in the case is the fact that the contents of the cyst were offensive at the time of tapping but not at all so five months later at the time of ovariectomy. The two practitioners who performed the tapping assure me that the fluid drawn off had such a sickening stench that they had to leave the room at frequent intervals to breathe fresh air. At the ovariectomy we noticed no smell whatever, and after some of the fluid had stood two days in warm weather it was still free from unpleasant odour. The cyst wall was rough inside and coated with caseous matter. There were one or two very small secondary cysts in the wall. I have no data to decide whether the pneumonia was secondary to a septic condition of the cyst contents or whether the contents became offensive on account of the pneumonia. But after the evacuation of the fluid the constitution seemed able to deal with any germs that were left and a more satisfactory issue from a desperate condition could hardly be experienced.

Leeds.

AN ANALYSIS OF EIGHTY CONSECUTIVE CASES OF ENTERIC FEVER.

BY ERNEST RINGROSE, L.R.C.P. LOND., M.R.C.S. ENG.

THE 80 cases from which this analysis is made came under my observation at the hospital, Newark-on-Trent, between August, 1891, and November, 1893, during which time two epidemics occurred in the town and district; 73 occurred in the town and 7 were sent in from the outlying districts. As to sex, 52.5 per cent. were males and 47.5 per cent. were females. Between the ages of one year and five years there were 8 cases; between six years and twelve years there were 22 cases; between thirteen years and twenty years there were 27 cases; between twenty-one years and thirty years there were 11 cases; between thirty-one years and forty years there were 8 cases; and between forty-one years and fifty years there were 4 cases. One case only occurred in which the patient had had enteric fever previously—viz., four years before. The initial subjective symptoms were chiefly headache (frontal), vomiting, and pain in the abdomen; in 27.5 per cent. of the cases there was epistaxis.

The maximum temperature, taken in the axilla, was as follows: 109° F., 1 case, fatal; 108°, 1 case, fatal. The temperature ranged from 104° to 106° in 12 cases, 4 of which were fatal; 103° to 105° in 28 cases, 4 of which were fatal; 103° to 104° in 28 cases, 3 of which were fatal; 102° to 103° in 7 cases, none of which were fatal; and 101° to 102° in 3 cases, none of which were fatal. The highest temperature reached during the attack occurred during the first week in 19 cases; during the second week in 28 cases; during the third week in 23 cases; during the fourth week in 6 cases; and during the fifth week in 4 cases. The temperature remained normal at the end of the second week in 1 case; during the third week in 17 cases; during the fourth week in 24 cases; during the fifth week in 8 cases; during the sixth week in 10 cases; and during the seventh week in 7 cases. In 40 cases the temperature became and continued subnormal throughout convalescence.

Two relapses occurred in 1 case with return of all the symptoms and one relapse occurred in 18 cases, with return of all the symptoms in 6. The interval of apyrexia before relapse averaged eight days; in 1 case the interval was twenty days, this was in a child aged ten years, whose primary attack had been most severe; there was a complete return of symptoms which lasted eleven days; in no cases except this one could the relapses in any way be attributed to change of diet. The average duration of the relapse was nine days, the temperature assuming the intermittent type.

With regard to the spleen, enlargement was made out by palpation in 20 cases; increased splenic dulness (no tenderness and spleen not felt) occurred in 3 cases.

There were typical rose spots in 67 cases and no rose spots in 13 cases. The rash appeared in the first week in 2 cases, in the second week in 42 cases, and in the third week in 23 cases. The spots came out in one crop in 28 cases and in several crops in 39 cases.

As to the bowels: (1) in 11 cases no diarrhoea occurred throughout the attack (constipation); (2) in 51 cases the stools were typical; (3) in 11 cases the stools were loose and

offensive but not typical of anything; and (4) in 7 cases the stools were normal. Constipation was very troublesome in 36 cases, especially about the beginning of the third week. An enema of olive oil followed by an enema of glycerine proved by far the most efficacious treatment.

Hæmorrhage took place in 9 cases, 2 of which were fatal. In 1 case, that of a patient aged fifty years, the hæmorrhage was profuse (ten attacks in three days) and the total loss of blood was twenty-one and a half ounces. This patient made a very quick recovery. The temperature came down to normal after the last hæmorrhage and remained normal. Hæmorrhage occurred in 1 case during the second week, in 6 cases during the third week, in 1 case during the fourth week, and in 1 case during the fifth week.

