tionate to the preceding stagnation. The occurrence of albuminuria during the secondary fever is analogous to that which occurs in cholera.

Birmingham, October 1855.

INTERESTING OPERATION FOR BRONCHOCELE.

By RICHARD HEY, Esq., Surgeon to the York County Hospital.

[*This paper, in a more extended form, was read before the York Medical Society in the winter of* 1855.]

ALTHOUGH it would be foreign to our purpose were I to enter considerably into the general nature and treatment of bronchocele; yet in bringing forward the particular and interesting case to which I purpose calling attention at this time, it may not be amiss for a moment to glance at the nature and history of simple bronchocele, the varieties of it which render it more or less formidable, and its anatomical relations to the surrounding parts.

By bronchocele we understand an enlargement of the thyroid gland, which takes its name from its position on the thyroid cartilage of the trachea. In its normal condition the gland is so small as to present no prominence whatever. But this gland is subject to various morbid alterations, giving rise, in many cases, to not only great deformity, but also much inconvenience, either from its great volume or from its pressure on the surrounding parts. Bronchocele is said usually to make its appearance between the eighth and twelfth year and certainly affects females much more frequently than males. Although the enlargement is usually very slow and painless in its progress at first, so as frequently to be suffered without control to go on enlarging for a considerable period, yet this is by no means always the case. The thyroid is subject, like other glands, to acute tumefaction from sudden inflammation, or even from improper diet. M. Coindet, of Geneva, mentions the circumstance of a regiment of young recruits, almost every man of which was attacked with sudden enlargement of the thyroid shortly after their arrival at Geneva, where they all drank water out of the same pump; on their quarters being changed, the gland soon regained its size in every instance.

Enlargements from simple hypertrophy may sometimes be so very considerable as not only to produce a lobulated tumour, occupying the entire throat, but even descending in front of the chest, and causing great obstruction to the respiration, as I have seen myself.

The enlargement may proceed from the development of accidental productions in its interior, even solid productions such as fibrous tissue, cartilage, or bone. I have myself seen the bronchocele consists of a large cyst; these, however, and others, are rare instances; and the last which I shall mention still rarer, happily, and that is enlargement from scirrhous degeneration, medullary sarcoma, etc.

It may be here incidentally observed, that errors in diagnosis will sometimes arise from enlargements produced by the thickening of the surrounding cellular tissue, or the enlargement of the lymphatic ganglia seated in the neighbourhood.

In the *Provincial Medical and Surgical Journal* for Sept. 19, 1849 (*vide* also Braithwaite's *Retrospect*, vol. xx), I had the satisfaction of recording a case of bronchocele, for the cure of which, owing to obstructed respiration, I was induced to insert a seton. The success was complete; and the patient has continued well ever since.

I now take the liberty to lay before the Association the brief particulars of a case of bronchocele, in which it was necessary, in order to preserve the life of the patient, to open the windpipe, and to keep it open for a lengthened period. I am indebted to my friend Dr. Shann for some notes of the case up to the time when I visited the patient in consultation with him.

Dr. Shann says:—"I saw our patient (the daughter of a tradesman at York, aged about 20, of short stature and not very stout) for the first time on the 16th of March, 1853. She was suffering from dyspnœa, without cough. She had the purplish countenance and stooping of shoulders of an old asthmatic, and. as is usual in chronic cases of this kind, the consciousness of want of freedom in respiration was not so great as the appearance of the patient would have led one to expect. The pulse was feeble, the extremities cool, and all the functions languid from the feeble state of circulation and general tendency to venous congestion. She had been suffering for some months from these symptoms, being more or less aggravated at intervals, not complaining greatly in the intermediate periods. After a careful stethoscopic examination, there was nothing met with in the condition of the heart or lungs, trachea or larynx, to indicate any primary affection of any of these organs, and I was led to the conclusion that the cause of the distressing symptoms was a small hard bronchocele, implicating both lobes, and the anterior portion of the thyroid gland. I prescribed under this impression, and the patient for a few days seemed rather relieved. But about the eighth day from the time of my first seeing her the difficulty of breathing became suddenly and greatly aggravated, the respiration noisy and stridulous, apparently from a spasmodic affection of the laryngeal muscles. At first, there were periods of remission, and the patient gained some relief; but these became shorter by degrees, until, on the third day, it became so alarming as to threaten asphyxia; believing that an immediate operation afforded the only hope of averting her impending fate, Mr. Hey was requested to see her in consultation with me." (I now take up the narrative in my own words.) We met, and I fully concurred in the view which Dr. Shann had taken of the case. As some further assistance seemed desirable, I requested Mr. Holl (the house-surgeon at the County Hospital) to give us his valuable aid. Whilst we were making some necessary preparations, I was unfortunately summoned into the country to a very urgent case, which placed me in a very uncomfortable dilemma. It was finally determined to try the effect of chloroform, in the hope of mitigating the spasm, and other remedies; and these failing, that Mr. Holl should open the trachea.

