

scarlet fever, 14 from diarrhoeal diseases, 5 from "fever," and not one from small-pox. The rate from these diseases in the Scotch towns last week averaged 4.8 per 1000, and was more than double the rate from the same diseases in the large English towns. The 34 deaths from measles in the Scotch towns showed a further increase upon recent weekly numbers, and included 19 in Glasgow and 10 in Aberdeen. The 27 fatal cases of whooping-cough also showed a further increase upon recent weekly numbers; 9 occurred in Glasgow, 6 in Dundee, and 4 in Edinburgh. The 21 deaths from diphtheria also showed an increase, including 8 in Glasgow and 5 in Edinburgh. Nine of the 14 deaths from scarlet fever occurred in Glasgow; and 3 of the 5 deaths referred to "fever" were returned in Edinburgh. The 145 deaths referred to acute diseases of the respiratory organs in the eight towns showed an increase of 44 upon the number in the previous week, and were 5 above the number returned in the corresponding week of last year. The causes of 89, or 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24.7, 25.3, and 30.0 per 1000 in the three previous weeks, further rose to 32.7 in the week ending the 22nd inst. During the first eight weeks of the current quarter the death-rate in the city averaged 28.1 per 1000, whereas the rate during the same period did not exceed 19.0 either in London or in Edinburgh. The 220 deaths in Dublin last week showed a further increase of 18 upon the number in the previous week, and included 39 which were referred to the principal zymotic diseases, against 18 and 25 in the two previous weeks. Of these 39 zymotic deaths, 16 resulted from scarlet fever, 7 from "fever" (typhus, enteric, or simple), 7 from whooping-cough, 6 from diarrhoea, 2 from diphtheria; 1 from measles, and not one from small-pox. These 39 deaths were equal to an annual rate of 5.8 per 1000, the rate from the same diseases being 2.3 in London and 4.0 in Edinburgh. The deaths from scarlet fever, which had been 8 and 10 in the two preceding weeks, further rose to 16 last week, and exceeded the number returned in any previous week of this year. The fatal cases of whooping-cough and diarrhoea also showed an increase. The 7 deaths referred to "fever" were two fewer than those in the previous week. Six inquest cases and five deaths from violence were registered, and 70 deaths were recorded in public institutions, showing a marked increase upon recent weekly numbers. The deaths both of infants and of elderly persons were fewer than those in the previous week. The causes of 34, or more than 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

COCAINE.

To the Editor of THE LANCET.

SIR,—Permit me to add my testimony to the advantages to be derived from the use of a 4 per cent. solution of cocaine in operations upon the eye. It acts excellently as a local anæsthetic, rendering the conjunctiva and cornea insensitive in the course of a few minutes. I first tried it on the 13th inst. in a case of extraction of a cataractous lens at the Royal Westminster Ophthalmic Hospital. It was dropped into the conjunctival sac about four times in the course of twenty minutes. The speculum was introduced: the conjunctiva was seized with the forceps, and the man was asked whether he felt pain. "No, Sir," was the reply. The linear knife was then passed across the cornea, and as it was slowly made to cut its way out, the patient was asked two or three times whether he experienced any suffering. "Not a bit, Sir," he answered each time. I have since tried it on three cases of cataract, in all of which the pain was stated to be inconsiderable though not entirely absent. I further tried it in a case of entropion, the solution being subcutaneously injected; but it did not seem to effect any material alleviation of the pain, perhaps because a sufficient interval of time was not allowed to elapse. On Friday last I operated on a boy of eight years

of age for squint. No pain was felt till the tendon was picked up with the hook, when as it was divided the child whimpered a little, because he did not like the scissors. This, however, did not prevent him from submitting, with a little coaxing, to the operation on the other eye. Lastly, I have done one iridectomy for glaucoma under its influence. The application of the forceps and the transfixion of the cornea did not produce any complaint of pain; the division of the sclerotic caused some, but not severe pain. The division of the iris excited no remark. The patient, on being informed that the operation was completed, said, "I was told there would be no pain; there was some, but it did not last long." The partial failure of the remedy in this case may reasonably be referred to the difficulty with which absorption takes place when the eye is very tense. On the whole I am well satisfied with the effects produced, and consider that it will prove of the greatest benefit to those who are old and infirm, or who from any other reason object to the use of chloroform or ether. In general surgery it will probably prove useful in cases of stricture, and as an anæsthetic in the removal of dressings. It does not seem to produce any disagreeable after-effects.

I am, Sir, yours truly,

Cumberland-place, W., Nov. 1884. HENRY POWER, F.R.C.S.

To the Editor of THE LANCET.

SIR,—As an addition to the information given by my friend, Dr. Felix Semon, last week, on the effect of cocaine on the larynx, will you allow me to publish the effect of cocaine on the interior of the nose? The experience is all the more valuable, because it is personal; the nose which was operated on was my own, the operator was Dr. Semon.

