The following table indicates the relative proportions of *Ingesta* and *Egesta*, at various periods during this protracted case:—

Days.	Inges.	Egest.	Days.	Inges.	Egest.
	Pts.	Pts.		Pts.	Pts.
1820. Jan. 24	8	11½	1821, Jan. 5	10	12
25	8	11	14	8	9½
26	8	10½	29	6	7
Feb. 3	5	8½	Feb. 17—21	5	5
17	4½	6	March 4	5½	5
May 10	6	8	1823, April 17	10	12
23	9½	12	May 15	7	7
24	9	11	Sep. 10	7½	8
30	8	9½	1824, Aug. 18	6	8
June 1	8	10	1827, Feb. 6	10	12
7	8	9½	20	7	9
11	9	9½	23	6½	7½
12—21	7½	9	1828, April 29	7	9
23	7	8	1829, May 14	9	11½
28	8	8	18	9	10½
July 5	7½	8	June 9	9	10
12	7½	8	July 1	8	8½
21—Aug. 7	6	6	August 3	8	8

The quantity of saccharine matter in a pint of urine was also determined at different periods of the disease.

On the 10th of May, 1820, it amounted to fifty grains. From June, of the same year, to the middle of May, 1829, the residuum ceased to be saccharine. In June, 1829, and during the remainder of that year, from one half to three drachms of residuum, having a saline taste, were obtained from a quart of urine.

CONTRIBUTIONS TO THE PATHOLOGY OF CHILDREN.

BY P. HENNIS GREEN, M.B.

Lecturer on Diseases of Children at the Hunterian School of Medicine.

SCROFULOUS TUBERCLE OF THE BRAIN.

AMONGST the various diseases of the brain to which children are subject, there is none so insidious in its approaches, so difficult of detection from the diversity of symptoms by which it is attended, or so completely neglected by medical writers as scrofulous tubercle. Were we to judge from the works of English or continental authors on diseases of children, it might be inferred that scrofulous tubercle of the brain is an extremely rare affection, for although I possess every standard work on the subject, I am not acquainted with one in which cerebral tubercle is mentioned: it may not, therefore, be superfluous to direct the attention of medical practitioners to this disease, of the frequency of which long experience has fully convinced me. With this object, I shall first relate several cases, and then endeavour to point out the symptoms by which scrofulous tubercle of the brain may be distinguished from the other affections of that organ.

CASE I.

Vomiting and headache; acute sensibility of the skin; occurrence of small-pox; death; extensive tubercle of the cerebellum.

ALEXANDRE LEGROS, 3½ years of age, was admitted into the Children's Hospital on the 1st of July, 1835, whither he was brought by the nurse under whose care he has been since the age of three months. The mother of the child is consumptive. For the last month he complained of pain in the abdomen, for which a medical man ordered baths

and twelve leeches to the abdomen; he took some medicine (supposed to be vermifuge) and vomited it up; on the following morning he had some convulsive attacks (the first lasted ten minutes), during which the face was very pale, the eyes fixed, and the arms contorted; he vomited again, without having taken medicine, in a few days, and the vomiting has recurred since then several times. The child was frequently stupid; no delirium or pain in the head; no squinting observed; no diarrhoea. For the last eight days the boy has had pain in the back of the head, and since then squinted; he also evinced an unwillingness to move about; makes urine frequently. He remained in the hospital until the 10th with no symptom worthy of notice, except squinting and a slight movement of the lower jaw, and was removed by his friends.

On the 16th of July he was again brought to the hospital, with a slight eruption of small-pox, in the first stage. We now learn that on the 14th and 15th the child vomited (he also vomited this morning), and complained very much whenever the limbs were touched; he had a strong convulsion this morning, and several similar attacks since Wednesday last.

Present state.—The boy now lies quietly on his back; the face full, pale and cool, but the forehead excessively hot; general surface moderately warm; there is some convulsive strabismus of the right eye, the eyelid of which is more closed than the left one; tongue clean and moist; the lateral movements of the lower jaw are more marked than they were before, and he occasionally catches the bed-clothes between his fingers; answers clearly when spoken to; extremities neither stiff nor contracted; when the integuments of the hands or arms are touched he evinces the most acute sensibility; no pain in the abdomen; pulse small, 128; respiration free, at one time 28, at another 36; short, dry cough.

17. The general appearance is the same as yesterday; had no regular convulsive fit, but much agitation and delirium last night; the squinting and movements of the jaw continue, with jactitation of the hands; right eyelid nearly closed; pulse small, 130; respiration 34; skin very warm; abdomen contracted and free from pain; tongue red and covered with a number of white pips, like aborted pustules; the face and extremities are covered with small papulæ, most of which are flat and irregular, like those of measles; a few only are prominent.

