was here, unless, indeed, it aided in causing his inaptitude for exertion.

Finally, there was no aphasia. Speech was low and mumbling, he was disinclined to converse, his replies were usually nearly monosyllabic; but, when urged, he could, and often would, speak more fully to the point, and used his limited vocabulary without hesitation or mistake. The use of language was partly restricted by his mental condition; the impairment of articulation was merely of a paretic nature, and the essential characters of aphasia proper were absent.

HYDATID DISEASE :

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND IN OTHERS ELSEWHERE.

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Correspondent of the Academy of Sciences of Philadelphia.

IV.

BEFORE concluding my summary of the human hydatids contained in the metropolitan and certain other museums, there is in this connection an interesting literary contribution that I cannot pass unnoticed. In the November number of the *Indian Medical Gazette* for 1870, an article occurs in which it is stated that the Calcutta Medical College Museum contains eighteen specimens of hydatid cysts of the liver. This fact was, it seems, originally adduced to show not the frequency, but rather the rarity, of the occurrence of hydatids in India. However, from a valuable communication by Dr. James Cleghorn, which was published in the same periodical for the following March, it appears that hydatids of the liver are much more common in India than is generally supposed. This, according to Cleghorn, is owing to the circumstance that many of the so-called cases of tropical abscess are neither more nor less than examples of hydatid cysts that have suppurated.

I now turn to a phase of the subject from which much practical instruction may be gathered. The consideration of the pathological phenomena of hydatid disease as it affects the lower animals is of high interest, and no prejudice should induce any medical man from accepting such useful data as may be gathered from this source. The facts of hydatid parasitism in animals, though often peculiar, are, for the most part, of an order similar to those presented in the human subject. If any practitioner think it beneath his dignity to study the pathology of the lower animals, the conduct of John Hunter in this respect is a standing protest against such narrowness.

The museum of the Royal College of Surgeons of England contains some of the finest specimens of hydatids from the lower animals that are to be seen anywhere; the very choicest of them having been selected by Hunter himself. That distinguished man sought information from every available source; and hydatids were for him of almost equal interest, whether found in the body of a human being or in the carcass of an ox or an ass. Now, at all events, neither pathologists nor sanitarians can well afford to neglect comparative pathology; and, for myself, I am free to say that the yearly exposition to the students of the Royal Veterinary College of the phenomena of parasitic life amongst animals has brought with it an ever increasing knowledge of the most curious and often unlooked for information. Some of the data thus supplied are quite remarkable. Let me also add that my studies of the entozoa of wild animals have put me in possession of particulars of the highest value in regard to the larger question of the origin of epidemics. Beasts, birds, reptiles, and fishes of every description are liable to succumb to internal parasites, and there is practically no end to the variety of useful information to be obtained from this source. I have collected materials for a large treatise on this department of the subject, but I fear I shall never have either the means or opportunity of giving the facts due publicity. Here, for obvious reasons, I restrict myself to the hydatids, more or less properly so-called.

Referring, in the first instance, to those true hydatids of animals that have the same mode of origin, and that exhibit the same general characteristics as those found in man, I notice that four of the museums exhibit nine examples of liver echinococci. The Hunterian collection shows specimens of this kind from the pig, monkey, zebra, and lion. The museum at St. Bartholomew's Hospital contains two examples from the pig and one from a cow; whilst the animal liver-hydatids preserved in the King's College and Guy's Museums, respectively, are from the pig and sheep. That from the latter is partly calcified. Respecting animal hydatids affecting the lung, the Cambridge Museum exhibits a simple acephalocyst from a monkey, and the Guy's Hospital Museum shows a pulmonary hydatid from the kangaroo. In the museum at Oxford, Dr. Acland's (pathological) department shows a preparation of

