closed by rain, falling in such deluging torrents as, I believe, were never witnessed except on the Western Coast of Africa. After a tornado the atmosphere becomes cool and pleasant—all animated nature, which just before appeared on the point of annihilation, now seems vigorous and refreshed. The rains are at their highest at Sierra Leone in the months of July and August, and begin to abate in the month of September, and are generally finally at an end towards the latter part of October. The dry season commences in the month of November, and with it what is termed the healthy season; the most healthy, or more properly speaking, the less sickly months, are December, January, February, and March. The heat at Sierra Leone is not excessive in degree, but, during the absence of the sea breeze, there is a closeness and

oppressiveness almost intolerable. About Christmas an easterly wind springs up, called the *harmatan*;* it is of an exceedingly searching and drying nature, causing furniture, glass, &c., to split and crack in an extraordinary degree; to the person newly arrived in Africa it proves extremely cool and agreeable, but to the “seasoned” European or native African, it is a source of annoyance not only unpleasant, but unwholesome, causing dryness of the skin and mucous membrane of the fauces and lips; it also brings on coughs, colds, and not unfrequently attacks of intermittent fever. The subjoined table, which, if anything, is rather low, shows the usual range of the thermometer at this station; but the heat varies not a little in different years:—

	Fahrenheit Thermometer.			Remarks.
	Max.	Med.	Min.	
January . .	86	80	79	Dry weather, comparatively healthy, harmatan winds.
February . .	87	80	80	Dry weather, comparatively healthy, harmatans, sometimes hazy
March . . .	86	80	79	Dry, comparatively healthy, sometimes foggy weather.
April . . .	84	81	79	Beginning, dry weather, generally healthy, a few showers.
May . . .	85	80	79	Rains commenced, some fine weather, fevers begin.
June . . .	80	80	78	Heavy rains, fevers abound.
July . . .	84	80	78	Ditto Ditto
August . .	82	80	75	Ditto Ditto
September .	83	80	78	Occasionally heavy rain; fevers, chiefly intermittents.
October . .	83	80	78	Very little rain, agues abound.
November .	83	81	79	Dry and fine weather sets in, fevers abate.
December .	85	82	77	Dry, and comparatively healthy.

Sierra Leone was formerly garrisoned by white troops, but such was the dreadful mortality amongst them, that it was found expedient to raise a native force, at first called the Royal African Corps, now termed the 3rd West India Regiment; the duties are now chiefly performed by the latter regiment: there are also stationed there recruiting companies of the 1st and 2nd West India Regiments. The officers of these regiments suffer very much from the fevers and other diseases incidental to the climate, but the mortality amongst them for some years back has not been so great as might be expected, considering the great unhealthiness of the country, and the harrassing nature of the duties they sometimes have to perform. In addition to the officers of the West India Regiments, there are also stationed at Sierra Leone those attached to the commissariat and ordnance departments. There are many civil officers belonging to the several departments of the government, such as the colonial secretary’s office, liberated African departments, mixed commission court, the law officers, &c. &c. The Church and Wesleyan Missionary Societies have many clergymen at Sierra Leone; also in the adjoining villages, and by their exertions many natives have been induced to embrace Christianity. The remainder of the white inhabitants are chiefly employed in mercantile pursuits. In my next I purpose giving a description of the settlement at the river Gambia.

* [The harmatan wind is exceedingly noxious in other parts of the African continent, and is a fertile source of fever. As for example, when it blows from the south-east over the coast of Guinea, being loaded with vegetable exhalations, with which it impregnates itself while sweeping over the immense uninhabitable swamps, and oozy mangrove thickets of the sultry regions of Benin. This destructive poison, in the year 1754, is said to have killed so many, that in several negro towns the living were not sufficient to bury the dead!—EDITORS.]

CASES
OF
LARYNGEAL ASTHMA;
OR,
THE CROWING DISEASE OF INFANTS.