Evening. Pulse 144; no motion of lips or jaw; thirst; deglutition perfect: some areola round the pustules on the body; on the thighs they are very confluent; the child has been seized with a peculiar trembling of the upper extremities.

19. Child appears to be dying. He lies on his back, with both hands elevated to the ears, and trembling violently; face pale, covered with a number of flat and pale papulæ; no convulsive motion of muscles of eyes or face; pupils natural; skin of forehead still excessively warm; pulse small and rapid, 140; respiration 46; lips and tongue dry and dirty; low muttering delirium; the pustules on body are assuming a bluish aspect. Died in the evening at eight o'clock.

Body examined 15 hours after Death.

Head: The superior surface of the brain is pale, and the membranes not injected; on the left hemisphere, along the course of a large vein, there is a sero-sanguineous effusion, about two inches in length; in the right hemisphere, about two and a half inches from the frontal bone, and a quarter of an inch from the medium line, there is a large solid tubercle embedded between the convolutions, with two or three small tubercles in the adjoining pia mater. The membranes and surrounding nervous substance are not altered; on the side of the left hemisphere, near the falx, there is a flat mass of tubercular matter, a quarter of an inch in diameter, partially embedded in the substance of the brain; the pia mater lying over it is not injected, but it is surrounded by a deep red circle of injection, about two

lines in breadth, with slight softening of the nervous tissue.

The lateral ventricles are considerably dilated, and contain five ounces of clear serum; inferior surface of brain healthy. On attempting to remove the cerebellum, a large portion of the right lobe was found to be closely adherent to the dura mater; here there existed a large flattened tubercle, one and a half inches by half an inch, adhering by one surface to the dura mater, and by the other embedded in the nervous tissue; the latter being softened around it, and of a light yellowish colour, sprinkled with points of red. The rest of the nervous system healthy.

Chest: The left lung adheres along its whole surface, to the chest, pericardium, and diaphragm, by cellular tissue of a deep red colour and moderate consistence; cavity of pleura contains about half an ounce of clear serum; numerous tubercles in both lungs; one very large one in the bronchial glands. Oesophagus healthy. The membrane lining the upper part of the larynx is of a dark purple colour, and is covered with small round white spots, apparently of false membrane.

Abdomen: Extensive tubercular deposits in the mesenteric glands; in the centre of the right kidney a small crude tubercle, of the size of a marble, without any change of the surrounding tissues.

CASE II.

Headache; convulsions; paralysis; large tubercle in the centre of the Pons Varolii and in the crus cerebri.

JULIA BOMBET, 4 years of age, was admitted into the Children's Hospital on the 7th of April, 1834. The child is healthy-looking and stout, with light hair and eyes. Her father and mother are healthy. She usually enjoyed excellent health. Had the measles eleven months ago; for the last two months she has complained of headache, and has lost her usual spirits, becoming irritable and apathetic, and showing a great tendency to be sleepy. Within the last fifteen days the symptoms have become more acute; headache more severe, with occasional vomiting, loss of sleep, cries, and convulsive attacks, characterised by stiffness of the limbs, throwing back of the head and distortion of the face; three days ago she had two attacks of this kind, to which none of her family have ever been subject. Six leeches were applied behind the ears; a lavement was administered, and she was given some emollient draughts.

8. The child's intellectual faculties have never been disturbed; she even appears to be intelligent beyond her years. The face presents a fresh, rosy tint; skin cool; pulse 124; respiration 28; strabismus; pupils moveable; mouth drawn to the left side; tongue clean and moist; deglutition unimpeded; no lesion of the sight or of hearing; the sensibility of the skin and the muscular power are also intact; severe and fixed pain in the back of the head; abdomen somewhat tender on pressure, and she has passed several fluid stools. Coughs very slightly; no râle: chest sounds well on percussion. Ordered, decoction of dog's tooth; emollient lavement; milk diet.

9. The headache persists with the same intensity, and constantly occupies the same part, at the back of the head; no disturbance of the intellect; no lesion of motility or cutaneous sensibility; squinting of the left eye and distortion of the mouth as yesterday; pulse small, 144; respiration 24; has passed two or three fluid evacuations; no somnolence or stupor. Foot-bath; milk; broth.

10. Skin cool; pulse 144; strabismus; no vomiting or nausea, but asks for food; to-day she does not complain of headache; the abdominal tenderness and diarrhoea have disappeared. A blister was applied on the arm and ordered to be kept open.

11. The headache has returned with some tendency to somnolence; face pale; pulse small, 112; no convulsive movements; has passed two fluid stools.

