sumptuous way in which he has been treated at the hospital, and of a gold watch he has just received as a present.

This state continued without any remarkable change, for a few days. On the 20th, we find the patient quite clear in the intellect; we speak of his having said his arm was amputated, he replies that he had dreamed it; tongue now moist and clean; abdomen indolent; diarrhoea suspended; pulse continues, as for the last week, at 72; for the last two or three days he has been taking soup. The boy got up to-day for the first time for two hours. A solution of chlorine is thrown into the ears. This favourable state continued to the 24th of February, when the patient remained in bed and refused eating; he complained of severe colic with tenesmus, and passed a quantity of glairy matter mixed with blood.

Decoction of Rice; 3 ounces of Malaga Wine.

26. Twenty stools within the last twenty-four hours, of a viscid semi-transparent fluid mixed with blood; tenesmus; sense of heat about the anus while at stool, but no pain in the intervals; abdomen retracted, and supple on pressure; pulse 84, feeble.

Anodyne Lavement of Rice, Water, and Opium; 4 ounces of Malaga; a few Spoonfuls of Broth.

From the 27th of February to the 31st of May, day of the patient's death, the symptoms of dysentery persist; the stools are almost constantly bloody, and sometimes mixed with bits of false membrane. The patient vomited from time to time; his appetite is very capricious; he loses strength every day. These symptoms were combated by opiate lavements, baths, decoction of simarouba, but without any effect. The patient died on the 31st in the last stage of weakness, conserving his intellectual faculties to the end.

Necropsy Twenty Hours after Death.

The abdominal cavity was the first examined. The stomach seemed capacious; distended by gas and fluid. The mucous lining pale and of normal consistency. In the duodenum and ileum it was thin, but the stripes which tear off are from three to four lines long. In the ileum we count nineteen glandular patches, slightly developed, and presenting a dotted black colour on a gray ground. The dotted points are regularly distributed in the twelve superior patches, but in the seven lower they are absent in part; and here we remark an evident depression in the mucous membrane, which seems to have been destroyed by ulceration, and replaced by a thin, whitish membrane of an uniform surface. Just above the ileo-cæcal valve, we observe two oval depressions, surrounded by a white border projecting a little, and apparently pro-

duced by old ulceration of two elliptical glandular patches. The ground of each depression is smooth, and the mucous membrane has been replaced by thin layers of cellular tissue. The glandulæ solitariae are converted into so many dark points, surrounded by a grayish areola. The chief alterations are found in the great intestine. The cæcum and ascending arch of the colon present nothing remarkable; but the transverse arch contains a number of regular ulcers, as if the substance had been removed with a punch. They penetrate the substance of the intestine to various depths, some going as far as the peritoneum. In the descending colon and rectum the ulcers are confluent, and nothing remains of the mucous membrane, except some shreds of a red or whitish colour. The volume and consistency of the spleen and liver are normal. The gall-bladder and bile pale. The left kidney is developed to twice the volume of the right one; but we cannot discover any alteration of texture. The mesenteric glands are solid, and of a white colour, without any trace of purulent or tubercular deposit.

In the thorax we discover alterations, some of which had not been suspected during life. The three lobes of the left lung are united together by false membrane, recently organized, and soft. The posterior moiety of this lung is in a state of red hepatization, and contains a few tubercles in a state of softening. In the superior lobe of the left lung we discover a large cavern with anfractuous parietes, formed by a gray indurated tissue; the inferior lobe is permeable to air, and contains a few crude tubercles. The greater part of the bronchial glands are tubercular, and the bronchi contain a puriform fluid. Larynx and œsophagus healthy. The heart is soft and small. Nothing worthy of notice in the great vessels.

The dysenteric affection under which this boy sank is very rarely seen as a complication of typhus fever, either during its course or in the period of convalescence. We have seen two examples this winter at the *Hopital des Enfants Malades*, but dysentery prevailed epidemically at the time in the wards, with considerable intensity. More than thirty children were cut off in a single "service."

TUBERCULAR MENINGITIS.

