I propose to treat any future well-marked case with sulphate of ammonia, which I have found to be quickly eliminated, without change, by the kidneys. I believe the first action of this will be to form a sulphate of lead, which will then be dissolved by the remaining sulphate of ammonia, and be speedily eliminated. I have, as yet, had no experience of this proposed treatment in any patient, and it is difficult to predicate whether the changes we find in the chemist's laboratory will be the same in the vital laboratory; and I also think any eliminating process should be used at first with caution, quantitatively analysing the urine day by day, as the patient may be re-poisoned by too large a quantity of lead being set free at once in the system.

From this experience it would seem that the conclusions at which Dr. Dobie and Mr. Allen arrived were correct as to the elimination of a considerable quantity of lead during a fortnight's treatment by potassic iodide.

PROLONGED INCUBATION OF SCARLET FEVER.

By R. J. BRYDEN, M.R.C.S.Eng.,
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HAVING read, in the last few numbers of the *BRITISH MEDICAL JOURNAL*, some correspondence concerning the length of the incubation stage of scarlet fever, and it being a subject about which I am much interested, and which, I think, is of some importance to medical men and to the outside public, I have thought I would give some particulars in favour of the short incubation period of scarlet fever.

I was acting as house-surgeon to one of the children's hospitals in London about three years ago, and was myself a victim to this dire complaint. Since that, I have contracted rather an interested affection for the disease, and have endeavoured to collect some authentic notes concerning it. Of course my experience is very limited; but, in nearly forty cases, I have ascertained that the incubation stage did not extend beyond six days in the longest period. Perhaps I might relate my own personal experience of scarlatina.

On the Sunday before I was taken ill, I felt quite well, and spent the day agreeably with some friends. On the Monday morning, I saw the out-patients, and amongst the new cases was a little girl aged three years, who was suffering from a very bad throat. The child seemed very ill; and the throat, on careful examination, looked very suspicious, the mucous membrane being of a dusky red hue, whilst the tonsils were coated with small exudations of lymph. On questioning the mother, she told me she had heard that there were three cases of scarlatina in the building where she lived; it was a block of Peabody Buildings in the neighbourhood. I told the mother that I thought it was a case of scarlet fever; and afterwards I ascertained that the little patient died very soon in a highly delirious state, and with a well-marked rash on the skin. I thought no more of the case, but did my work as usual during the day. I had been reading hard of late, and did not go out that day. I went to bed feeling quite well, but woke up in the morning about six o'clock, feeling my throat sore. I ascertained, with the aid of a mirror, that my tonsils were much swollen and inflamed. I just managed to wade through breakfast; but, when visiting the wards, I began to experience a feeling of languor and weakness, and one of the nurses remarked how ill I looked. I had lost all appetite for luncheon, and therefore I thought I would try to do some reading; but I found this impossible; so I took my hat and went for a walk, thinking the air might do me good. After I had gone some little distance, I shall never forget the dreadful sensations I felt. My body seemed too heavy for my legs; a horrid sensation of nausea and faintness came over me; and I felt almost inclined to commit suicide. I got some brandy; but, soon after swallowing it with pain, I vomited two or three times, and felt so ill that I took a cab and returned to the hospital. On my way back, I was sick again, and felt very chilly. My bed was soon ready for me; and, being in a shivering state, piles of blankets were placed over me. About an hour afterwards, I was taken with fearful gripping pains in the abdomen, followed, in about another hour, by profuse diarrhoea and attacks of vomiting. A medical man saw me, who examined my throat and gums. He would not say what was the matter with me, but suggested that I was suffering from the effects of lead-poisoning. The succeeding night was spent in alternate attacks of diarrhoea and vomiting; in fact, the nurse who was with me was quite frightened at my condition. When daylight appeared on the Wednesday morning, I observed that my chest and arms were covered with a well-marked scarlatinal rash; and then immediately it flashed through my mind that I had contracted the poison from the throat of the child I had examined on the Monday morning. Although my throat was very bad, I succeeded in weathering the storm, and recovered perfectly, without any complications whatsoever. No

albumen was ever found in my urine. The whole of my epidermis peeled, and continued to do so for six or seven months after the rash had gone, my feet being the last to lose their diseased covering. Strange to say, eight months after the scarlatina left me, my toe and finger nails began to desquamate, and were marked with the furrows caused by the slow dropping off of the epidermic cells for two or three months afterwards.

