Mr. Robert Smith thinks that when the displacement is considerable, the fragments generally unite by ligament rather than by bone.

[To be continued.]

PERNICIOUS FEVER.

BY M. W. TOWNSEND, M.D., OF RIGA, MONROE CO., N. Y.

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CASE I.—At 5, P.M., February 20, 1858, I saw James B., æt. 2 years, in convulsions. Ordered a warm bath, and allowed him to slowly inhale fifteen drops of chloroform. The convulsions ceased in ten minutes, after which the surface became cool and very pale; pulse small and frequent; pupils dilated and insensible. There was tonic spasm of the posterior cervical muscles, so that the head was drawn backward; thumbs forcibly turned into the palms. Once in ten or fifteen minutes, he started from a comatose condition, with a cry indicative of the greatest terror, followed by a few clonic spasms.

I learned that he was well until noon of the previous day; in the afternoon became fretful and looked pale, vomited several times, and passed a restless night. At 12, M., had a convulsion, lasting fifteen minutes, and at 5, P.M., another, during which I first saw him.

Applications of cold were made to the head, stimulating enemata administered, sinapisms over the spine, and warmth to the extremities. Gave one grain of sulphate of quinia every hour.

Feb. 21, 9, A.M.—Patient has had several convulsions in the interval of visits. Extremities cold; no pulse at the wrist; pupils dilated, and insensible to light. On the face and chest were petechiæ as large as a three-cent coin; upper portion of body bathed in a profuse sweat. Had taken eight grains of quinia. No treatment. Patient died at 11, A.M.

The body, twenty hours after death, presented no trace of the mottled appearance; rigidity was slight. No autopsy allowed.

CASE II.—M. P., a female, æt. 18, complained of headache and general lassitude, Feb. 22. Took supper at 5, P.M., during which she was seized with chill. Chill was attended with delirium and vomiting. At 10, P.M., the family physician found her comatose, pupils contracted, and neck stiff. (Blister to the neck, leeches to scalp and an active cathartic.) Cathartic operated in twenty-four hours, when Dr. Craig first saw her. Pulse counted 120, quick, small and frequent; pupils dilated, and insensible to light; delirium constant, and extremities cool. (Whiskey and quinia.) Patient sank in five hours. No autopsy allowed.

CASE III.—Mrs. G., aged 35, had had headache and weariness, slight chilliness and "flashes of fever" several days. Had a severe chill, February 21, accompanied with convulsions. Blocks of wood,

heated in boiling water, were placed beside her in bed; sinapisms were freely applied to spine and extremities. After the convulsions ceased there remained stiffness of the neck; pupils were dilated; skin mottled; pulse quick and frequent, hardly perceptible at the wrist; delirium constant; vomits freely; strabismus. Moderate reaction was finally established, her symptoms improved, and she was ordered a cathartic.

Feb. 22d.—Patient had a recurrence of the convulsions after twenty-four hours, attended by the same phenomena. After the convulsions ceased, she continued delirious. (Quinia, gr. iij. every second hour until next visit.)

23d.—Patient is better. After this date, she was troubled with headache, double vision, strabismus and tinnitus, which, being still periodical, were successfully treated with quinia. Convalesced in two weeks.

CASE IV.—Mrs. F. P., aged 25, complained of headache and lassitude March 6th, and previously. Had a chill on the 6th, followed in one hour by delirium, which was soon succeeded by coma. Head was thrown forcibly backward. Dr. Craig saw her at 5, P.M. Reaction was aided by blocks of hot wood, sinapisms, &c. (Quinia, gr. iij. every hour for twelve hours.)

March 7th, 5, A.M.—Patient somewhat rational; when aroused, complains of intolerance of light and sound; pulse small and frequent. (Whiskey.) During convalescence had many signs of disordered innervation. Got well under the use of quinia.