If we have ventured to introduce the above new term into medicine, we have not done so without long reflection, and the support of an extensive series of pathological observations. We are prepared to prove (as we shall take an early opportunity of

doing), that the disease commonly called "acute hydrocephalus" is accompanied, in a very great majority of cases, by an inflammation of the meninges, with the deposit of tubercular matter in the form of granulations, or cheesy matter; we therefore prefer abandoning the term hydrocephalus, because all physicians of the present day are agreed that the effusion forms no essential part of the disease, and adopting in its stead, at least for the form we treat of, a denomination which has the advantage of denoting the pathological change, and its most striking character. Tubercular peritonitis has long been admitted into the science. The time, we believe, is not far off, when the term "*tubercular meningitis*" will assume a rank by its side.

During the first "trimester" of the present year we have observed six cases of the disease called "acute hydrocephalus" in the male wards of the *Hopital des Enfants*; in all these cases the fatal termination of the disease has permitted us to verify our diagnosis, and confirm the opinion just delivered; in all the six cases we found a greater or less number of miliary granulations embedded in the pia mater, with tubercular deposit in several other organs of the body. With respect to the age of our patients, two were three years of age, two of six, one of eight, and one of eleven years. These numbers are too insignificant from which to draw any conclusions. We possess, however, a much more extensive series. From a comparison of 140 cases observed at the *Enfants Malades*, we find that the greatest number of cases of hydrocephalus occurs at the period comprised between 5 and 7 years inclusively; and by a similar analysis of 920 autopsies made at the same hospital, we find that tubercles are most frequently met with in children exactly at the same periods of five, six, and seven years of age. Hence we are led to the discovery of the curious and important fact, that "*acute hydrocephalus*" occurs most frequently at the period of infancy when tubercular formations are most frequently met with. But these considerations will be developed with more advantage apart.

In the six cases which occurred this year, the treatment was extensively varied, but in all it was unsuccessful. We select the following as examples:—

CASE 1.—*Child three and a half years old.*—*Weak Constitution and Rapid Growth.*—Symptoms: *During two months, Intermittent Headache; Sudden Starting from Sleep; Loss of Spirits; Apathy; Somnolence; Irregular Access of Fever; Cough; Gradual Wasting. Then Headache, Vomiting, Constipation, Coma, Contraction of the Left Arm, Paralysis.*—Death on the 14th day.—*Numerous Granulations in the Pia Mater; four ounces of Turbid Serum in the Ventricles, with Softening of the Central Parts and Digital Cavity; Tubercles in the Left Lung, Bronchial Glands, and Spleen.*

Lecture B., three years and a half old; tall for his age, but of a feeble constitution, was brought to the hospital in a state of coma, on the 26th January, 1836. We learn from the parents that they are healthy; that the child grew rapidly within the last ten months, during which period he complained constantly of his head; lost his usual gaiety; started from time to time in his sleep, uttering piercing cries; he coughed; had irregular access of fever, and fell away gradually. On the 15th of this month new accidents manifested themselves; the child was seized, without any known cause, with vomiting, which continued for three days, accompanied by agitation and cries; loss of appetite; constipation; then alternations of agitation and stupor, of paleness and redness of the face, convulsive movements of the eyes. From the 21st to the 26th, coma now and then, interrupted by acute cries. From the 15th to the 26th, no less than twenty-five leeches were applied, at four times, to the temples and behind the ears. Several doses of calomel had been given without producing a single evacuation. Sinapisms had been placed every day on the legs, and blisters to the calves. During the last five days ice has been applied to the head. On the 25th, immediately after the boy's entrance, he was given a draught with two drops of croton oil.