I cannot discover, in any book, mention made of an incubation stage in scarlet fever lasting fourteen days; and I think that these rare cases—for rare they are—should be carefully chronicled.

CURIOUS SYMPTOMS IN A DOG AFTER A DOSE OF MALE FERN.

By FREDERICK MASON, L.R.C.P.Ed.,
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UNTIL the news came from India (*BRITISH MEDICAL JOURNAL*, October, 14th, page 748) that a gentleman had been poisoned by an overdose of male fern, taken for the destruction of tapeworm, it was generally supposed that this drug was innocuous to the individual, and acted specifically upon the parasite only.

The following notes of some curious symptoms in a dog may be of interest.

In February 1881, a gentleman complained of the annoyance he suffered from portions of tapeworm constantly escaping from him. I prescribed the ordinary dose, half a drachm of the liquid extract of male fern, with the usual result.

At the same time, his son had a dog, a cross between a bull and fox terrier, suffering badly from tapeworm; and, seeing the good effects upon his father, thought he could do no harm by giving some to his dog. He procured one drachm from a druggist; and, after keeping the dog without food for a day, gave the dose about half-past six in the morning. Shortly after taking it, the dog began to stagger in its attempts at walking, and, at half-past nine, when placed upon the ground, fell over on his back, and was unable to get up. He now became completely helpless, having lost all muscular power. The ears, which were pricked (so-called) or upright, became flaccid, and dropped, and, from having the transparent pink or red hue, became quite white. I chanced to see him the day following. He appeared to be dying, unable to move; and, when lifted by the skin of the back, the legs and head hung down as they would do in a dead dog. There was no voluntary movement whatever. He continued in this state for three days, during which time he took no food or drink, with the exception of a little milk forced into the mouth. He did not pass any urine, and the bowels were obstinately constipated, notwithstanding castor-oil, in repeated doses, was administered to the extent altogether of between three and four ounces. After some of the doses of oil, he vomited a frothy white fluid. On the morning of the fourth day, he had a very costive and black motion, and after this he began to recover; but it was not until the sixth day that he was able to walk without staggering. There was no appearance of the worm in the motion; but, as so long a time elapsed before the bowels acted, and as he has not since shown any symptoms, it may be supposed it was digested in the bowels.

The dog has recently met with an accident, and it will be necessary to have him killed; but, previously to this, the owner has proposed to try the effect of another dose of the extract of male fern.

WEST HERTS MEDICAL ASSOCIATION.—The sixty-ninth meeting of this Society was lately held at Watford, Dr. P. Hood, president, in the chair. Dr. Iles read a paper on the period of incubation in diphtheria and in German measles occurring in the same patient. In the discussion which followed, Drs. Hood, Brett, Saunders, Fisher, Batterbury, Hobson, Lemon, and others, took part.

ESTIMATION OF THE QUANTITY OF BLOOD.—Messieurs Ghreant and Quinquaud are reported to have ascertained by measurement the volume of blood contained in the system of a live mammal. The method used depends on the carbonic oxide giving an oxycarbonised hæmoglobin, a more fixed combination than oxygenated hæmoglobin (the carbonic oxide being substituted for oxygen, volume for volume). An animal is made to breathe gas containing a known amount of carbonic oxide. The volume of carbonic oxide remaining is noted, say, in a quarter of an hour, and this gives the amount fixed. On the other hand, the blood is analysed to find the carbonic oxide fixed in a given volume. In this way it was found that the total weight of blood is between one-twelfth and one-thirteenth of the body-weight. In the normal state, there are no great variations.