discovery of M. Pelouze. When a bit of rag or paper is treated for some time with very dilute nitric acid and water slowly evaporated, the acid becomes incorporated with the ligneous matter, yielding to it its oxygen, and giving off nitrogen. The product obtained is a highly oxygenated cellulose, which ignites spontaneously, like a fulminating powder, when placed in contact with a body heated from 150 to 200 degrees.

I shall conclude this lecture, Gentlemen, by reminding you that nitrogen does not enter into the ultimate composition of vegetable tissues, while all animal tissues contain this substance; but many of the vegetable principles contain nitrogen, and all the young organs of a plant are provided with it. This fact indicates that we should restore to the earth the principle which plants are constantly drawing from it, and that the rational method of manuring is, if I may use the expression, the incorporation of nitrogen with the soil. But I shall return to this important subject when treating of manures. In my next lecture I shall discuss fully the question of the preservation of timber.

OBSERVATIONS

ON A

SIMULATED CASE OF LARYNGISMUS STRIDULUS.

By EDWARD OCTAVIUS HOCKEN, M.D., M.R.C.S.,
Fellow of the Royal Medical and Chirurgical Society,
Member of the Prov. Med. and Surg. Assoc., &c.

An infant, nine weeks old, was brought to me on the 18th of September, 1842, with general convulsions, which had come on the evening before, and had recurred several times during the night. The child was relaxed in its bowels, the stools resembled chopped spinach, and each evacuation was attended by much griping.

About a week previously the parents had shown me the same infant, whilst attending its elder sister informing me that the child had always been healthy since its birth, till a few days before, when it seemed slightly indisposed. There was a slight eruption of strophulus intertrinctus on the skin, and a swelling, about the size of a small marble, below the mastoid process on the right side. This swelling had a firm feel, similar to that of an enlarged gland, the skin over it was perfectly unadherent, and of its natural color, and the tumor (of whatever nature it was) was movable. It had come on, they said, or at least they had not observed it, till very recently. Although the child had been in good health, still the mother informed me that every time it took the breast it threw itself backwards, and seemed nearly suffocated, and that she had noticed this ever since it was born. I gave some doubtful diagnosis about the tumor, and merely ordered some gentle aperient.

The elder sister, about fifteen months old, I had been attending for lichen febrilis, which had disappeared very favorably, and she had been considered well for several days. On the Sunday (the 18th) I was informed that on the Friday previous, this child was, to all appearance, as well as ever it was in its life, when in the evening it was seized with a fit of suffocation, followed by very severe convulsions; that these subsided after a short time, but recurred again and again,

and that about two in the morning it had died during one of these attacks. No medical advice had been obtained, as they were unwilling to seek it during the night, having no idea that the following day would be too late.

On the Saturday morning the infant was attacked by the bowel complaint (as the mother thought, from her milk disagreeing with it, after her alarm and grief), and on the Saturday evening with spasmodic inspiration, followed by general convulsions, which recurred, but not very severely, during the night. I saw it on the Sunday, when the diarrhoea and green stools especially attracted my attention, and trusted that the disturbed state of the abdominal ganglionic system was the sole cause and origin of the symptoms. The abdomen was soft, and by no means tender; the mouth and tongue covered with a slimy fur; the skin cool and soft; no heat of head, or drowsiness; lungs perfectly healthy. I ordered mercury with chalk, scammony, and jalap, two grains of each to be taken directly, and repeated every six hours.

Evening: Remains the same; convulsions have recurred.

September 19. Has had several convulsions during the night; breathing occasionally very spasmodic and crowing; seems incapable of swallowing anything; pulse 140; pupils contracted and quite immovable; evident blindness; bowels less frequently relaxed, but still of the same color. I ordered a leech to the temple, a grain of calomel every third hour to the sixth dose, and cold applications to the head, which was to-day hotter than natural, and the face flushed.

Evening: Decidedly improved; had slept quietly for a short time; convulsions had been less severe.

20. The child had recovered its sight, but had been frequently and severely convulsed. There had been several attacks of croupy breathing, which once or twice had even threatened suffocation. The child still continued unable to swallow anything in quantity, but the mouth was kept moistened by a little of its mother's milk. Stools less frequent, but resembled chopped spinach. Thinking that the calomel might now itself be proving an irritant to the abdominal secretions, I entirely omitted it, and directed gentle aperient doses of medicine. I now again examined the tumor in the child's neck, but could detect no difference; it felt quite firm and solid, and was very movable, and seemed to occasion the child some uneasiness when much handled. It occurred to me that probably it extended deeply, and might exert pressure on some important parts, and hence, in connection with the abdominal disturbance, might account for the spasmodic inspiration.

Evening: Secretions from the bowels unchanged; no alteration in the symptoms.

21. I found the child respiring with a very peculiar spasmodic noise, especially marked in the expirations, which seemed to terminate in on short crowing cough. The parents informed me that this had come on some hours before, and had scarcely ceased for a minute since. The lungs were perfectly free from any morbid sound, although the character of the respiration rendered auscultation somewhat difficult. The peculiar appearance of the stools remained precisely the same, although the griping had entirely ceased. The child seemed perfectly conscious; its skin was comfortable,

and it directed its eyes about as if it saw, although the pupils did not move by alternation of light and shade, nor did it wink when the finger was brought close to its lids. I directed a mustard cataplasm to the upper part of the chest, and the *vin. ipecac.*, in doses of twenty minims every hour; feet, as usual, to be placed in hot water.

