in the groins. It was copious and distinct on the chest and back, but scarce and faint on the limbs and the hands and feet. On the cheeks and over the nates there was a deep-red flush. Tongue covered with patches of white fur. There was a deep-red punctate eruption on the soft palate and fauces; appetite bad; bowels opened twice on the 14th; has had running at the nose for the last fortnight; conjunctivæ injected; slight cough; pulse 112; temperature 100·2°.

June 16th.—Pulse 116; temperature 103·5°. Passed a good night. Eruption rather faded on trunk, but more distinct on hands, feet, and limbs; tongue denuded of epithelium, with prominent papillæ.

17th.—Eruption everywhere faint. Pulse 100; temperature 99·6°. Profuse perspiration yesterday afternoon.

18th.—Eyes much injected; upper eyelids swollen; considerable discharge from the nostrils. Eruption almost imperceptible. A little desquamation to be seen on the sides of the nose. Pulse 84; temperature normal.

19th.—Pulse 80; temperature normal. Passed a good night. Eruption now only to be seen faintly on the anterior folds of the axillæ. Papular eruption on the extensor surfaces of the arms. Eyes less injected; throat better.

20th.—Pulse and temperature normal; eyes natural; slight cough. On the anterior folds of the axillæ there is a number of dark-red spots, which do not disappear on pressure. Except these spots, no eruption visible anywhere. No further desquamation.

23rd.—Has been doing well since the 20th. The spots on the axillary folds have now disappeared. No desquamation visible; but on rubbing the chest the cuticle peels off in small rolls.

25th.—Much better. Slight desquamation here and there on the neck and chest.

CASE 3.—A. O.—, aged eight, a brother of the last patient, complained of sore-throat on the 16th of June, 1871. I saw him on the 17th, and found the uvula swollen and a dark-red eruption on the soft palate and fauces. There was a slight red flush, with commencing spots, just perceptible at the root of the neck. Tongue slightly furred; appetite fair; bowels regular; eyes rather glistening and watery; no coryza. Pulse 80, irregular; temperature 99·4°.

June 18th.—Passed a restless night. There is now a bright-red punctate eruption on the neck, chest, back, upper arms, and face. On the cheeks there is a red flush. In many places on the chest a few of the puncta are run together, forming irregular patches. The eruption is scarce and faint on the forearms. Throat rather better. Pulse 88, regular; temperature 100°.

19th.—The eruption is now abundant on the upper arms, and rather less so on the thighs. It is also more plentiful and more distinct than yesterday on the forearms and hands, where it is of a pale-red colour. There is none to be seen on the legs or feet. There are red flushes over the nates and at the joints. On the arms there are many aggregations of a few of the puncta into irregular patches. Eyes the same—glistening, but no injection of the conjunctivæ. Pulse 108; temperature 100·3°.

20th.—Eruption now well marked on the legs and feet, and growing faint on the trunk and upper arms. On the legs and feet many patches of aggregated puncta. Conjunctivæ injected, with lachrymation and running at the nose. Under lip swollen. Pulse 104; temperature 102·2°; appetite fair; bowels regular.

21st.—Eruption now very faint on the trunk, except on the anterior folds of the axillæ. It is still distinct on the hands. Eyes less injected; throat better. Slight desquamation at the sides of the nose. Pulse 88; temperature 99·8°.

22nd.—All traces of eruption gone except a few dark-red dots, which do not disappear on pressure, on the anterior axillary folds, and here and there on the chest. Itching all over the body. Pulse 72; temperature 99·2°.

23rd.—Conjunctivæ still a little injected, and throat red. No further signs of desquamation. Pulse and temperature normal.

26th.—Doing well. There are a few traces of desquamation on the neck and upper part of the chest. Eyes natural and throat well.

I regret much that the urine was never examined in these cases.

