

views in bone-pathology. We are glad to observe that the merit of Professor Lister's antiseptic system is fully recognised. Compound fractures were the subject of Lister's earliest trials of the method of dressing wounds, which has now been recognized as the most safe and successful. And Dr. Macnamara bears strong and hearty testimony to its peculiar advantage in this class of cases. We feel convinced from personal observation that in all operations affecting or exposing bone, Lister's plan of dressing is specially appropriate, and we would strongly urge its adoption not only in compound fracture but in amputations, resections, and all operations for caries and necrosis. We hope that Dr. Macnamara will persevere in the admirable work in which, as this volume testifies, he has so laudably busied himself at a time when most men, counting the real labour of life ended, surrender themselves to the petty interests and occupations of club life.

THE POISONOUS SNAKES OF INDIA.

COMPILED BY JOSEPH EWART, M. D., M. R. C. P. (LOND.),
SURGEON-MAJOR IN THE BENGAL ARMY, &c. &c.

The author of this work defines its object to be "to place in the hands of the busy officials of India a handy book by means of which they may easily recognise any of the poisonous reptiles of the peninsula."

The principal feature of the work, 1,000 copies of which we observe have been subscribed for by the Governments and administrations of India, is the reproduction on a reduced scale of the magnificent plates which adorned Sir Joseph Fayrer's "Thanatophidia." These plates were chromolithographic renderings of coloured drawings executed from nature by Baboo Annoda Prosad Bagchee and other students of the Government School of Art in this city, which have been so much admired and reflect so much credit upon Mr. H. H. Locke, the Principal of the School, and his pupils. The reduced reproductions of these drawings in the present work are admirably executed, and the whole "get up" of the volume is worthy of the high reputation of the well known publishers Messrs. J. and A. Churchill, to whom the work was entrusted. The plates are 21 in number, and represent 26 species of poisonous reptiles the most common land and sea snakes in India whose bite is poisonous, belonging to the genera *Naja*, *Ophiophagus*, *Bungarus*, *Daboia*, *Echis*, *Trimeresurus*, *Halys*, *Hypnale*, *Pelamis*, *Enhydrina*, *Platurus* and *Hydrophis*. Each plate is accompanied by a concise description of the appearance and habits of the several species depicted. The main object of the book being identification, both plates and descriptions are primarily designed to subservise that end which they fulfil admirably. The importance of identification with regard to treatment is immense, for the necessity of adopting remedial measures, often of great severity, depends entirely upon whether the animal which has inflicted a given bite is venomous or harmless.

The author has very properly prefaced his descriptions by a concise account of the symptoms and treatment of snake poisoning. The measures recommended under the latter head are severe; but prompt and radical remedies are the only means capable of procuring recovery in cases of effective bite. The ligature, excision, cauterization and, under certain circumstances, amputation with a moderate exhibition of stimulants, and in extreme cases the employment of artificial respiration, are the expedients which both experience and experiment have proved to be alone of real avail. Immediate and firm deligature of the limb above the site of injection, free excision of the inoculated part and a liberal margin of surrounding tissue, followed by cauterization by fire or acid, should be unhesitatingly employed in a case of positive poisonous bite. The necessity for strangulation or amputation

must be made the subject of very careful consideration after full inquiry into all the circumstances of the case. In deciding upon such extreme measures, the main questions determining action are,—Was the bite undoubtedly inflicted by a poisonous reptile? Was it an effective bite? What time elapsed before any measures were adopted? What has been the probable effect of these measures in removing the poison or limiting the area of its absorption? While promptitude of decision and effort are of the utmost importance in such cases, ill grounded and unreasonable rashness and recklessness are to be very strongly deprecated.

Correspondence

THE CAUSE OF CHOLERA.

TO THE EDITOR OF THE "INDIAN MEDICAL GAZETTE."