27. Decubitus dorsal; face pale; head thrown backwards; pupils dilated and oscillating; complete loss of sight; coma, uninterrupted by the least cry; some slight contraction of the left arm; automatic movements of the right upper extremity; lower extremities in a state of resolution; sensibility modified, is more obtuse at the left than the right side; respiration unequal, accelerated, 36; pulse small and excessively frequent, 150; no trismus; tongue natural; deglutition difficult; low plaintive moans, when we press the abdomen. The head was now shaved, and a large blister placed along the traject of the sagittal suture. *Weak wine and water for drink.*

28. Coma still more profound; face coloured over the cheek bones; pale in all other parts; the eyes are constantly agitated

ted by convulsive movements; the conjunctivæ injected; the corneæ dull; the pupils dilated to such a degree, that the iris is almost effaced; the left arm is now in a state of paralysis, affecting movement and sensibility; but the latter remains imperfectly in the other extremities; pulse too small and frequent to be counted; respiration more embarrassed, 40 in the minute. Death at two o'clock p.m.

Body examined forty-three hours after Death.

Cranium.—Skull well formed; dura mater normal; glandulæ Pachioni very much developed, and occupying the two posterior thirds of the great median fissure; vesicles on the surface of the brain moderately injected; the arachnoid membrane lining the convexity is normal in transparency and consistency. The serous side presents no trace of exudation, false membrane, or granulation. It has not contracted any adhesion with the subjacent tissue, nor do we perceive any fluid effused under it at this part. The pia-mater, especially in the convolutions, is much injected, and contains here and there some granulations of a dull yellow colour and cartilaginous hardness. They vary in size from that of a millet to a canary seed. At the external and middle part of the right hemisphere they are closely assembled together, and visible through the arachnoid. At the base of the brain, the arachnoid conserves its normal transparency, but the pia mater, in addition to granulations similar to those already described, is inflated, in the neighbourhood of the fissure of Sylvius, with a yellow, lardaceous matter. On examining this substance with the microscope, we discover in several points of it a number of round granulations, and here the secretion seems formed altogether by the confluence of these small granules. The lateral ventricles form one cavity with the third, containing about four to five ounces of troubled serum, in which some portions of the cerebral substance are suspended. The fornix is reduced to a white pulp, extremely soft. The corpus callosum, and both digital cavities, partake of the ramollissement, which is more extensive and deep in that of the right side; the corpora striata and thalami are healthy. The cortical substance presents a normal degree of consistency, as does the white matter, in all other points than those just pointed out. The cerebellum, pons varolii, and medulla oblongata, healthy. The spinal marrow not examined.

Thorax.—The majority of the bronchial glands are tubercular; no adhesion between the pleura costalis and pulmonalis; right lung free from engorgement, hepatization, or tubercles. The left lung contains a number of gray semi-transparent granulations, and some tubercles in a crude state. They are chiefly situate under the pleura pulmo-

nalis, which thus presents in some places exactly the same aspect as the cerebral serous membrane in the points where it covers the granulations of the pia mater. The heart, pericardium, and great vessels, present nothing remarkable.

Cavity of the Abdomen.—All the organs of the abdominal cavity, if we except the spleen, which contained some tubercles, were quite free from any pathological alteration.

This is another of those numerous cases, in which the inflammation of the meninges having pursued a chronic march for an indefinite period, suddenly assumed an acute character, became concentrated, as it were, in the medullary central parts and membranes lining the ventricles, and terminated in "acute hydrocephalus." We have already said that *tubercular meningitis* may terminate in three ways.

1st. The simple inflammation of the membranes may produce death, without effusion into the ventricles; this is rare.

2nd. The inflammation of the membranes, in this case generally chronic, suddenly changes to acute inflammation of the cerebral substance, terminates in yellow ramollissement, with or without effusion, and death. This affection presents equally the symptoms of acute hydrocephalus, and is not to be distinguished from it by any pathognomic sign or signs that we are acquainted with.

3rd. Tubercular inflammation of the membranes may terminate in effusion into the ventricles, with or without softening of the central white parts. This is not the place to enter into the question, whether tubercular deposit be the product of inflammation or not. However this may be, it is very frequently accompanied by inflammation of a chronic nature, recognisable after death; and even when no inflammation exists, tubercular deposit in the cerebral membranes is often attended with symptoms of irritation altogether identical with those of chronic inflammation. In the case before us, the symptoms during life would have led us to expect the presence of chronic inflammation, evinced by thickening and adherence of the membranes; but we only found a deposit of tubercular matter in a thick layer, from which we are forced to conclude either that this deposit was the effect of a chronic inflammation, or the cause of cerebral irritation nearly equivalent to the former.