When the epidemic was at its height, it prevailed most extensively at St. Helier's, passing through a great many families, and breaking out in most of the schools. The principal of one of the schools told me that while the disease was prevalent in his establishment one of his ushers left for London in perfect health, and that five or six days afterwards he found himself covered with the eruption.

Jersey, June, 1871.

CONTRIBUTION TO OBSTETRIC MEDICINE.

By ROBERT BELL, M.D., L.R.C.S. Ed.

CASE OF PUERPERAL CONVULSIONS, ILLUSTRATING IN A MARKED DEGREE THE EXPEDIENCY OF EMPTYING THE WOMB AS EARLY AS POSSIBLE.

MRS. W.—, a strong, healthy woman, eight months advanced in her second pregnancy, was up to March 2nd feeling quite well, with the exception of having experienced a considerable amount of pain in the lower part of the back. The gravid uterus was unusually high up in the abdomen, quite filling up that cavity and pressing considerably on the thoracic viscera. There was no oedema in any part of the body, neither was the patient drowsy or uncollected. Indeed, up to the forenoon of the above date her pregnancy was progressing most satisfactorily, when she began to feel slightly out of sorts, and in the afternoon was seized with a most marked epileptic fit. This was followed by another towards evening, and again another occurred, the interval each time becoming shorter, till between 11.30 P.M. and 12.30 A.M. she had no less than four very severe epileptic seizures. Matters wore a very alarming aspect, the more so as no appearance of approaching labour was present; and I felt certain that my patient's strength could not hold out much longer if immediate relief was not given. By this time the pupils were quite insensible to light, and deep stertor had set in, which was becoming more and more profound.

I immediately sent for Dr. J. G. Wilson, and in consultation we deemed it advisable to induce premature labour, so as to effect delivery as speedily as possible. Dr. Wilson then proceeded to rupture the membranes; and in a most remarkable manner, from the moment that the liquor amnii escaped the stertor began to subside, but not altogether, nor to such an extent as to cause us to be the less anxious as to the final result. The os was fortunately very flaccid, and could be dilated to a considerable extent by the fingers without much difficulty. As soon as it could be accomplished with safety, Dr. Wilson applied the long forceps, and within thirty minutes of the rupturing of the membranes the child, a fine healthy boy, was born, and although in a semi-asphyxiated state, this soon passed off on applying the usual restorative measures. The placenta speedily came away, and the uterus contracted in a most satisfactory manner.

No sooner was the womb thoroughly empty than the stertor ceased, and all immediate danger seemed at an end. The sudden relief which the whole system appeared to receive on the birth of the child was most instructive, and indicated the propriety of the treatment pursued; but this was still more manifest in the next few hours, for there was no recurrence of the convulsions till 9.30 A.M., fully eight hours after delivery, when a very slight one occurred. This was the last unfavourable symptom which the mother had, and from that time her recovery was rapid and uninterrupted. The babe also is well and healthy.

CASE OF DIFFICULT LABOUR, WITH COMPLETE INVERSION OF THE UTERUS OCCURRING WITHOUT SHOCK OR HÆMORRHAGE.

MRS. S.—, a primipara, aged about thirty, full period. Soon after labour commenced a brow presentation was detected, with the face towards the pubes. For upwards of twelve hours the pains were strong and regular, but ultimately became feeble and inefficient, until at length several hours passed without progress being made, and the patient was becoming nervous and exhausted. It was then resolved in consultation with Dr. J. G. Wilson to effect delivery by means of the forceps. The patient was accordingly put under the influence of chloroform, and the infant (a strong

and healthy female, considerably above the average size) was extracted with considerable difficulty. After waiting the usual time, slight traction was being made on the cord, when, to the surprise of Dr. Wilson and myself, the uterus suddenly became completely inverted, with the placenta firmly adherent to the fundus. Without any delay, Dr. Wilson separated the placenta, and effected reposition of the uterus in the usual manner. This grave accident occurred when the effects of the chloroform had almost passed off, and yet no perceptible shock to the system was apparent; and what is as worthy of record is the fact that very little above the usual amount of hæmorrhage took place, notwithstanding that the placenta was forcibly detached during the time that the uterus was inverted.

