was also similar to that of tubercle, which the author considers would be unlikely in two substances wholly unconnected, to which may be added the frequency with which it was found with tubercle in the same individual; and we can hardly fail to consider it, "almost in every case, a proof of the former existence of the morbid deposit."

I am glad to meet with this confirmation of an important conclusion arrived at from other evidence, since it has been objected, that too much reliance has been placed on this chalky deposit as a proof of the curability of tubercular disease in an organ.

Dr. Chambers gives five "*suppositions*" to account for the origin of the cretaceous matters, and maintains that there is nothing to render either of them untenable; a tolerably sure proof that we are in the dark upon the subject.

The cretaceous matter in the lungs was associated with tubercle in the following manner:—

Mixed up with tubercle, twenty-one times.

In the walls of vomicae, five times.

In one part of the lungs, with vomicae elsewhere, twice.

With tubercle in the opposite lung, twice.

With tubercle in other parts of the body, but not in the lungs, three times.

The proportion of cases in which cretaceous tubercle was found to the total number of autopsies, was as nearly as possible 3 per cent.

Nothing has excited more discussion than the question of the inflammatory complications of tubercle in the lungs; nor has anything, probably, had a more direct bearing on practice than the views generally entertained as to the nature and origin of the morbid deposits met with in connexion with tubercle. One of the most useful results of these statistics will be, especially when derived from various sources, so as to admit of being collated and compared, that they must add materially to our knowledge of the circumstances under which such complications occur, and also aid our investigations of the relations which subsist between tuberculosis and other diseases. The length to which this paper has extended renders it necessary to defer entering upon this part of the subject.

Dr. Chambers's papers contain numerous tables showing the relative frequency of tubercle in different organs, in either sex, and at various periods of life, with the deductions at which he has arrived. I consider that the author has done great service to the pathology of tuberculous diseases by placing these facts on record, and that their value will increase as science progresses. The exception I have taken to general deductions from the proportions observed in the larger divisions, as from the ratio of cases in the male to those in the female sex, (*viz.* that the author is working upon minute fractions of the total number, and without any certainty that the examples before him are, in all essential respects, representations of the mass,) induces me to pass over both the proportions and the deductions, where the numbers are still smaller. But in extracting some of the more salient points, and thus freely commenting upon them, I trust I shall succeed in directing the attention of others to the whole series. One object I have in view is, to point to the necessity of publishing periodically, not only the pathological observations made at St. George's Hospital, from which this series is derived, but those of every similar institution in the kingdom. The least thoughtful reader will also arrive at the conclusion that some conventional usage should be adopted, for the purpose of carrying out such statistics on a uniform and well considered plan and nomenclature. If this were accomplished, practical conclusions, founded on facts, would soon supplant conjectural opinions; and, at least in some parts of the science of medicine, we might hope to arrive at *axioms* upon which to found our reasonings.

Norfolk Crescent, Hyde Park, Nov. 1853.

LITHOTRITY: EXHIBITION OF CHLOROFORM.

By WILLIAM THOMAS BELL, Esq., M.R.C.S., formerly House Surgeon to the London Hospital.

JOSEPH RICHARDSON, aged 62, a sailor, came under my care in July 1853. He was of moderate stature; his complexion was sallow, his countenance haggard and care worn, and expressive of extreme pain; his hair was grey; his habits of late years had been extremely temperate; for the greater part of his life he had worked as a sailor, but lately for farmers in this neighbourhood. He dated the commencement of his symptoms from three years back. Within the last six or eight months, his symptoms had been extremely aggravated. He had constantly passed blood, and thick muco-purulent matter. He also had prolapsus ani; and for the last few months had been unable to ride in a chaise, or sit upon a chair for many minutes together. After walking a short distance, he would be seized with a constant desire to micturate, attended by great pain. The urine was alkaline, and strongly ammoniacal.

On sounding him, the stone gave the impression of being soft, and fitted for lithotripsy, should the urgent symptoms yield to treatment. This consisted in the administration of the following remedies:—

R Sodæ carbonatis gr. x.

Misturæ acaciæ ʒij.

Tincturæ hyoscyami ℥xv.

Aquæ puræ ʒvj. M.

Fiat haustus cum spiritus ætheris nitrici ℥xx. sextis horis sumendus.

R Tincturæ opii gtt. xxx.

Spiritus ætheris nitrici gtt. xxv.

Misturæ camph. ʒx. M.

