITING.

KOUMISS has recently been spoken of favourably in the *JOURNAL* in the treatment of obstinate vomiting. I send a brief account of two cases which I treated successfully by it after the failure of other means.

CASE I.—Miss W., aged 25, came here for the benefit of her health about six months ago, and, when I examined her chest shortly after her arrival, I found that the left lung was extensively diseased. She improved greatly till January, when violent sickness came on. Hydrocyanic acid, bismuth, and other remedies, were used without any benefit, so I determined to try what koumiss would do. I got a supply from Messrs. Chapman, and was very pleased to find that the stomach would retain small quantities of it, and from this time the patient gradually mended. I was anxious that she should take a course of koumiss, as I thought it would do her good; but, unfortunately, after taking three or four bottles, she disliked it so much that she could not continue to drink it.

* I have related this case at length in the chapter on the Treatment of Pleuritic Effusions, in my recently published work on *Consumption and Chest-Diseases*.