With regard to nervous manifestations severe delirium occurred in 36 cases, troublesome insomnia in 5 cases, and melancholia in 3 cases. Typical epileptiform convulsions were present in 1 case; tremor and deafness were not frequent. As to complications, pneumonia occurred in 20 cases—right in 10, left in 4, and both in 6; pleurisy with effusion occurred in 1 case; suppurating glands occurred in 2 cases—axilla in 1 and neck in 1; albuminuria occurred in 13 cases—in 6 cases there was only a trace and in 7 cases there was from one-twelfth to one-sixth; retention of urine occurred in 3 cases; thrombosis of the long saphenous vein occurred in 1 case; hæmaturia occurred in 1 case; and abscess over the buttock occurred in 1 case. Mitral systolic murmur developed in 3 cases, lasting not longer than two weeks. Bradycardia, lasting two weeks, occurred in 1 case, the pulse falling to 40. The apex of the lung became impaired in 1 case. Purpuric eruptions appeared in 3 cases; 1 case was complicated by whooping-cough. No case of ulceration of the larynx occurred.

The death-rate was 16.25 per cent.; 4 cases died during the second week, 5 during the third week, 3 during the fourth week, and 1 during the sixth week. Hyperpyrexia caused death in 2 cases, peritonitis (perforation) in 3 cases, pneumonia in 3 cases, hæmorrhage and exhaustion in 2 cases, cardiac failure (sudden) in 2 cases, and bronchitis and collapsed lung in 1 case.

The following points appear to me to be of interest: (1) the marked influence of severe hæmorrhage in the one case; (2) the infrequency in which the spleen could be felt; (3) the unusual period of twenty days occurring before a relapse; (4) the frequency of transitory albuminuria, the effect of the poison and not of nephritis; and (5) the presence of an epileptic attack during the course of enteric fever.

Newark-on-Trent.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF HICCUGH OF UNUSUAL DURATION AND SEVERITY; SUCCESSFUL TREATMENT BY GALVANISM.

BY GEORGE HERSCHELL, M.D. LOND.,

SENIOR PHYSICIAN TO THE HOSPITAL FOR DISEASES OF THE HEART, SOHO-SQUARE.

A WOMAN, aged twenty-four years, first attended my out-patient clinic on Oct. 26th, 1895, complaining of persistent hiccup, from which she had suffered for a week. The attack had been preceded by a prolonged period of overwork and worry. She was markedly anæmic but nothing else could be detected upon a physical examination. She improved very much under treatment consisting of iron, bromides, bismuth, and arsenic, but still continued to have a mild attack every few days. In March, 1896, she had a severe fright, after which the attacks greatly increased in severity and frequency. It was found that the medicines which formerly did her good were now without good effect and in the case of the iron it made her worse. She derived most benefit from bismuth with which I succeeded on two occasions in stopping the attacks for a few days. In each case as she was so anæmic (hæmoglobin 30 per cent., red corpuscles 2,300,000) I followed it up with iron, with

the result of immediately after two or three doses bringing back the hiccough as bad as ever. Valerian and assafoetida made her worse. In April, 1896, whilst waiting in the hall of the hospital she had the severest attack of hiccough I have ever seen in my life, and I thought at one time that she would die then and there from failure of the heart. I had her at once taken into the consulting room and a continuous current of about 8 milliamperes applied to her, the anode being applied alternately for a minute or so at a time, stable to the sides of the neck, whilst the kathode was placed upon the epigastrium. The effect was almost instantaneous, the attack passed away, and she had no return of it for several weeks. At the end of this time, however, the affection returned and she gradually became much worse, the attacks frequently lasting for a whole week with, as the patient declared, no intermission. There would then be an interval of a few days, during which time she would have merely several attacks in the twenty-four hours lasting an hour or so each, and then another long spell of almost continuous hiccough. As she daily grew weaker I decided to take her into the hospital in order to give a more extended trial to the galvanism which had been so successful on a previous occasion, and she was admitted on Nov. 27th, 1896. On admission it was recorded that the spasms were of such violence as to shake the whole body and give her the greatest distress. She slept very little as she was continually awakened by the hiccough which occurred, but with less frequency, during sleep. The treatment prescribed was the daily application of 15 milliamperes of the continuous current, the anode on the epigastrium and the kathode on the small of the back; this was followed by the electric brush to the epigastrium. For the first few days she improved very much, but as this was not maintained the application was altered and the anode was applied alternately to the pneumogastric nerves in the neck whilst the kathode was placed on the nape of the neck. From this date she rapidly improved and was discharged on Jan. 21st, 1897, being directed to continue the treatment in the out-patient department and to attend twice a week for galvanism. This treatment was continued until May, 1897, when all attacks having ceased for over a month she was finally discharged. There has been no relapse.

The main point about this case is its extreme duration. Dr. Edward Liveing mentions a case in which hiccough occurred in paroxysms of twelve hours' duration twice a week for four years, but I have been unable to find another one reported of anything like the severity. It is a remarkable thing that the administration of iron should have invariably brought on an attack, and I think that the fact of its having done so goes far to suggest that in this case the affection had its origin in some irritation reflected from the stomach. This theory would also be strengthened by the fact that galvanism had little or no effect until it was applied to the pneumogastric nerves. Against the hypothesis that the affection was of an hysterical nature we have the facts that it occurred during sleep, that the medicines usually of service in hysteria were without effect, and that the suggestion involved in the daily manipulation with the galvanic current and electric brush did not cure until the former was applied in one particular manner.