By THOMAS H. BURGESS, M.D.,
Surgeon to the Blenheim Street Dispensary and Infirmary

Anne P—, a healthy infant, ten months old, was suddenly attacked with laryngeal asthma on Monday, Nov. 16, 1841. I was in attendance on the child for some weeks previous to that date, during which period the little patient had several severe fits of convulsions. The mother informed me that, in consequence of pains in her chest and side, which prevented her from turning in the bed, or even stooping, she was obliged to wean the child when it was six months old. From its birth it was remarkably healthy and lively, but very passionate. When eight months old the two lower incisor teeth appeared, without occasioning any untoward symptoms. The child continued in excellent health for five or six weeks subsequent to that event, with the exception of the bowels being slightly constipated. It was fed on “milk sop” from the time of its being weaned up to the date when I first saw it. On Saturday, October 23, the infant was very restless and uneasy all day; towards night the indisposition increased considerably, and symptoms of approaching convulsions became manifest. I saw the child for the first time late in the evening of this day; a convulsive paroxysm ensued immediately on my arrival; the pupils were dilated, the thumbs clenched in the hands, the mouth was contorted, and the whole frame was in a state of rigid spasm. The child was instantly put into a warm bath, containing about two tablespoonfuls of mustard.

In about five minutes afterwards the spasm and other convulsive symptoms gradually began to subside, and before fifteen minutes had elapsed every untoward symptom vanished. The gums were now freely lanced, when the two upper incisor teeth appeared immediately below the surface. The bowels were opened with powders containing calomel and jalap, and a teaspoonful of the common black draught after each powder. The gums were hot and swollen prior to being lanced; they bled pretty freely; the temperature of the head was not above the normal state; the fontanelles were natural. On inquiry of the mother if she had ever noticed a crowing sound during inspiration since the child was weaned, she informed me that she had not, but was in great alarm lest that affection should occur in the case of her child, a friend of hers, a Mrs. Arnold, having lost a fine infant, the same age as her own, in a paroxysm of the crowing disease. Mrs. A.'s child was weaned when six months old, it was very healthy, the process of dentition was proceeding to all appearances favourably, and the child had cut several teeth, when the first indication of the crowing disease became manifest. The crowing sound did not occur as frequently as it usually does after the disease is fully developed, but when it did occur, the stridulous noise was loud and protracted; the child got black in the face during the paroxysm. Mrs. A. took her infant in an omnibus to a distant part of the town, to procure some winter clothing; it was in perfect health on that day; she was absent from home about two hours; on her return, and while she was in the act of paying the conductor of the omnibus, a crowing paroxysm ensued, and the child that was in perfect health a moment before expired suddenly in her arms.

Since hearing of the death of this child the mother of my little patient was alarmed for her own infant, which she constantly watched over, but never observed the slightest tendency to the crowing noise up to the date of my first visit. When she sent for me, however, she was afraid that the crowing, or to use her own phrase, the croupy disease was about to appear, and the convulsive fit was merely the forerunner of that dangerous complaint.

On the 25th the child again became restless and uneasy. There was considerable intestinal irritation and pain all over the region of the abdomen; the child screamed violently all day, and by starts. The gums, which were swollen and red, were freely lanced; powders, containing about three grains of hyd. c. creta, were administered two or three times during the day; and a mixture containing the syrup of poppies allayed the pain effectually after the third dose. From this date to November 16, the gums were obliged to be lanced every third or fourth day, from the irritation of the mouth, and the tendency to convulsions. On November 16 I was suddenly sent for. Before entering the room in which the little patient lay, I heard the peculiar and characteristic sound of laryngeal asthma, that disease being now perfectly developed.

The frost had set in pretty sharply, and continued for several days from this date.

The crowing paroxysms increased gradually in intensity and duration to the 20th, when the disease seemed to have reached its height. There was emprosthotonos, contraction of the thumbs within the palms of the hands, and dilatation of the pupils, during each attack. The child was ordered light food, consisting chiefly of Le Mann's tops and bottoms, and the bowels were purged briskly for several successive days, with calomel, jalap, and scammony. With the exception of the irritation of the gums, occasioned by the teeth which had not yet come through, the infant was in excellent health and spirits; and, singular to say, the crowing paroxysms were invariably excited whenever the little patient laughed heartily, but they never arose from crying or

"passion fits." This, I believe, is the reverse of what is usually observed in the progress of the disease.