12. The patient appears weaker; headache, with somnolence; strabismus of the left eye very marked; pupils

natural; skin cool; pulse 104; respiration 30; no contracture or paralysis of the limbs; no convulsive movements; no lesion of the cutaneous sensibility. The child has vomited once, and passed two fluid stools.

13. Accesses of headache from time to time, accompanied by vomiting; no change in the general symptoms.

15. The child has vomited several times; she is now unable to walk with steadiness, and seems to drag the right leg after her; during the day she was twice attacked with her old convulsive fits, followed by headache and somnolence. Four leeches were applied behind the ears, and calomel was administered, but in very small doses.

On the 20th she had an access of fever; pulse 140; respiration 24; intense headache, with somnolence. On the 25th the patient was removed from the hospital by her parents. She was brought back on the 15th of May. During her absence she had almost constant headache with irregular accesses of fever, and difficulty of walking; within the last three days convulsive fits, bilious vomiting, and distortion of the mouth. The convulsions ceased immediately after her second admission. On the 22d a cautery was applied behind each ear.

23. No headache this morning; skin cool; pulse regular, 84; respiration natural; mouth drawn to the left side; pupils normal; no contracture of the muscles, but the cutaneous sensibility is very evidently diminished on the left side of the body; the child now walks easily about; tongue moist and clean; abdomen free from pain; has passed two fluid stools.

For the next fortnight there was no very remarkable change in the symptoms. On the 6th of June a blister was applied to the arm. On the 8th the headache was felt in the left side of the head; the sensibility of the skin was equal on both sides of the body, but the power of the left arm and leg was diminished; mouth still drawn to the left side; pulse 90; respiration 24. The child has been labouring for several days under purulent ophthalmia, which is now endemic in the hospital. On the 12th and 13th the child was feverish; complained of severe pain in the head; she vomited three times. Two leeches were applied to the temples.

30. The patient appears to be much weaker for the last few days; she cannot walk without assistance; the face gets pale, and the limbs on the right side of the body become stiff; this occurs frequently during the day, and lasts two or three minutes, with loss of consciousness. After recovery from the fit the child remains dull and stupid for some time; the mouth still drawn to the left side; the patient still complains of pain in the back of the head; the strabismus continues; pupils normal; vision quite distinct; hearing also perfect; no lesion of the intellectual faculties; the cutaneous sensibility is equal on both sides, but the motor power is diminished on the right; the child drags the right leg after her in walking. No fever; skin cool; pulse regular, 116; respiration free, 18; tongue moist and clean; abdomen free from pain.

This comparatively favourable state continued without any notable change for the next month. On the 1st of August the headache still occupied the same seat in the back of the head; her answers were somewhat less slow than they had been for the last fortnight; the extremities on the right side were almost completely paralyzed, but without loss of sensibility; the mouth drawn to the right side.

August 21. The child has been gradually falling away for the last three weeks; the intellectual faculties are almost broken down; when spoken to, she does not answer in her indistinct manner before a great length of time has elapsed, and she has stared at the questioner with a dull fixed eye; face cedematous; limbs very flaccid and thin; pupils moderately dilated, but contractile; sight not lost; strabismus; deviation of the mouth towards the left side, particularly evident when she attempts to speak; the tongue also now deviates slightly to the same side; the cutaneous sensibility of the extremities is a little dimi-

nished; no contracture; the movements are limited and very feeble; the child is unable to sit up in bed; coughs occasionally, without expectoration; tongue moist and clean; no diarrhoea.

From this period the paralysis continued to extend, and soon reached the muscles of the face; the eyelids fell; the mouth remained half open, and a quantity of saliva constantly flowed from it; the patient was no longer able to masticate her food with facility; she lay in a constant state of somnolence; the head inclined sometimes to one side, sometimes to the other; the lower extremities were completely paralyzed, but the superior preserved a slight degree of movement; the extensor muscles of the hand were somewhat contracted, and bent the fingers backwards; the pulse varied from 110 to 120, and the respiration from 25 to 30. Finally, the child sunk in the last stage of exhaustion and marasmus on the 16th of September, 1834, six months after her first admission into the hospital.

Body examined 23 hours after Death.

Head: The membranes on the upper surface of the brain are free from inflammation, but there is a slight infiltration of serum in the pia mater. The cerebral substance healthy, although rather soft; about a spoonful of clear serum in the lateral ventricles; the parietes of the ventricles not softened, but the fornix seems to be a little less firm than in the healthy state. In the centre of the pons Varolii, extending to the left side, there is a round crude tubercle nearly as large as a walnut; the surface of this tubercle is irregular, and the surrounding nervous substance is softened to the depth of about a line. There is a second tubercle, of the same size as the former, in the left crus cerebelli; this one is enclosed in an evident cyst; here the surrounding tissue is also soft. There are no marks of chronic inflammation or traces of miliary tubercles in any part of the cerebral membranes.