Queen Anne-street, W.

A CASE OF POISONING BY CANNABIS INDICA.

By C. C. BAXTER-TYRIE, M.D. EDIN.

THE following case of poisoning by Indian hemp is not only interesting in itself but sheds a vivid light on the evils of the writing of so-called popular medical works by gentlemen of good professional standing and the dispensing by chemists of unauthorised prescriptions.

A few weeks ago I was called about 11 P.M. to see a young woman who had it was alleged "gone out of her mind." I thought at first I had to do with an ordinary hysterical fit, but closer observation convinced me that although the symptoms were a curious caricature of some hysterical attacks there were other symptoms that made such a diagnosis untenable. Fits of laughter and incoherent ravings alternated with comparatively lucid intervals. She complained of various hallucinations and delusions, chief of which were a complete perversion of the relations and elapse of time and a loss of identity. She

was now herself, now again a different individual, and the modifications of her behaviour in relation to her dual personality were grotesque. I was entirely at a loss as regards the cause of the patient's condition until her mother volunteered that she had been taking Indian hemp. Like many other foolish people they had purchased a book on family medicine. The girl had suffered severely from headache for some time and after consulting the book they pitched upon Indian hemp as the likely remedy. A local chemist made them a dozen pills each containing one-half grain of the extract. The girl took one with no relief then two with a similar effect. She then concluded that they were "a fraud" and to demonstrate it swallowed the remaining nine with the result that I found her four hours after in the above-mentioned condition. I administered strong coffee and gave her a few doses of strychnine and she quite recovered on the following day. It is a well known fact that many victims of morphine and cocaine have derived their knowledge of these drugs from books on popular medicine, and it was very injudicious for the chemist to make up the pills without medical sanction.

Keighley, Yorkshire.

A CASE OF TETANUS TREATED WITH INJECTIONS OF SERUM.

By THOMAS G. C. EVANS, L.R.C.P. EDIN., M.R.C.S. ENG.

THE patient was a man, twenty-four years of age, who was admitted into the Budleigh Salterton Cottage Hospital on Oct. 7th suffering from severe injuries caused by the wheels of a loaded waggon passing over him. He had a badly comminuted fracture of the left leg immediately below the knee with a great deal of bruising of the soft parts around but the knee-joint was uninjured and the larger vessels were intact; he had also a large ragged wound over the right knee. The left leg was put upon a back splint and slung and the wound of the right knee was carefully cleansed and dressed. During the next few days the skin about the seat of injury gave way in several places and the leg was put upon a perforated metal splint in order that it might be irrigated with as little movement of the limb as possible. On Oct. 23rd he complained of a feeling of slight stiffness of his neck which he thought was due to taking his food in a recumbent position; his temperature which had been almost normal for the last few days rose to 101° F. and he was drowsy. At this time the wound of the right knee was almost healed. On the left leg there were several large granulating surfaces where the skin had given way and two or three sinuses leading into the fracture. He took his food well but nothing solid after 12.30 P.M. and he had a good night. On the 24th the stiffness of the neck and jaws was increased. The patient's temperature was 98.4° in the morning and 100° in the evening. He was cheerful and took large quantities of liquid food well. After a consultation with my colleagues Dr. Walker and Mr. Semple it was decided to amputate the left thigh. This was done at 11 P.M. On recovering from the æsthetic after the operation the patient had a severe spasm. He passed a fairly good night. On the 25th his jaws were rather less stiff, he passed a fairly comfortable day and took his food well. The morning temperature was 100.8° and the evening temperature 103°. The stump was dressed at 8.30 P.M. and 10 c.c. of anti-tetanic serum were injected. He was very restless the first part of the night but slept better towards morning. On the 26th there was more stiffness of the jaws and neck and he could not move his head from side to side. His temperature was 99° in the morning and 101° in the evening. At 10 A.M. 10 c.c. of the serum were injected. An ounce of castor oil was given. He had not quite so good a day, being restless. At 5.30 P.M. an enema with olive oil was given and was followed by free action of the bowels. At 8.30 P.M. the stump was dressed and 10 c.c. of the serum were injected. He felt better that evening and passed a better night, having good sleep after 4 A.M. On the 27th the stiffness was much the same. At 10 A.M. 10 c.c. of the serum were injected. He had a much more comfortable day and took nourishment well. At 5.30 P.M. an enema was given but there was no action of the bowels. At 8.30 P.M. the stump was dressed and 10 c.c. of the serum were injected. He passed a restless night. His temperature was 101° in the morning and 102° in the evening. On the 28th the stiffness of the jaws was