SIR,—It has occurred to me that the cause of cholera is due to the refrigerating action of some salt upon the blood, for the symptoms of the disease naturally suggest such an explanation to the chemist. Foul air and foul water seem to be the means by which cholera is propagated, and therefore it is probable that Hyposulphate of Soda is the refrigerating salt. This might be produced by the absorption of Sulphuretted Hydrogen with impure water combining with carbonic acid from the air and the ever present sodium. The purging and cold collapse and the blue tint of the skin all seem to point to the action of some such salt. The natural remedy would be the drinking of some compound which would decompose the salt, perhaps calx chlorata and iodide of potassium acidulated with hydrochloric acid might be found successful.

Yours truly,
G. T. C.

6th January, 1879.

REMARKS ON THE "CASE OF FATAL THERMAL FEVER (?). BY SURGEON-MAJOR G. C. GRIBBON M. B., A.M.D."

To the Editor of the Indian Medical Gazette.

SIR,—In a foot note to the above case, published in the August number of the "*Indian Medical Gazette*," correspondents are invited to offer any "clinical remarks" they may have to make bearing on the subject. I therefore venture to hope that the few following remarks may prove acceptable to your readers. The facts of the case as related are as follows:—

Mrs. S. a young woman of 29 years of age, of a fair complexion and previous good health, meets with a fright on the 10th June while driving in her *ghari*, and jumps out twice. We are told that she was in her 7th month of pregnancy at the time, so I think we may come to the conclusion that many of her symptoms arose from the death of the *fœtus*, caused (a) partly by the fright of the mother, and also doubtless from (b) direct violence to the abdominal walls, (as in all probability Mrs. S. fell to the ground when jumping out of her carriage). We are also told that the heat was very intense at the time, so it is quite probable that Mrs. S. suffered from a *coup de soleil* at the time of the accident, which will account for the symptoms of hyper-pyrexia, and aching pains in arms and legs, of which she complained on the morning of the 12th (2 days after accident) when she first sought medical advice. The next morning, the 13th, she was found to be covered with "lichen tropicus," or prickly heat, and the eyes were somewhat sunken in their orbits, and surrounded by a dark areola, (invariably in my experience, a sign of nervous exhaustion, indicating a

supporting line of treatment), her tongue was coated with a thick brown moist fur; skin moist, the pulse small and quick, and she complained of the cramps bothering her. It would appear that no anxiety was caused by these symptoms, and we are not told that any medicine was ordered to allay these spasms which would in all probability have yielded to full doses of Chloral hydrate, combined with the Bromide of potassium, together with sponging with tepid water to relieve the nervous irritability. Her symptoms became aggravated during the night and she was seized with "tonic spasms" (affecting the extremities only) which were much relieved by a tepid bath, given her by the nurse. These spasms returned while Dr. Gribbon was at the bedside of his patient, and lasted about 3 minutes: the fingers were clenched, and the arms and legs extended rigidly, but the features remained perfectly natural. Apparently no danger was apprehended, as we are told that only some grey powder and rhubarb was prescribed as an alterative and the patient placed on "milk diet," and tonic water. During the day the cramps did not return, and in the evening she was no worse, and able to converse with the other patients, but it appears that during the night the cramps returned, and she complained of a sudden pain in her back: she got no sleep that night. Early the next morning (the 14th instant) she told the nurse that she had passed no urine for 3 days. At the Doctor's morning visit he found an alarming change for the worse—her skin was cold and moist, cramps frequent, no vomiting or purging; hypogastric region quite resonant (in other words tympanitic); pulse thready and rapid; pupils contracted to a pin's point, and fixed. Complains of no pain and is quite sensible: voice low but distinct. Her temperature was found to be 103°4', but we are not told at what hour it was taken, but most likely soon after Dr. Gribbon's visit. *The catheter was passed, but no urine flowed.* This fact taken with the symptoms above described, lead me to diagnose that pressure on the neck of the bladder from retroversion of the uterus had prevented her passing her urine, causing distension of the bladder and rupture of this organ, which was quickly followed by a state of collapse, from which she did not rally, but rapidly grew worse: and coma set in, and her pupils became widely dilated for an hour or more before she died at 11. A. M.