Fiat haustus sedativus horâ somni sumendus.

Perfect rest in bed, with a light, nourishing, unstimulating diet, was enjoined. The bowels were freely opened daily. After persevering in these remedies for about ten days, his symptoms so far subsided, and the urine assumed a more healthy character, as to allow the operation to be performed on July 13. He suffered a good deal of pain during the operation, which continued to a trifling extent during the day. The stone was readily seized, and gave way freely under the lithotrite. The usual preliminaries were of course attended to prior to commencing the operation.

Forty-eight hours afterwards, he had a little fever, accompanied by lumbar pains, which soon passed off. He took barley-water *ad libitum*. During the night subsequent to the operation, he passed a large quantity of stone.

Three operations were performed after this; but the extreme excitement prior to and at the time of the operation, produced such violent spasmodic and uncontrollable action of the muscles in the neighbourhood of the bladder, together with those of the extremities, that the performance of the operation was almost impossible. Under these circumstances, we determined upon administering chloroform, to produce partial anæsthesia. It was accordingly administered by our assistant Mr. Pritchett. The fifth and following operations were thus performed under chloroform, which had the effect of keeping him quiet, though at the same time in a "partially" conscious state. In this way, the operations were rendered comparatively simple.

September 10, about ten weeks after the patient had first consulted my father and myself, we carefully sounded the bladder, and could not feel the slightest remnant of stone. His symptoms being entirely relieved, we determined upon sending him home.

Nov. 19th. His general health had so far recovered, that he was able to undertake a journey on foot of seven miles without inconvenience. Although a difficulty occasionally presents itself in perfectly emptying the bladder, this, I think, may be attributed more to an enlarged prostate than to remains of the stone.

REMARKS. This patient presented such aggravated symptoms, that it appeared almost impossible to perform

lithotripsy, unless his urgent symptoms were allayed. He had a capacious urethra, with enlarged prostate; a greatly dilated and rugous bladder. One symptom in his case strongly indicated the existence of stone; viz. that of being able to feel the stone move from side to side as he turned in bed.

This case has been brought prominently before the profession, with a view of advocating more strongly the administration of chloroform; for without its aid the operation could not have been repeated so as to complete the cure. The great point in its favour is, that it is only required to be exhibited to the extent of producing "partial" anæsthesia; and, to the best of my belief, chloroform may be administered thus far without the least fear of fatal consequences. (This is an invaluable point in the reduction of dislocations in certain constitutions.) In this case nine operations were performed. The composition of the stone was triple phosphate of ammonia and magnesia; its weight was three drachms and a half.

The carbonate of soda relieved very much. It is a very valuable remedy in cases of stone; and is extensively used in such cases by the surgeons at the London Hospital.

Great Grimsby, Lincolnshire, November 12. 1853.

CASES OF CHOLERA, WITHOUT COMMENTS.

By JOHN GROVE, Esq.

CASE I. Edwin D., aged 14 years, went to bed in perfect health and spirits on the night of October 31st. At 4 A.M. November 1st, he was seized with an attack of diarrhœa. His first evacuation was so copious that (according to his own statement) it nearly filled the chamber utensil. He is errand boy to a druggist. He complained of bellyache and relaxation in the morning on going to shop. His master gave him a warm dose of rhubarb: after this a teaspoonful of paregoric. Being no better from these remedies, he gave him one ounce of Board of Health mixture; half to be taken immediately, and to be repeated at 2 P.M. if necessary. At 4½ P.M. the boy's mother applied at my surgery, saying that her son had been purging and vomiting all day, and was very bad. The evacuations, she said, were like water, only with white flakes; and he was suffering severe pains in his belly and legs.

I ordered that he should be kept warm by means of hot bottles to the body and extremities, and administered the sulphur mixture, with a small quantity of liquor opii sedativus.

At 6½ P.M. a messenger came to say he seemed somewhat better. Up to this time I had not seen the lad, in consequence of being required urgently in another direction.

At 8½ P.M. a messenger arrived to say that the lad was not so well. I went immediately to see him. He was perfectly pulseless; his countenance was sunken and livid; his lips were blue; he had dark areolæ around the eyes; his hands and feet were purple, and the skin shrunken. There was no sweat. The voice was peculiar, resembling the falsetto. He had vomited and was purged just before my arrival; both of these evacuations were like arrowroot or rice-water. He complained of cramps, and required his legs to be constantly rubbed. Thirst was urgent. He passed no urine. I administered the sulphur mixture, with two minims of liquor opii, and waited half an hour; I then gave him another dose at 9 P.M. These were both retained; but he was moved twice before I left, at 9¼. Evacuations were the same.