Chest: Some old adhesions between the right lung and chest; some small tubercles also in this lung: the remaining viscera healthy.

Abdomen: Stomach very small and contracted; the mucous lining healthy. There are five small ulcers near the termination of the ileum. In the large intestines there are a few patches of arborised injection, with thinning of the mucous membrane, but no ulceration. Liver large and congested; spleen and kidneys healthy. There are a few tubercles in the mesenteric glands.

CASE III.

Long-standing headache; paralysis of the left side; death; tubercle in the right crus cerebri.

LOUISE PATU, 3½ years of age, was admitted into the Children's Hospital on the 5th of May. Her father and mother are healthy, but two of their children died of convulsions during infancy. This child enjoyed good health until the commencement of March, when she began to complain of headache; and became sullen, and stupid. At the end of the month, without any apparent cause, she vomited during two days. The headache still continued, with occasional exasperations, and the limbs on the left side felt numbed; the left eye was affected with strabismus, and the mouth deviated to the left side; the loss of motion gradually increased, and in three weeks the child was unable to walk. During this latter period were observed somnolence, occasional cries, irregular accessions of fever, loss of appetite, and constipation. The treatment employed consisted in the application of leeches behind the ears, and blisters to the neck, with warm baths and the cold affusion, but without relief.

On admission into the hospital, the following symptoms were noticed:—Face marked with an expression of sadness; mouth distorted towards the left side; squinting; paralysis of the left side, with contraction of the left arm; there is, however, no headache, nor stiffness of the neck; tongue moist; deglutition free; bowels constipated for

several days; skin cool; pulse 92; respiration tranquil; no cough. Four grains of calomel; purgative lavement; a seton behind each ear. (The latter was not applied, as the blistered surface on the neck supplicated abundantly.)

May 7. The symptoms continue the same, and the child cries almost constantly; one scanty stool after the lavement. Six grains of calomel, six grains of rhubarb; in two doses.

8. Six leeches were applied behind the ears.

10. Took a draught composed of an infusion of one ounce of arnica in eight ounces of water; frictions with the camphor liniment along the spine.

11. Face pale; left eyelid widely open, with squinting, and dilatation of the pupil; right pupil natural, the eyelid permanently closed; answers slow, with difficulty of pronouncing words; some paralysis, with contracture of upper and lower extremities on the left side; sensibility equal on both sides of the body; no rigidity of the muscles of the neck; no trismus; no nausea or vomiting; skin cool; pulse 120; respiration normal; sound of the chest on percussion good; tongue covered with a white fur; considerable thirst; the blistered surface continues to suppurate abundantly, and is surrounded by an erysipelatous inflammation, causing a painful swelling of the cervical ganglia. To have a few sulphur baths.

Nothing worthy of note occurred until the 23d, when an access of fever came on with cough, difficulty of breathing, and bloody stools. These symptoms continued for the next two days.

25. At 3 o'clock, P.M. the face was purple; the sensibility of the skin extremely dull; limbs paralyzed; pulse excessively small and quick; respiration oppressed; eyelids closed; corneæ dull; pupils dilated; no convulsive movements nor contracture of the limbs; no deviation of the mouth. The child sunk in the course of the day.

Body examined 18 hours after Death.

Head: Dura-mater and arachnoid healthy; injection of the white substance of the brain; the lateral ventricles contain an ounce of clear serum; the right crus cerebri is much larger than the left, and on cutting into is found a tubercle as large as a walnut, contained in a small cavity partially filled with greenish detritus; the rest of the brain healthy.

Chest: Old adhesions between the lung and chest; numerous miliary tubercles underneath the pleura pulmonalis and in the lungs, at the posterior part of which there are several points, both congested and hepatized. Heart and pericardium normal.

Abdomen: Some of the mesenteric glands tuberculated; mucous membrane of the stomach of a light rose colour, but firm; a few ecchymosed spots near the termination of the ileum, and in the colon; the other abdominal viscera are healthy.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

(Continued from p. 168.)

REPORT OF THE POOR-LAW COMMITTEE, 1840.

(Published by order of the Council.)

§ 9. A DEPUTATION consisting of three members of the late poor-law committee, was immediately appointed by the council to ascertain how far Mr. Serjeant Talfourd was disposed and able to promote the wishes of the Association in the approaching session of parliament, and Dr. Hastings applied to Lord Wharnccliffe to present the petition to the upper house, and to move for the extensive returns which were proposed by the late poor-law committee at Cheltenham, and which it was thought might be more readily agreed to in the House of Lords.

Towards the close of November, 1837, the deputation, accompanied by Dr. Webster of the British Medical