The preceding are cases so selected as to give a fair representation of an affection which we have dealt with in this vicinity for two years. The four reported are among the severe cases. Besides such, we have observed attacks in which general lassitude or weariness, headache, pains in back and limbs, chilliness and flushes of heat, sickness at stomach, anorexia, &c.—all of which symptoms have been clearly periodical—are the principal complaints of our patients. Of the deaths occurring this year, we could obtain no autopsies. I therefore report such cases as were fatal last year, and in which *post-mortem* examinations were allowed.

CASE I.—N. B., æt. 5, died in February, 1857, after an illness of a few hours. As death occurred before his physician arrived, I can only report that the parents noticed that the child became fretful and extremely pale, vomited, was convulsed, and died in convulsions. Parents stated that the child played in the street eight hours before death; did not know that he had been out of health.

Autopsy.—As the patient was supposed to have been convulsed from eccentric irritation, the stomach and intestines were first examined; we found them healthy, with no appearance of irritating ingesta or parasites. Thoracic viscera healthy. Integuments of head bled freely; sinuses were extremely full; pia mater congested, congestion principally venous; slight effusion beneath arach-

noid; puncta of cerebral substance rather more numerous than usual.

CASE II.—A child, æt. 4, had been restless the previous night. Found him, Feb. 23, pale; pulse was small and frequent; head forcibly extended; surface mottled; delirious. Could not learn whether he had had a well-marked chill. During visit, vomited and had convulsions. (Hot bath, stimulants, sinapisms over spine, and on extremities.) No reaction. Child died thirty-six hours after attack.

Autopsy.—Rigidity slight. Brain only was examined, where the same congestion was noticed as was observed in the preceding case.

CASE III.—About March 1st, I attended a *post-mortem* examination in the case of Miss T., æt. 16, who sat down in the evening to write a letter. She was somewhat unwell, and had been for a day or two troubled with headache, was seized with chill, had projectile vomiting, and soon after delirium. No reaction ensued, and patient died in the morning at 5.

Autopsy.—Surface of an almost universal lividness; face much swollen; “froth” about the mouth and nose; almost no rigidity. Integuments of head bled freely, a streamlet running from the incised portion of scalp; sinuses distended to the utmost extent; colored serum in the ventricles and beneath pia mater. On making a section of the hemispheres, the knife severing the vessels, carried enough blood with it to give the section a marked appearance. No other organs examined.

CASE IV.—Miss G., æt. 15, was seized, March 12, with chill attended by severe headache, pain in neck and back. Reaction, as in other cases, was not proportionate to the chill. Reaction was accompanied by delirium, strabismus, clonic spasms, and strong extension of the head. (Quinia.) During a tedious apparent convalescence of four months she was troubled with headache, tinnitus, strabismus and double vision, sickness at stomach, anorexia, &c. After a long time she was able to ride out, made visits, and gained flesh. Yet she still carried a pale, sallow complexion, such as people often have after suffering a long malarial fever. She continued to improve up to the sixth month, when she began to complain of increased headache and sickness at the stomach, the headache being paroxysmal, once in a half hour, sometimes entirely ceasing. Respirations were irregular, and inspiration consisted of a double effort. In this way she lived two days, and was perfectly rational up to one or two minutes before death.

Autopsy.—Stomach showed softening of the mucous body along greater curvature, which was supposed might be *post-mortem*; a beautiful arborescent appearance near pylorus. Gall-bladder distended with bile; liver healthy; spleen not increased in size; other viscera, abdominal and thoracic, healthy. Meninges and cerebral substance showed no remains of inflammation, and yet the

ventricles were distended with serum to the amount of six ounces. Some effusion beneath arachnoid of the spinal cord. A small portion of the medulla oblongata notably softened, so much so that a portion elevated on the scalpel might be dropped in two separate pieces.

CASE V.—Miss R., æt. 8, among the first cases, died eight months after attack. Had been entirely rational, and apparently well, except about once a week or two, when she had spells of clonic spasms. Confined to the bed two days before death, complaining of headache and difficulty of breathing; pupils both dilated. Respirations ceased several minutes before pulsations of the heart.

Autopsy.—Head and spine only examined. No appearance of inflammation. Eight ounces of serum obtained, mostly from the ventricles.