About three weeks ago, Dr. Semon was kind enough to apply the galvano-cautery freely through the thickness of the mucous membrane over my right inferior turbinated bone, as for some time past I have suffered from slight symptoms of obstruction, which, I thought, might cause or at least aggravate the attacks of migraine from which I occasionally suffer. He made three long incisions in the membrane. They produced so much pain that I found it difficult, even with great determination, to sit still. My right eye ran with water and the conjunctiva was instantly intensely congested. The application of the cautery to the turbinated bone immediately lighted up the pain on the right side of the head and in and behind the eye, such pain as I always experience during an attack of migraine. I was very unwell during the rest of the day, and on the day following was laid up with the most violent attack of migraine I have ever had. On these accounts it was agreed that when the operation was repeated I should take gas or chloroform. In the meantime we have become acquainted with the properties of cocaine, and Dr. Semon has, as he has already told you, put it to the test in affections of the larynx. To-day he repeated the burning of my nose, and, instead of three linear cauterisations, made five—two in the inferior and three in the middle turbinated bone. But, instead of using gas or chloroform, he first painted the surface of the bones thoroughly twice with a 20 per cent. solution of cocaine, allowing an interval of five minutes to elapse between the first and second paintings, and another interval of five minutes between the second painting and the burning. The effect was marvellous, far more so than I, or even he, I think, expected. The burning was not felt by me more than the introduction of the brush in painting. I cannot say I did not feel the operation, but the sensation must be described as feeling, not pain; for indeed I suffered none. There was scarcely any watering of the eye or suffusion of the conjunctiva, and there was no pain in the head or about the eye. Of the length of time during which the effect of the cocaine lasts I am not able to speak, for although after the first operation I was much more unwell than I feel at present, there was really very little pain in the nose. Certainly the discomfort has been less this time, and the cocaine has not left any disagreeable sensations.

Dr. Semon begs me to draw attention to the strength of the solution of the muriate of cocaine which was used—20 per cent.; very much greater than the strongest solution which is used in ophthalmic surgery. At an earlier hour on the same morning he performed the same operation on the turbinated bone of a patient (a medical man) who brought with him a 4 per cent. solution of cocaine. The pain was less than if no local anæsthetic had been employed, but was

not entirely absent, as in my case. I can confirm this observation so far that on the previous day I used a 4 per cent. solution in operating on the larynx of a delicate woman under my care at St. Bartholomew's Hospital without producing any marked anæsthesia. Yet the application was made twice, and an interval of at least five minutes was allowed between the applications and between the second application and the operation. It is not improbable that a solution of less strength than 20 per cent. will suffice in operations in the interior of the nose, and this will easily be determined during the next few weeks or even days. Indeed, the sooner it is determined the better, for the muriate of cocaine is at present extremely expensive, costing about one shilling a grain. When the 20 per cent. solution is employed, and the nose or larynx is brushed over twice thoroughly, it will be found that from two to four grains of the cocaine have been used. I am informed that the cost will probably increase during the next few months if the drug is as largely employed as it bids fair to be, for the supply is very limited, and there is not even a good prospect of obtaining a sufficient supply of the leaves from which the alkaloid is manufactured.

Nov. 24th (two days after the operation).—Yesterday I suffered from a slight attack of migraine, not so severe as I have often experienced, and not to be compared with that which followed the first cauterisation. To-day it has completely passed off, for it only lasted a few hours. How much of the difference is to be attributed to the use of the cocaine I am not able to say, but I believe a part of it at least. I mention it to make the case as complete as possible, and to show that there is certainly no reason to apprehend that the after-effect of the alkaloid will exaggerate the suffering of the patient. I remain, Sir, yours truly,

Queen Anne-street, W., Nov. 24th, 1884. HENRY T. BUTLIN.

P.S.—Dr. Semon has just looked through this letter, and thinks I ought to have offered some explanation of the reasons which induced him to perform and me to submit to the cauterisation of the turbinated bones for migraine; but I think it will be better to defer that and the discussion of Hack's theory to a later date, when we have more material within our reach. The object of the present communication is to direct attention to another use of cocaine.

FLUKES IN MAN.

To the Editor of THE LANCET.

SIR,—Having received from Dr. Manson a copy of Dr. Wallace Taylor's paper entitled “Distomata Hominis,” I request permission to offer a few criticisms in no unfriendly spirit. Dr. Taylor says that “the whole subject of distomata infesting man has probably been worked up better in Japan than elsewhere.” Nevertheless his memoir, which from the clinical standpoint does him much credit, omits all reference to the labours of Lewis, McConnell, Sonsino, Thomas, and others. My papers on *Distoma crassum*, *Bilharzia*, &c., naturally share the same fate.