For several successive days from the above date the child was free from all spasmodic tendency; the gums, however, were lanced as usual, as the irritation of the teeth still existed, although considerably abated; the infant being now subject to sudden twinges of pain, instead of the continued harassing irritation which marked the early progress of the complaint. This relaxation of the spasmodic affection was but of short duration, for, on the fifth day from the last paroxysm, the crowing sound again became manifest, and resumed its former dangerous character. The temperature of the head, which up to this period continued natural, became greatly augmented, and was accompanied with a throbbing of the fontanelles. The gums were again lanced, cold lotions were applied to the head, the drastic purgatives were freely administered, and, at the close of the second day from the reappearance of the crowing fits, the two upper incisor teeth came through the gums, and thence the disease gradually subsided.

REMARKS.

In some papers which I published in the "*Lancet*" in 1838, I ventured to call this disease "*Laryngeal Asthma*,"* with the view of more accurately expressing its real nature, and to obviate the confusion resulting from the great variety of vague appellations—Miller's asthma, thymic asthma, asthma infantum, laryngismus stridulus, spasmodic croup, &c.—which has been bestowed on it by writers. Most of these names convey a false notion of the pathology of the complaint, and the last in particular should be guarded against, as likely to confound it with croup—an inflammatory affection—the crowing disease being now admitted on all hands to be a purely nervous disorder.

This name has been approved of, and adopted, by Dr. Marshall Hall, in his recent work on the "*Diseases of the Nervous System*," for the reasons above mentioned. Dr. Hall observes, "The crowing inspiration in children has been aptly designated by Dr. Burgess, *laryngeal asthma*. There is a pathological truth of much importance involved in this expression. It denotes that the crowing inspiration of infants, taken as a special disease, which it is, is, like ordinary or *bronchial asthma*, a disease of reflex action."—(p. 100.)

Since the publication of my former observations, I have met with several interesting cases of the disease, three of which terminated fatally. I examined the parts after death in each of these instances. There was no appreciable lesion in the larynx, or along the course of the nerves. The brain was examined only in one case. That organ was in a perfectly normal condition. In each instance the larynx was pale and healthy looking, especially about the rima glottidis.

Dr. C. J. B. Williams, in an excellent article on this disease (*Library of Medicine*, vol. iii, 1840), seems to think that it occurs as frequently after the age of twelve months as before it. He mentions the case of a child, who, after suffering from attacks of this affection for two years, became idiotic; and, in his remarks on the treatment, observes, "for children above the age of two years, milk and farinaceous food, &c., will generally be most suitable." Although

* "If the word *asthma* signifies a difficulty of breathing, and if that difficulty of breathing is produced by a spasmodic stricture of the bronchial vessels spreading thence to the muscles of respiration, we are apparently justified in calling this disease *laryngeal asthma*, which is merely distinguished from the former by the seat of the spasmodic constriction being removed from the bronchial vessels to the larynx and its muscles. Besides, it removes the possibility of confounding this disease with croup. T. H. B."—(*Lancet*, April, 1838.)

I have known one instance where the disease re-occurred at the period of the second dentition. I believe it is pretty generally admitted that its occurrence, subsequent to the age of twelve months, forms rather the exception than the rule. Dr. M. Hall, I think, entertains this opinion; and Dr. Hennis Green did not meet with a single case of the disease during an attendance of upwards of four years at the Children's Hospital, Paris, which he supposes was owing to the circumstance of children under twelve months of age not being admitted into that institution. In the case which Dr. Williams alludes to, the crowing sound was evidently symptomatic of affection of the brain.

The following positions appear to me to be established with regard to this complaint—viz.

1st. That it generally attacks children under the age of twelve months.

2nd. That irritable and spoon-fed children are more subject to it than others.

3rd. That intestinal irritation, cold, and dentition, are its chief exciting causes.

4th. That the opinion of Dr. Ley, and others, as to the cause of laryngeal asthma, is not borne out by facts; for the disease occurs in numerous instances where there is no pressure on the nerves; and the nerves are compressed in many instances where the disease never supervenes.

5th. That when it occurs in a child over two years of age, it is almost invariably symptomatic of cerebral affections, and not a special disease.

6th. That the treatment consists in lancing the gums, active purging, guarding against exposure to cold, supplying a young nurse if the child is weaned, change of air, attention to the general health, and regimen.

29, Margaret-street, Cavendish-square,
December 21, 1841.

ON THE APPLICATION OF BURNING ÆTHER, SPIRITS OF WINE, AND BOILING WATER.