Evening: The breathing was somewhat relieved; convulsions at intervals. The *ipecacuanha* acted on the bowels, but did not vomit the child.

22. Spasmodic expiration and cough had returned as bad as ever, and occasionally threatened suffocation, and the attacks of convulsions were frequent. The motions were improved, but still of a green color. They found much difficulty in making the infant swallow the *ipecacuanha* mixture, and requested me to return to the powders. I directed that the mother's milk, in small quantities, should be administered by enema, a grain of calomel occasionally given, and a blister be placed to the back of the neck.

23. Spasmodic respiration constant, but aggravated in paroxysms; constant restlessness and complete insomnia; countenance pale; pulse feeble; much reduced in strength. I directed the mouth to be frequently moistened by weak white wine whey, and one fourth of a drop of the tincture of opium to be given every four hours.

24. Still sinking; much quieter since taking the laudanum, and has slept quietly for two or three hours; breathing spasmodic, occasionally quiet; occasional recurrence of convulsions, but less violent than before; no change in the tumor; evacuations green.

25. Sinking fast; occasional attacks of convulsions and spasmodic breathing. Died at four o'clock, a.m., Monday morning.

Post-mortem Examination Eight Hours after Death.

The child was well formed and moderately plump, and the tumor had the same appearance as during life. The contents of the chest were perfectly healthy; lungs free from congestion or inflammation; thymus gland of small size.

Abdomen.—The whole tract of the intestinal canal was distended by air, but empty, with the exception of the cœcum, of feculent matters; rectum filled with milk. The bladder was full of urine. Liver healthy; gall-bladder full of bile of a grass-green color; mesenteric glands perfectly healthy.

Cranium.—The contents of the cranium appeared perfectly healthy, although the vessels were rather fuller than ordinary. A few drachms of fluid in the ventricles.

Neck.—On making a careful dissection of the neck, we found the larynx and pharynx pushed forwards by something behind them; they were both of them quite healthy in appearance, except that the lower part of the epiglottis and the cavity of the glottis itself appeared redder than the mucous membrane lining the larynx, from fine vascular injection; but there was no œdema, or other obstruction of the rima. The tumor behind the pharynx was of considerable size, and very firm in feel; it sent a process behind the sterno-cleido-mastoideus, just below the mastoid process on the right side, which had the same firm feel. On cutting into its structure it felt like cartilage under the knife, and presented a cyst of considerable thickness, from which a quantity of laudable pus immediately escaped.

When the cyst was completely emptied, it could not have been much less than an ounce of pus which escaped. The cyst was in contact with the front of the bodies of the cervical vertebrae, and the process, noticed during life, turned over the transverse processes.

REMARKS.

During the progress of disease in this infant the parents, almost from the very beginning, despaired of its life, from the similarity of the complaint, as they supposed, to that of the elder little girl. They were anxious that a post-mortem examination should be made, in order to detect the cause of what they considered a family peculiarity; hence they were somewhat surprised at the result of the examination. Not having seen the elder child's symptoms, nor having made an examination of its body subsequently, I cannot, of course, tell what was the nature of its disease, except from the account furnished by the parents. The history of the diseases in both were, however, sufficiently different.

If we review the history of the youngest child's case, we shall find that it presented different symptoms at different periods; sometimes closely resembling spasm of the glottis (*laryngismus stridulus*), then the symptoms were chiefly cerebral, and then a permanent state of irritation of the glottis; marked, however, throughout by constant obstruction in the pharynx. No doubt the tumor interfered greatly with the functions of the sympathetic and other nerves of the neck, and may thus have produced the blindness, &c., although this is less probable from its disappearing and then reappearing subsequently. There can, I think, be little doubt of the abscess being congenital, although it may have increased in size subsequently, as the mother had noticed the child's choking on sucking ever since its birth; the account of the sudden appearance of the external swelling, especially when we take into consideration the character of its cyst, is not very probable. During life there was nothing to lead to a knowledge of the existence of an abscess; there was no indisposition till a few days before its final illness; there was no symptom referable to the pharynx or larynx before abdominal disturbance was superadded; the tumor below the mastoid process was firm, elastic, without any sign of fluctuation, like a glandular enlargement; the only phenomenon previous to the infant's final illness indicating any peculiarity was the difficulty and choking it always experienced from sucking its mother's breast; in short, the symptoms were peculiar, and, although I could not form a positive diagnosis of the nature of the tumor or its extent, I suspected that its presence was intimately connected with the difficulty of breathing and swallowing.

A somewhat similar case to the above was detailed by Mr. Worthington in the "Provincial Medical Journal," * for September 24.