At 10 P.M. a messenger came to say he had not vomited since I first saw him, but the bowels had been moved twice. I now allowed a small quantity of soda water; as he begged incessantly for cold water to drink.

11½ P.M. There had been no sickness since 8½ P.M. The bowels continued loose, the stools being the same in character. The mother had substituted a bed-pan instead of getting him out of bed, because the cramps were so severe when he was moved off the bed. The surface was now

much warmer; the pulse was perceptible at the wrist. The voice was slightly improved. The eyes were still as sunken, and the dark areolæ as pronounced as before. The spasms of the abdomen were not nearly so severe. He complained bitterly of thirst. I directed him to take sulphur mixture without opium every two hours. Soda water and arrowroot water cold, in limited quantities, were allowed as drink. The warm applications to the surface were continued.

Nov. 2, 6½ A.M. He had had a restless night, but slept at intervals. The bowels had been open four times. He was sick at 2 A.M., 4 A.M., and 6 A.M. I visited him at 8 o'clock. The countenance was somewhat improved. The dark areolæ remained. The cheeks were sunken, and the face pinched; still there was a more healthy hue on the skin. Pulse 80, weak. The skin was warm. He had continual sighing. The cramps were much less severe, and only occasional. The evacuations remained the same. The medicine was continued. During the night the medicine had not been administered as frequently nor in the doses ordered.

12½ noon. He had had no sickness since 9 A.M. The bowels continued relaxed. He had had short sleeps at intervals, the eyelids only half closed. His countenance was better. The surface was warm. He was restless; and had not passed any urine. He evacuated the bowels in his bed. His pulse was 108. Thirst continued.

3 P.M. He had been sick half an hour previously, rejecting the medicine. In other respects, he remained the same. Pulse 100.

7½ P.M. He had not been sick again; the bowels were still relaxed. His lips were now florid; yesterday at this time they were quite blue. Pulse 96. I ordered a table-spoonful of beef-tea to be taken occasionally.

10 P.M. The bowels had not been moved since 7½ P.M.; nor had he been sick. No urine had yet passed. He had taken beef-tea twice, and liked it much. He had dosed for short intervals more tranquilly, with the eyes closed. When awake, he tossed his arms about, and sighed very much. He was directed to continue the medicine every two hours.

Nov. 3, 6½ A.M. The father came to my house, bringing with him the first urine (3ijj) which had been passed since Tuesday midday. An interval of thirty-six hours had elapsed; for this occurred at 12¼ on Wednesday night. The bowels were still loose; there had been slight sickness once; and he had taken half a pint of beef-tea during the night.

9½ A.M. He lay on his side in a tranquil sleep, and had been so for three-quarters of an hour. The countenance was rather flushed. The dark areolæ of the eyes were subsiding. He had had one motion of the same character since 7 o'clock. Urine had been passed several times. Pulse 90. He was not roused by the manipulation. I left him asleep, after waiting thirty minutes, ordering a continuance of the medicine and beef-tea as before, with alum-whey *ad libitum*.

2 P.M. He continued much the same, but was very delirious two hours since, and could not be kept in bed.

9 P.M. The face was very flushed. The tongue, which had never presented any remarkable appearance, was now florid and dryish. He had slept two hours, with the exception of a few minutes, when he turned in bed. He had passed urine abundantly, and had but two motions since 2 P.M.: the last, though but slightly stained, had for the first time a faculent odour. Pulse 80, of moderate strength. He complained of great exhaustion, and extreme soreness and weariness of extremities; also more or less of pain in the region of the stomach, of which he had complained at every visit I paid him. He vomited once, after too large a draught of whey. The medicine was ordered to be taken every four hours.

Nov. 4. The following is the history of the night of the 3rd, from the father's notes. He had a slight motion at 9¼ P.M.; went to sleep at half past; awoke at 11, and had some whey. There was then slight wandering. He went to sleep at quarter to 12; and awoke at 1 A.M., and took medicine. He had a motion, much improved, at 1½ A.M.; he took some beef-tea; at 2¼ A.M. he had a little soda water, then fell asleep, and slept till 4 A.M. He took a wineglass-