Dr. Taylor gives a description of *Distoma Ringeri*, but, following Prof. Baelz, he calls the parasite *D. pulmonale*. My description of the original fluke sent by Dr. Manson was published in the *Quekett Journal* in 1880, two years before the publication of Baelz's memoir in the *Berliner Klinische Wochenschrift*, which he quotes (1883). Baelz, it seems, had mistaken the eggs of this fluke for gregarines.¹ But apart altogether from the question of priority, the title (*D. pulmonale*) is badly chosen, because the lung flukes of mammals are so very like one another. The *D. compactum* found by me in the lungs of the Indian ichneumon is apparently a mere variety of, if it be not identical with, *D. Ringeri* of man, and as much may be said of Dr. Kerbert's *D. Westermanni* infesting the lungs of the tiger.² In all three corresponding forms the uterine organs have precisely the same character and disposition. Certainly Baelz's and Kerbert's figures leave little to be desired.

The second parasite described by Dr. Taylor is still more unfortunately named. He calls it *D. hepaticum*. Here, again, he follows Baelz, who had previously called it *D. hepatis perniciosum*. It seems incredible that anyone writing on flukes should be unfamiliar with the natural history and characters of the common *D. (Fasciola) hepa-*

ticum so beautifully worked out by Professor Thomas and already known to have been detected some twenty times in the human subject; yet Dr. Taylor naïvely remarks that “whether *D. hepaticum hominis* is of a different species from the *Fasciola hepatica* (Linn.), well known in Europe as the cause of the sheep ‘rot,’ I am unable to decide.” Dr. Taylor's parasite (*D. hepaticum hominis*) is utterly unlike the common liver fluke. If it be a good species, it will be less confusing to call Baelz's fluke (*D. Baelzi*). My impression is that it is only a contracted or broad example of the species which I have called *D. sinense*. Dr. Taylor, however, says of his *D. hepaticum* that, “omitting minor differences, the general description given of the viscera of the *D. pulmonale* will answer for this.” This statement surprises me, for his own, or rather Professor Baelz's, really good figures show that (as regards the position and extent of the vitellaria and other reproductive organs) no two fluke species of the same genus could well be more divergent in the arrangement of their essential organs.

The next species described by Dr. Taylor is Prof. Baelz's so-called *Distoma hepatis innocuum*. This fancied new parasite is (as Manson himself points out in a pencilled side-note) nothing more than the now well-known *D. sinense*, of which I have specimens sent by the original discoverer, Prof. McConnell. Unaware of my prior description, Leuckart named the same parasite *D. spatulatum*. I have part of a liver well infested by this fluke, which is doubtless “perniciosum” in its effects. Baelz's zoological nomenclature is therefore altogether inadmissible.

Dr. Taylor's memoir closes with figures of two other fluke parasites. Here again he is equally unfortunate in his determinations. The large fluke “infesting the stomach of cattle,” which he calls a distoma, is the well-known *Amphistoma conicum*, whilst the smaller fluke, taken from the liver of a cat, is probably Creplin's *Distoma conus*. The size, to be sure, is rather larger than Dujardin states it to be in his description.

The errors which exist in regard to the synonymy of parasitic species are already sufficiently burdensome, and it was in the hope of aiding identification that I published a “Manual of Reference” to all the known human parasites, bringing the literature up to date (1882). Honest and good workers, who are not at the same time systematists, can have little idea of the great trouble and confusion which the introduction of new names for old or familiarly known parasites creates in medicine. Solely in the hope of checking errors of fluke-nomenclature in relation to important diseases I have made these few remarks, which I trust will be accepted in the spirit in which they are offered.

I am, Sir, your obedient servant,

Portsmouth-road, W., Nov. 22nd.

T. SPENCER COBBOLD.

“CHARCOT'S JOINT DISEASE.”

To the Editor of THE LANCET.

SIR,—The interest excited by the discussion at the Clinical Society on “Charcot's Disease” induces me to state that you published in THE LANCET of Jan. 28th, 1871, in a report by me of cases under the care of Dr. Charcot at La Salpêtrière, Paris, the first notice of this disease in England. This report included a very short résumé of the clinical facts, and by what, in considering the diagnosis, rheumatism was excluded. In 1876 I begged of Dr. Charcot that he would kindly give some specimens of bones illustrating the disease in question. He informed me that the specimens he had shortly before had at his disposal were sent to the museum of St. Thomas's Hospital. May I here have the pleasure to acknowledge that Dr. Charcot did not send me empty-handed away, but gave me sections of the spinal cord in another form of disease—namely, progressive muscular atrophy, which I exhibited at the Pathological Society May, 1877, as having a relationship with the joint affection.

I append an extract from your journal of the date above named.

I am, Sir, your obedient servant

Stratford-place, W., Nov. 1884.

T. W. NUNN.

“Dr. Charcot pointed out some cases of joint affection which he believed showed that consecutive to lesion of the nervous system arose mischief in the joints. In the *Archives de Physiologie*, No. 1, 1868, he has published papers: “Sur quelques Arthropathies qui paraissent dépendre d'une Lésion du Cerveau ou de la Moëlle Epinière.” The purpose

¹ See THE LANCET, 1880, vol. ii., pp. 548.

² Archiv für Mikroskop. Anat., Bd. 19, S. 529.