The infant was nine months old. It had been indisposed for five days with slight fever, hoarseness, and crying, before this gentleman saw it. It died in four days from the time he was consulted, with symptoms which he mistook for croup. In his case an encysted abscess was discovered, situated between

the cervical vertebræ and pharynx, extending some way down behind the œsophagus. The cyst was about the size of pullet's egg, capable of containing at least an ounce of pus, and seemed only prevented from forcing its way into the pharynx by a thin partition wall.

In the example I have given, if a diagnosis of abscess could have been made during life, it might readily have been opened at that portion which extended behind the sterno-cleido-mastoideus, or, in Mr. Worthington's, through the pharynx; but the question arises, how is a diagnosis, under such circumstances, to be formed? In the generality of cases I should presume it to be impossible, especially if the cyst proved, as in the present example, thick, firm, and cartilaginous. In some, however, if peculiar symptoms of spasm were referable to the glottis with permanent dysphagia, it would be the duty of the practitioner to pass his finger back into the pharynx, and feel if there were any fluctuation or swelling, and if detectable, an abscess might be surmised, and an instrument passed through the posterior wall of this bag. The occurrence of such cases should be generally known, that if practitioners met with similar cases they might be alive to the possibility of the symptoms depending on deep-seated and concealed accumulations of pus, and it is in the hope of such an use, should any of my readers be so unfortunate as to meet with similar cases, that I now commit this history to paper.

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ON
MILD MERCURIAL FRICTION
IN
CERTAIN STATES OF VENEREAL DISEASE.

By JONATHAN TOOGOOD, Esq.,
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It is a common practice with persons in a certain class of life to apply to quacks and irregular practitioners for the cure of venereal disease, which often subjects them to a complicated set of symptoms, extremely difficult to eradicate. If the patient has been quickly salivated, and is of a scrofulous habit, the difficulty is much increased. In these cases I have found the slow and cautious introduction of mercury by friction a more effectual mode of removing the train of distressing symptoms which follow a mistreated case, than any other plan of treatment. The following cases will be found worth attention:—

CASE I.—Peter F. contracted a chancre, for which he was very quickly salivated; the sore healed, but after a short time secondary symptoms appeared. He still pursued an irregular course of life, and after the lapse of a year and a half he consulted me. At that time he had nodes in various parts of the body, and was extremely weak and emaciated. A medical friend of great experience, who had for many years been attached to a large hospital, being on a visit at that time, saw him with me, and agreed that a regular mercurial course would afford him the best chance of relief. He did not, however, regularly pursue the plan, and afterwards he took the muriate of lime with some good effect. I then lost sight of him for several years, when I was again desired to visit him. His

state had become deplorable; exfoliations of bone had taken place in various parts of the skull, arms, and legs. He was lying in bed with his knees permanently bent to an acute angle; the abdomen was greatly distended, partly with fluid, and partly tympanitic. All hopes of cure had long since been abandoned, and he sought some mitigation of his sufferings from large doses of opium. Ten grains of mercurial ointment were carefully and slowly rubbed into the thighs every night, and five drops of Fowler's arsenical solution given three times a-day. The good effects of this treatment were soon apparent; in ten days the abdomen was reduced in size five inches by measurement, and by a steady perseverance in this plan for six weeks, with a milk diet, all the wounds healed, the swelling of the abdomen completely subsided, the legs became straight, and he so perfectly recovered that he shortly afterwards married, and never had any return of his former symptoms.

CASE II.—A medical man was attacked with sore throat, which had resisted all the ordinary methods of cure, and affected his constitution considerably. It had continued many weeks when I was consulted, and he was suffering much pain, with loss of appetite and sleep. He fancied he had swallowed a pin, which was still sticking in his throat, and keeping up the irritation. A careful inspection of the parts convinced me that the sore had all the characteristics of a venereal ulcer; but he was equally positive that it could not have arisen from such a cause, not having had the slightest symptom of the disease for fifteen years, since which time he had been married, and had several healthy children. He was, however, prevailed on to take small doses of oxymuriate of mercury in sarsaparilla, which at first appeared to do good, but after a short time the disease became worse. He consulted many friends, whose opinions were as various as the treatment recommended. As he got worse and worse every week, he undertook a journey to London, which he accomplished with difficulty by easy stages, his strength had become so much impaired. He consulted several surgeons of great eminence and experience, all of whom agreed in opinion as to the nature of the disease, although they differed in their mode of treatment. One ordered a regular course of mercury in the usual way; another, the daily application of lunar caustic to the sore and surrounding parts, with the use of tonics; a third, the fumigation of the throat with cinnamon; and a fourth, who stood deservedly at the head of the profession, assured him that his cure would be effected by Velno's vegetable syrup. All these remedies successively failed, and at length he abandoned himself to despair, and resolved to return home and die. I earnestly entreated him to try the plan of rubbing in very small quantities of mercurial ointment, which at length he reluctantly consented to, and in one week he derived such sensible benefit from its use that he was encouraged to persevere. The pains gradually abated, and he got sleep; the sore healed, his appetite and strength returned, and in less than six weeks he was able to resume his practice. His recovery was delayed by the exfoliation of the bones of the nose, but ultimately the cure was so perfect that he has been enabled to follow his profession as a country surgeon, and been in the enjoyment of good health.