The pain in the head, occurring at uncertain intervals, loss of gayety, agitated sleep, and cries, are symptoms that frequently accompany chronic inflammation of the pia mater; and they become for us *certain signs* of this affection, the moment a child labouring under them for some time is seized with an aggravation of the headache, and *spontaneous* vomiting, accompanied with the slightest tendency to drowsiness.

The march of the disease in the present case did not present any thing very remarkable; we would merely notice the little effect produced by the treatment, which, however insignificant in other cases, was here as energetic as the most strenuous advocates for bleeding and purgatives could desire, viz. twenty-five leeches to a child 3 years of age, repeated doses of calomel, ice to the head, croton oil, blisters. The disease progressed in spite of medicine, and the fatal termination did not seem to have been retarded a single day.

Before concluding, we may draw attention in a cursory manner to the contraction of the left arm observed on the 27th. This symptom is hardly ever noticed by writers on hydrocephalus, yet we find contraction or stiffness of one or more extremities mentioned, in a large number of the cases we have observed. The ventricular effusion, then, as authors generally say, is not recognisable by complete paralysis, but is very frequently attended by contraction, a symptom so commonly attributed to ramollissement alone. If our observations furnish a different result from those previously published on this disease, we can only explain it by the fact that perhaps the attention of the physicians was not formerly directed towards ascertaining the modifications of sensibility and motility which occur in acute hydrocephalus.

P. H. GREEN.

CASE OF

DOUBLE FRACTURE OF THE FEMUR

SUCCESSFULLY TREATED IN LESS
THAN FOUR WEEKS

WITHOUT THE USE OF SPLINTS.

To the Editor of THE LANCET.

SIR: Six months have already transpired since Mr. Radley's excellent papers on the treatment of fractures appeared in your Journal. Week after week I have

waited, anxiously expecting to find that his system had been adopted, or at least tried, at some of our public institutions. In this, however, I have been disappointed. Surely enlightened medical men are not so wedded to their prejudices, that they will longer allow the old system of torture to be continued, merely because *they* have had no part to perform in its overthrow, and in the introduction, in its stead, of a plan of treatment which is alike simple, natural, and effective. Some I perceive have even been attempting to take from Mr. Radley the merit of originality. But it matters little. The non-acquiescence of the former, and the insinuations of the latter, cannot at all alter the fact, that Mr. Radley is the first who for a number of years has treated fractures without the use of splints; and that he is the first who has *made known* to the profession that admirable plan of treatment to the world. It is therefore our duty to acknowledge the boon—to try the system—and, after having found it effective, to give to Mr. Radley all the praise which he so justly merits.

The following may add one more case to the already undeniable evidence in favour of his system, and, should it be deemed worthy, its insertion in your valuable Journal will oblige, Sir, your obedient servant,

JAMES INGLIS, M.D., M.R.C.S.E.

Castle Douglas, May 7, 1836.

CASE.—On Tuesday, the 1st of March, 1836, whilst John Napier, a boy of nine years of age, was standing by the side of his father, who was examining the spring of a cart which had been set in an upright position, it suddenly lost balance, and fell with great force, the shafts in their descent striking the boy to the ground. Being at Gellston Castle, where the accident happened, I had an opportunity of seeing the boy almost immediately afterwards, when neither swelling nor discoloration had taken place. I found that the left femur was fractured in two places; one fracture near its lower third, and the other just below the greater trochanter, at which place *several splinters of bone* could be distinctly felt. Under these circumstances, I now determined to give Mr. Radley's system* a fair trial, and taking from a bed the soft feather mattress, I substituted a hard compact hair one. A pillow was next procured, broad enough to encircle the leg and thigh, and long enough to extend from the hip to the heel. The fractures being now reduced by gentle extension, and two many-tailed bandages being firmly adapted, one enveloping the leg and lower part of the thigh, whilst the other, passing from the knee to the hip, kept, in the position desired, both fractures under

* Described in the October and November Numbers of THE LANCET for 1835.