Early on the following morning a messenger was sent to the country, where I had been detained all night, to request my immediate attendance, which I was enabled to obey. I found that Mr. Holl had made several attempts to open the trachea, but without success. He had used the trocar and canula; and, as it appeared to me, every time he pressed upon the trachea it receded, and so the trocar failed to enter. I thought also that he made the attempt at a part of the trachea too low. I quickly cleared the blood from the wound, passed the forefinger of my left hand to the bottom, and felt for the cricoid cartilage. I then, with a common scalpel, guided by the finger, made a vertical slit through the two uppermost rings of the trachea, and the patient was at once relieved from her most perilous condition. (Here let me incidentally remark upon the value of the finger as a guide in some operations rather than the eyes.) A short pewter or zinc canula, somewhat curved, and with a broad wing, being introduced, was kept in its place by means of a bit of elastic, and the patient was soon in a comfortable state. The progress of the case was, on the whole, satisfactory. The canula was retained for about three months, and eventually was removed with perfect safety and success. One feature in this case particularly to be noticed was the satisfactory circumstance that the wound, kept open by the canula, acted as a seton, and the enlarged gland was eventually completely reduced; thereby serving to confirm (as Dr. Shann observes in a note appended) the favourable action of setons in bronchocele, which was well illustrated in the case to which I have already alluded.

REMARKS. I regret that my limits will not admit of my entering much into practical remarks upon this case; but

there are two points which seem to me of sufficient importance to warrant a brief notice.

The first is with regard to the use of the trochar in opening the windpipe. It would be vain here to enter into an elaborate discussion of the various modes of effecting this desirable object in cases of necessity. Much has been written on the subject from the earliest history of surgery until the present time. Although Hippocrates refers to the necessity of this operation in cases of quinsy, "but not to be ventured upon until the agonies of death are present"; yet to Asclepiades, who practised at Rome, is attributed by Galen the honour of having first successfully practised this operation. Since his time, it has been advocated or condemned with equal confidence by a vast variety of writers. Paulus Ægineta, quoting the words of Antyllus, says, "We are to make an incision in the trachea, below the top of the windpipe, about the third or fourth ring—for this is a convenient situation—as being free of flesh, and because the vessels are placed at a distance from the part which is divided. Wherefore, bending the patient's head backward, so as to bring the windpipe the better into view, we are to make a transverse incision between two of the rings, so that it may not be the cartilage which is divided, but the membrane connecting the cartilages." The bugbear of avoiding the division of the cartilages is now, I need scarcely say, exploded. About the year 1695, Dekkers first proposed to open the trachea with a small trochar, furnished with a canula; and Louis, in his *Treatise on Bronchotomy*, describes it as a happy thought, simplifying the operation, and rendering it easy of execution. Pauli claims the invention for Sanctorius, who recommends, for piercing the trachea, the same instrument which he proposed for tapping the abdomen.

Dr. Martin speaks of a very ingenious idea, which had been thrown out, to employ a double canula, one inside the other, so that the inner might be withdrawn and cleaned without interfering with the respiration. The use of the trochar has also been strongly advocated in our own day, and improvements proposed in its construction, to which further allusion need not now be made. On the other hand, the authority of Van Swieten carries great weight, and strongly deprecates the use of the trochar. "This instrument", says he, "cannot be made to penetrate the trachea without great difficulty, on account of the great mobility of this part. I have sometimes tried it on dead bodies and on living animals, and the operation has appeared to me difficult, and the instrument likely to deviate"; for which reasons he deprecates it. I state my own opinion, partly founded upon the result of the case before us. This case was undoubtedly a very embarrassing one, and much complicated by the incision having, in the first instance, been made partly through the lower portion of the enlarged thyroid gland.