The preceding are a few of the many cases of the epidemic which commenced in Monroe County early in 1857. It has also spread itself quite generally through the State. Most attacks have originated where intermitting and remitting fevers prevail, rarely showing themselves on the higher soils, frequently along the courses of sluggish streams. The intensity of the affection has been various—from a periodical headache to a frightful form of disease in which no amendment takes place, the patient dying in a few hours, or, perhaps, in one or two days.

The cause is undoubtedly the same as that of the more ordinary miasmatic fevers, for the following considerations. The milder and moderately severe forms have been distinctly periodical, as have also the grave continued forms after amendment. Quinia interrupts the disease. *Post-mortem* appearances are those of congestive fevers existing at the South and Southwest. Its habitats are the same.

The disease has been called "brain fever," "cerebro-spinal meningitis," &c. But its periodicity, its sudden invasion, and the fact that quinia is the difference between life and death, will not warrant us in supposing inflammation to be its essential character. Can meningitis be cured with quinia? Again, the unmistakable signs of inflammation are seldom found. The deaths could not have resulted so suddenly in these cases from inflammation. The congestion was insufficient to cause death, with one exception. Depraved innervation resulting from a circulating poison, it seems to me, will only account for the sudden death observed in so many cases. Faulty innervation has been manifested by an extremely variable pulse, the change being sometimes fifty beats to the minute in the course of an hour, without any sign of fever; also by the excessive vomiting, profuse sweating in the latter stages, petechiæ and paleness, showing the loss of innervation in the capillaries, irregular respiration and subsultus.

In this section, children and adults have been equally subject. The number of cases in all, in this town, treated mostly by Dr.

Craig, is about 200. In other places, we hear of its attacking principally adults.

Thacher, in his "Modern Practice," has given histories of epidemics which have been thought similar to the one under consideration.

In treatment quinia occupies almost the entire ground. In moderate cases, we have waited for the interval, in grave cases waiting for nothing, but giving it with a liberal hand, notwithstanding convulsions, delirium or coma. Patients have convalesced under the use of six grains every hour for eight or ten hours. Bleeding has been proposed, but was tried in only one instance, so far as I know. The error was soon acknowledged, although it was in one of the most robust patients, with an evidently exceedingly hyperæmic condition of the brain. Palliative measures, of course, should be resorted to.

Bibliographical Notices.

Mind and Matter, or Physiological Inquiries. In a series of Essays intended to illustrate the Mutual Relations of the Physical Organization and the Mental Faculties. By SIR BENJAMIN BRODIE, Bart., D.C.L., &c. With additional Notes by an American Editor. New York: Samuel S. & William Wood. 1858. 12mo. Pp. 279.

THIS little work consists of a recapitulation of the principal facts and theories on the subject of the connection between mind and matter. It is written in a familiar style, so as to be easily comprehended by those who are not acquainted with that abstruse subject, and hence it is a popular rather than a scientific work, though the pleasing manner in which it is written will render it acceptable to the profound student in psychology, who may devote a few hours to its perusal both with pleasure and profit. The form of dialogue has been selected by the author, as the best adapted for inquiries of this nature, and it certainly adds variety and interest to so abstract a subject. We recommend the book to all, lay as well as professional, as a most agreeable and instructive work.

For some reason, not explained, the American editor has chosen to alter the title of the work in this edition, and he has by no means improved it. The original title is "Psychological Inquiries, in a Series of Essays, &c." Why "physiological" should be substituted for "psychological" (unless by an error of the press), it is not easy to see, any more than the necessity of the interpolation of the words "Mind and Matter," which are sufficiently indicated by the context. We conceive that the title of a work is as much the property of the author as any part of the text, and protest against an alteration in it without his sanction.

Of Nature and Art in the Cure of Disease. By SIR JOHN FORBES, M.D., D.C.L., F.R.S., &c. From the Second London Edition. New York: Samuel S. & William Wood. 1858. 12mo. Pp. 261.

THE views advanced in this book have long been familiar to the profession in this part of our country. Ever since the discourse on Self-