IN CERTAIN DISEASES.

By CONWAY J. EDWARDS, M.R.C.S.,

Surgeon to the Batheaston Lying-In Society.

The progress of many inflammatory diseases receives a severe check by the judicious application of counter-irritants.

In the acute inflammations, from which secreting membranes and important organs of the human body frequently suffer, blistering the skin in the immediate vicinity of the disease generally forms a prominent feature in the treatment. Frequently a succession of blisters demonstrates the reliance which is reposed in its power and efficacy; and rarely do we find that the diseases in question terminate fatally, where a general counter-irritation has been vigorously employed in their early stage, unless an organic change has taken place in the affected part, previously to the first visit of the professional man.

The beneficial influence of external counter-irritation being undoubted, it is not unreasonable to believe, that such as act in the most unerring manner, and with the greatest rapidity, will soonest bring to a favourable termination the dangerous stage of an acute inflammation. In inflammation of the liver, blistering the right hypochondrium with a mustard cataplasm, immediately after a heavy depletion, is attended with great advantage. What happy effects frequently result from sinapisms to the feet, legs, and thighs, in coma, delirium, &c., and the same train of reasoning which has led some medical gentlemen to resort to

such remedial means, has induced others to prefer using those, in croup, which will accomplish the desired effect in a shorter time, and accordingly they have employed an actual cautery for the purpose. It is to support by facts the efficiency of this mode of attacking swiftly destructive diseases, that I am induced to request the insertion of this paper in your valuable periodical.

CONVULSIONS.

The son of a respectable market-gardener was seized with a convulsive fit; from whatever cause it originated, there was great determination to the brain. The parents had placed him in a hot bath, where he was struggling very violently. I opened each jugular vein, but as they were small, little blood could be obtained; the temporal arteries were tried, and from one, half a tea cupful was abstracted; the cupping-glasses were then applied between the shoulders, and rather more than half a pint of blood was drawn away. During the flowing of the blood, a mustard cataplasm was applied to the epigastrium, mustard added to the bath, and the head to be kept cool by occasionally pouring water on it from a height. The convulsions increased in violence, the diaphragm was most strongly affected—sometimes acting with great rapidity, at others, putting on a tremulous motion, and producing corresponding changes in the breathing; the heart was wild in its action, the jaws became fixed, the eyes, insensible to light, were rather twisted than rolled in their sockets; and from the extraordinary collapsing of the countenance, the most unfavourable results were augured. As a last resource, I rubbed the spine with gin, from the cervical to the lumbar region, and set it on fire; in less than half a minute the convulsions ceased. The boy was now put into a blanket, carried to bed, purged freely, and in a few days was convalescent; he was about eight years old.

A similar case was that of a daughter of a solicitor. The cause producing the convulsions resisted measures equally vigorous to those which were used in the first patient. The amiable mother, who, unfortunately, had been taught too severe a lesson in the trying school of her children's sicknesses, had already applied numerous leeches to the head of the sufferer, and given a smart dose of calomel and scammony; all our remedies seemed powerless, when I sent for the sulphuric æther, and, rubbing it on the spine, set fire to it. The convulsions soon ceased, the child gave a heavy sigh; the danger had passed. I should observe that this young lady, when on a visit in Bath, had an attack equally severe to that in which my professional services were required. The same powerful depletory means were used, but with no avail, and no sign of any amendment was visible, until ammonia, combined with assafœtida, were rubbed on the spine and on the epigastrium. I believe the case was regarded as quite hopeless by the medical gentlemen then in attendance.

CROUP.

The child of a Mr. Holten, a contractor on the Great Western Line, had been suffering during the day from difficulty of breathing; the symptoms increased towards the evening, and about nine o'clock became so alarming as to render medical assistance necessary. I found the patient struggling for breath, and each inspiration was attended with the never-to-be-mistaken sound which indicates an attack of croup. An emetic was given, but did no good; the patient was immersed to its neck in hot water, with a similar result; leeches were applied; the disease was assuming a more fatal appearance every moment. I then rolled a piece of flannel to the size of a finger, dipped it into water, which was on the fire, boiling, and applied the roll to the throat, until a blister was produced. The symptoms were subdued in a few minutes, and the child recovered.

These are a few cases, abstracted from many