"one large echinococcus cyst from the abdomen of a baboon", whilst Dr. Rolleston's department (anatomical) displays the echinococcus itself from the "cavity of the abdomen of the same animal". The collection also contains a variety of other bladder worms from different animals. The Hunterian Museum, Lincoln's Inn, exhibits four or five alleged examples of hydatids from the kidney of the sheep, besides another from the spleen. Some of these are very doubtful in character. A cystic kidney from the sheep, preserved in the London Hospital Museum, and originally supposed to have been due to hydatids, is (as hinted in the MS. catalogue) certainly not of parasitic origin. In regard to the occurrence of hydatids in the heart of animals, the Hunterian series shows two good examples from cattle, whilst the collection at University College exhibits one taken from the wall of the left ventricle of a sow. This was presented by Dr. Elliotson.

In the museum of the Royal Veterinary College, Camden Town, there are a number of excellent preparations of true hydatids taken from various animals, especially from cattle, swine, and sheep; and there are also many kinds of bladder-worms which, though often called hydatid by veterinarians, have a totally different origin from that of the true echinococci. The so-called gid-hydatids (*canuri*) and slender necked hydatids (*cysticercus tenuicollis*) are of this description. Specimens of the polyccephalous brain-hydatid, or *conurus*, also exist in the museums connected with St. Bartholomew's, Guy's, and St. Thomas's Hospital Medical Colleges, as well as in both the anatomical and pathological departments of the Oxford Museum. Specimens of large *conuri* occurring in the soft parts of rabbits may be seen in the Guy's Museum (presented by Mr. Carpenter). Similar characteristic specimens exist in the Oxford collection, labelled *C. cuniculi*, obtained from the "maseter and infrapinatus" muscles of a rabbit. My private collection also contains a recent addition of this remarkable hydatid, sent to me by Mr. Alston from Ayrshire. It is the only one I have seen from Scotland. Three examples of the slender necked hydatid (from a monkey and two sheep, respectively) may be seen in the Guy's and University College collections, and several are preserved at the Royal Veterinary College.

I cannot go out of my way to speak of other bladder-worms, except so far as to call attention to the heart of a bear preserved in the museum at Guy's, the walls of which are crowded with cysticerci. That unique preparation ought to be more carefully examined and described. Lastly, in this immediate connection, I have only to call attention to the fact that the Hunterian Museum contains two really magnificent specimens of hydatids affecting the bones of cattle. In the one case, a large solitary vesicle occupies the shaft of the humerus; whilst in the other, several "acephalocysts" have taken up their residence within the cancellous structure of the ilium. These facts are of high interest when taken along with certain others of a like character, already adduced in connection with hydatid parasitism as it affects the osseous system of man.

INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE RESULTING IN RECOVERY.

By H. ERNEST TRESTRAIL, F.R.C.S., Aldershot.

IN considering cases in which death has followed the injection of perchloride of iron in *post partum* hæmorrhage, we should be careful not to attribute more of the result to the perchloride, *per se*, than actually belongs to it. In the case reported in the JOURNAL by Mr. Boddy, I cannot avoid the conviction that the manner in which the iron was used was the cause of death. I observe that from the commencement there was decided contraction of the os uteri, requiring "dilatation for the passage of the tube", and also that subsequently "the uterus was so firmly contracted around the tube that some little force was required for its withdrawal". It is evident, therefore, that there could not have been sufficient passage for the free exit of the solution—a point of very great importance. The pipe being introduced to the fundus, the nurse worked the syringe, and sixteen ounces were forced in. The question immediately suggests itself, what became of this fluid? Doubtless, it dilated the uterus, and at the same time escaped at the weakest points. Mr. Boddy contends that fluid could not pass through a contracted uterus, but it certainly might through the placental site of a forcibly distended one, especially if introduced in the jerking manner essential to the working of an "ordinary enema-apparatus". Then, again, why should not some of the solution have escaped through the Fallopian tubes?

In my experience, the two most essential points in the use of the perchloride of iron are—first, to see that there is a free passage