ing to almost paralysis succeeded, and he died in twenty hours after the second dose. About the same time I administered the same drug to another dog, rabid and ferocious. His ferocity was subdued, and the disease was protracted; but he died. At other times the alisma did not produce the slightest effect. This was the case with almost all the sedatives to which I had recourse.

Mr. Caesar Hawkins tried the effect of the South American guaco on a dog in my hospital. The lower jaw was dependent, the tongue black, the breathing hoarse and grating, and the true rabid howl was heard almost every minute. About half an ounce of the expressed juice of the guaco was given in the afternoon, and a second dose in the evening, with some slight relief of the symptoms; but, after the third dose, on the following morning, the change was most extraordinary. The dog recovered to a very considerable degree the use of the jaw, and could not only masticate the food when put into his mouth, but could with tolerable ease pick it from the floor. The howl ceased and the restlessness disappeared. We were surprised and pleased, and almost began to think that the grand specific was at length discovered. The medicine was continued during the day; but on the next morning the dog was found breathing slowly, with every limb paralysed, and presently afterwards he died.

The guaco was afterwards given at St. Thomas's Hospital, to a young man evidently hydrophobous. He experienced some slight and temporary relief after every dose; but he died.

About the same time Mr. Hawkins tried the *veratrum sevadilla*, regarded in South America as a specific in the cure of rabies. We administered four times the quantity that was said to cure the disease, but not the slightest effect was produced.

Mr. Morgan having given me some of the Ticunas poison, I inoculated a rabid dog with it, in order to see what effect one poison might have in weakening or destroying another. Although not ferocious, the animal had been in a considerable state of excitation. An incision through the integument was made on the inside of the arm, and a pointed bit of wood that had been dipped in the poison was rubbed on the exposed fasciæ. No effect being produced, the same bit of wood was introduced into an incision more deeply made. In less than two minutes the dog was more tranquil, and at the expiration of five minutes he dropped motionless, the only indication of life being a regular and not laborious breathing. In this state he continued eight hours, when I left him for the night. On the following morning I found him dead.

Sir A. Carlisle gave me opportunity of testing another South American cure for hydrophobia, prepared from a plant of the cactus

family. It produced a considerable degree of temporary excitement, I might almost say insanity; but this passed over in the course of a few hours, and the disease pursued its fatal course. It was also, about the same time, given to the human being without effect.

To sum up the results of my experience in the treatment of rabies, I may say that I have seen some palpable cases of spontaneous recovery. I have seemingly gone a great way towards effecting a cure, but I never fully accomplished my purpose. I hope that I may have contributed to prevent the appearance of the disease in a great many patients; but I have never cured one.

LITHOTOMY IN THE FEMALE DURING UTERO-GESTATION.

To the Editor of THE LANCET.

SIR:—Hoping that the following case will be interesting to some of your readers, you will oblige me by inserting it in your widely circulated Journal. I am, Sir, your obedient servant,

HENRY THOMAS.

Sheffield, Sept. 22, 1838.

Jane Whough, ætat. 27, unmarried, tall, thin, and delicate-looking, was admitted into our infirmary, under my care, on the 3rd of April, 1838. She complains of severe pain, with swelling, in the vagina, a constant, distressing desire and straining to pass water, and states that for several weeks past she has suffered from tenderness in the hypogastric region, where she has been freely leached with some relief. For three years she has been obliged to rise several times in the night to micturate, but did not feel any other inconvenience until about three months back.

On examination a large rough calculus was found in the fundus of the bladder, about an inch and a half in its long diameter, which could not be moved from its situation even with the assistance of the finger in the vagina. My first impression was to break down the stone, but finding that she was about four months and a half advanced in pregnancy (despite her most resolute denial of the fact), and that we could not inject the bladder, in consultation with my colleague lithotomy was agreed upon, relying on the known preservative power of Nature in the pregnant state.