The second practical point is the question, What was the actual cause of that most urgent and distressing condition which threatened the life of our patient? I am not at all inclined to think that the dyspnœa was the effect of mechanical pressure on the windpipe; the bronchocele, it is true, was very hard, but it was also by no means large. I cannot doubt that it arose from nervous irritation, arising from the pressure of this hard gland upon the laryngeal branches of the eighth pair; and this is corroborated by the fact that, as long as any portion of the enlarged gland remained, the temporary removal of the canula was at once followed by all the old symptoms; as soon as it was quite obliterated, the dyspnœa ceased, and the wound rapidly healed.

York, October 1855.

TREATMENT OF DELIRIUM TREMENS WITHOUT NARCOTICS.

By H. PAYNE, M.D.

THE more successful methods of treating those diseases of the brain known as delirium tremens, delirium ebriosum, cephalalgia ebriosorum, serve to show their gastric complications, and the importance of addressing their treatment to the stomach and chylopoietic viscera, instead of to the heart and brain by bleeding and narcotics. These diseases are three, of a class produced by the abuse of alcohol, commencing with acute dyspepsia, and culminating in phrenitis or in mania: and the main object in their treatment should be to restore a healthy state of the blood and circulation; as, for example, in the brief summary of the following cases of delirium tremens, which is one of the most usual of these diseases that comes under medical care.

CASE I. A married man, aged 35, warehouseman, with a family, having had previous attacks, shortly after one of his immoderate potations of brandy was seized, about 10 P.M. in summer. Lying opposite to a window, he complained of frightful objects coming through it to torment him. Pulse 130; great restlessness and pervigilium.

℞ Pulv. rhei ℈ss; pulv. pot. sulph. ℈j. Fiat pulvis 8vis hor. sumendus.

℞ Liq. ammon. acet. ʒij; mist. camphorat. ʒiij; syr. ʒvj; sp. æth. nitr. ʒij; aquæ ʒij. M. Cap. cochl. larg. 4tis horis.

To relieve the phrenitic symptoms, ordered—

Applicentur sinapismi carpis singulis et stupa terebinthina nuchæ.

To abstain from all alcoholic drinks, and to have toast water or milk and water. Next day he was able to take broth, which appeared to be of saving efficacy; the debility, owing to the long continued dyspepsia, being removed, and a cure effected in two days.

CASE II. A publican, aged 42, married, without family, attacked in the same summer as was Case I. Great prostration; bowels torpid.

℞ Magnes. sulph. ʒx; quin. sulph. gr. iij; coccinell. gr. ij. M. et div. in chart. viij, sumatur j 4tis horis.

In addition, ordered the same remedies as above. This man recovered after a week's illness.

CASE III. A man, aged 70, in whom every muscle appeared to be tremulous. Pulse rapid; excessive pain at the occiput; maniacal.

Subjiciatur caput largo canali. Applicentur sinapismi sing. carp. Habeat infus. anthem. pro potu.

℞ Pulv. jalapæ co. ʒiss stat. sumendus.

These were ordered in the morning. In the afternoon, he came down stairs, but no effect from the powder. Pulse below 90. Ordered the pediluvium cal.

℞ Ext. col. co., pil. hyd., ää gr. v. Fiat pil. ij. horis somnis sumendus.

℞ Pulv. rhei ʒss; pulv. potass. sulph. ʒj. Fiat. pulv. p. m. sum.

Applicetur emp. lytt. nuchæ.

After the operation of the cathartic, the following was ordered; and he recovered after a few days' illness.

℞ Magnes. sulph. ʒj; mist. camp. ʒviij; sp. æth. nitr. ʒij. M. Fiat. mist.

REMARKS. The carbonic acid, given in the usual way, is an efficient contrastimulant in this disease; and I should place confidence in tartar emetic, especially in a case like Case III, as recommended by some authors. The following may be the principles of treatment deducible from the results of the above mode of treatment.

1. To calm and give tone to the stomach and chylopoietic viscera.

2. To restore the blood to a healthy state by nutrient diet and external counterirritation.

3. To avoid the use of narcotics, which embarrass the respiration still further.

Barnsley, October 1855.