As no post mortem was permitted, we are left in doubt as to the immediate cause of death. The case is one presenting several features of great interest, and difficulties as to a correct explanation of several prominent symptoms. The absence of severe headache, or convulsions, make one doubt as to her suffering from sun-fever; her temperature rose to 103°4' the morning she died, but no record had been kept during her illness. The cramps or "tonic spasms" were clearly the result of irritation of the ganglionic nerves, originating I believe in displacement of the uterus, and death of the foetus, from the accident, and proving the exciting cause of the "tetanic" spasms. If my idea as to the cause of the sudden collapse which set in a few hours before death is not correct, we must conclude that she suffered from "suppression of urine" leading to uræmic poisoning. The symptoms of "hyper-pyrexia" towards the termination of the case agree with the theory of "tetanus" being one of the causes of her death. Although undoubtedly the "prognosis" was unfavourable from the beginning, had the gravity of the nervous symptoms been recognized earlier, and active treatment adopted accordingly, the fatal termination might have been averted, as the patient was young and robust.

I remain yours truly
J. CANDY, M. D.,
Surgeon-Major A.M.D.

Ramandroog Convalescent Depot
near Bellary., 17th October, 1878.

SCARLATINA IN CALCUTTA.

TO THE EDITOR OF THE "INDIAN MEDICAL GAZETTE."

SIR,—The following case is of interest, as being an undoubted case of scarlatina, a disease that is, as far as I know, very seldom met with in India, and though I have occasionally seen cases in Calcutta that in some respects resembled scarlatina, they have always been somewhat doubtful in character. As this disease is in Europe so intensely contagious, it would be interesting to know if other cases have of late been observed in Calcutta.

A Eurasian boy of 12 years o'd, son of an apothecary, and attending a school in Calcutta, was brought to me on the 5th with slight fever, and his whole body, arm and hands were covered with a bright red rash, consisting of minute red points spreading into general diffused redness; the fauces were red and slightly swollen; the tongue red and with bright red papillæ, the regular strawberry tongue. He had had fever for 2 days before; and the rash appeared on the 2nd day of the fever. I saw the boy again on the 14th, or the 12th day of the disease. He was free from fever, fauces still a little red, and the whole skin of his body and limbs was desquamating, the cuticle coming off from his neck and palms of the hands in large flakes. There was little or no rash on his face. Dr. Partridge also saw the boy, and pronounced it an unmistakable case of scarlatina. The attack was a mild one.

Yours truly,
H. CAYLEY.

Calcutta, February 15th, 1879.

OFFICIAL REPORT ON AN OUTBREAK OF FEVER AT THE NIRA CANAL CAMP.*

No. 878 of 1877-78.

From
THE CHEMICAL ANALYSER TO GOVERNMENT,
To
THE SECRETARY TO THE SURGEON-GENERAL,
Indian Medical Department, Bombay.

Chemical Analyser's Office,
Bombay, 23rd January 1878.

SIR,

In accordance with Government Resolution, Judicial Department, No. 367 of the 18th instant, I left Bombay for the Nira canal on that day, arriving at the prisoners' camp near Nira bridge on the morning of the 19th. During the whole of the 19th I was engaged at the camp itself, inquiring into the nature of the outbreak and the proportion in which the various classes composing the population of the camp had been attacked. On the 20th I inspected the ground occupied by the various camps, the canal where the prisoners had been at work, and for comparison portions of the canal where the famine labourers had been employed. On the 21st I was engaged in collecting further information; and started on my return to Bombay that evening, arriving on the morning of the 22nd, when I verbally reported to the Surgeon-General.

I now beg to submit the following written report on the matter, and a description of the symptoms, &c., presented by the individuals attacked, drawn up by Dr. Dane, the Surgeon in charge.

From Dr. Dane's description and from all I could gather as to the nature of the fever, it appears to be undoubtedly malarial in character; the progress of the outbreak is shown by the diagram attached.

In order to place before you clearly the facts, I have collected bearing on the cause of the outbreak, I have divided my report as follows:—

* This interesting report has been reprinted from the Chemical Analyser's report for the year 1877-78.