April 26. I operated as follows:—Having secured my patient in the usual position for lithotomy, I passed a small sound into the bladder, presenting its concavity to the anus, and gave it to an assistant, to depress somewhat firmly, the labia being held tensely back to either side, with a spear-pointed knife I commenced a semilunar in-

cision half an inch on the right side of the urethra, carried it over, and terminated it at the same distance, on the left of the meatus urinarius externus, which incision I gradually dissected onwards, directed by my forefinger, until I arrived at the bladder, and made a pretty free opening into it, above the meatus urinarius internus. I now attempted to extract the calculus with the forceps, but ineffectually; after, however, slightly dilating the wound in the bladder, with the aid of the finger in vagina, the stone was separated from some adhesion its rugous surface had formed with the mucous membrane at the fundus of the bladder, and easily extracted. No hæmorrhage of importance occurred; an elastic gum catheter was introduced through the urethra, and secured in the bladder. The process occupied thirteen minutes.

The stone was a well-marked specimen of oxalate of lime, or mulberry calculus, measuring $1\frac{1}{2}$ inch by 1 inch, and weighing 5vij.

She recovered favourably. The whole of the urine passed through the catheter until the fourth day after the operation, when a small quantity was forced through the wound, in the act of vomiting, excited by an aperient she had taken.

On the fifth day more urine drained through the wound, producing considerable soreness of the labia, &c. The catheter was now removed, and the whole of the urine, with some mucous deposit, drained through the wound until the twenty-first day, when a small quantity resumed its natural course.

On the twenty-third day she suffered from a mild attack of bronchitis, which soon yielded to treatment, but did not interfere with the curative process in the bladder, so that on the thirty-second day after operation the wound had entirely healed, and it was not easy to detect its precise situation, the whole of the urine passing at will through the urethra.

June 4. Complained of occasional abdominal pains, which an anodyne and perfect rest for two days relieved. The motions of the foetus have been distinctly felt every day since the operation, and continued to be experienced up to the 17th of June, when she left the infirmary, having fully recruited her strength.

August 4. Since last report she has been in the workhouse, and was this morning easily delivered by a midwife, of a still-born child, partially decomposed.

Mr. Martin, one of the parish surgeons, distinctly heard the foetal circulation after her admission into the workhouse; and she herself stated that she regularly felt the motions of the child up to three weeks before birth.

I do not claim the merit of originality in this operation, the idea having been suggested by M. Lisfranc, in one of his cliniques

which I heard at La Pitié, in 1831; I am not, however, aware that it has previously been put in practice.

I will not further encroach on your valuable columns than to remark on the preference this operation appears to claim, from the perfection of the patient's recovery, there being not the slightest incontinence of urine, which miserable sequence of lithotomy in the female has but too often embittered the remaining life of an unfortunate said to be cured of stone. The case is also instructive in the evidence it contains of the impunity with which, as regards uterogestation, we may undertake a dangerous and painful operation for the relief of an important source of irritation.

EXTERNAL USE OF OPIUM.

To the Editor of THE LANCET.

SIR:—Your Journal of the 4th August last contains the following:—

“Dr. Bow, the author of a pamphlet ‘On the Treatment of Croup and Bronchitis, by the External Use of Opium,’ assures us that he has employed this mode of treatment with the greatest benefit in cases of the above-mentioned diseases, on the principle ‘of causing a diversion of nervous influence towards the heart and arteries, and thereby increasing their contractile power.’ The following cases, however, prove that the external use of opium is by no means unattended with danger in cases of infantile disease.”

As to the external use of opium, and the principle on which the practice is based, the writer of the above is correct, but the cases cited from “Siebold’s Journal” have no reference whatever to the treatment recommended by me. I do not resort to what is understood by the *endemic* application; on the contrary, I give strict injunctions that the application shall not be used where the cuticle is not entire, and that lest absorption should take place.

The following extract from my pamphlet will show that I do not apply opium externally with the prospect of its being absorbed:—

“That the liniment I employ does not act on the vascular system through the absorbents, that is, by any portion of the components of it being absorbed, I think will appear evident from the fact, that in some cases the good effects follow the application almost immediately. From the fact likewise that, although I have applied it in very large quantities at once, to very young children, I have never seen any unpleasant effect produced; yet it is recorded that fatal results have followed the application of a single grain of opium to blistered surfaces in young children. Indeed, I do not believe that absorption is a function natural to the