In case secondary hæmorrhage might occur, I remained in the house all night; but the discharge was no more than in an ordinary case, and my patient spent a very comfortable night, expressing herself as feeling "very well" in the morning. From that time she made an uninterrupted recovery, and was feeling so well on the 30th of March (four days after her confinement) that she began to talk of getting up.

Remarks.—Such cases cannot fail to be very instructive, possessing as they do so many features of more than ordinary interest. The first perhaps affords more instruction than the second, and it stands foremost in importance on account of its more frequent occurrence, and also from the fact that two lives are jeopardised—that of the mother and the babe; whereas in the other the mother alone is in danger. Here, then, we have convulsions coming on at the eighth month, without any apparent cause, in a woman who up to the day of her sudden seizure had been enjoying the best of health. No external evidence could be found to show a faulty action of the kidneys, nor indeed of any of the other organs; yet a succession of convulsions of such frequency and severity supervene, that for a time the lives of the mother and child are in imminent danger, and depend altogether for their safety on the skill of the accoucheur. To decide what was to be done in the circumstances was simple enough; but to act, and bring away a living child with safety to the parts of the mother in the short space of time which the operation took to perform, was quite a different thing. Another point worthy of note was the partial cessation of the stertor when the liquor amnii escaped, and the complete suspension of it almost immediately after the uterus was emptied; and, what was most important of all, the discontinuance of the convulsions. But the case possesses interest apart from the mother altogether, and that is in the fact of the child, although premature and having been exposed to so much danger, being alive and doing well nearly six months afterwards.

The second case is also full of interest, and presents many most important points worthy of remark; and amongst these may be noted the almost spontaneous nature of the inversion, its completeness, the absence of shock and hæmorrhage, the facility with which the uterus was replaced without any recurrence of the displacement, no tendency to secondary hæmorrhage, and the completeness of the recovery without an unfavourable symptom.

Woodlands-road, Glasgow, Aug. 24th, 1871.

TOXICAL EFFECTS OF CHLORAL HYDRATE WHEN PERSISTENTLY USED AS A HYPNOTIC, AND FATAL RESULTS OF LARGE DOSES.

By N. R. SMITH, M.D.,

LATE PROFESSOR OF SURGERY IN THE UNIVERSITY OF MARYLAND.

In February last, a medical friend, long retired from practice, called on me for advice in regard to a singular affection of the fingers of both hands, attended with desquamation of the cuticle and superficial ulceration, especially about the borders of the nails. It was associated with pain and much morbid sensibility to touch. There was also some acceleration of pulse, and general *malaise*. He visited me daily for some ten days, when, by the use of astringent lotions and of ointment the local affection

was overcome. He informed me that he had been taking chloral in liberal doses, as a hypnotic, for four months (I am not perfectly sure that it may not have been four weeks). He expressed to me his conviction that the disease of his fingers had resulted from the use of that medicine. Having never observed the agent to produce such a result, I was reluctant to believe that such was the case.

Some three weeks after the cure of the local affection, I was called to attend my friend, in consultation with his family physician. We found him labouring under acute bronchitis in severe degree. His respiration was exceedingly embarrassed, and there was a high degree of hoarse mucous rale. The bronchial tubes were filling. The pulse was about 140, and the action of the heart extremely feeble. In the treatment adopted our object was to sustain the powers of life, which were rapidly failing, and to relieve the bronchial tubes of mucus. Our efforts, however, were unavailing. He died on the third day after I first saw him.

I scarcely, at the moment, entertained a suspicion that the use of the chloral was concerned in producing the fatal malady of my friend, it being not at all uncommon for persons of his age (seventy) to succumb suddenly to such malady from ordinary causes. Some two months later I accidentally met a medical friend, who expressed pleasure at the meeting, as he wished to consult me in relation to a singular affection under which his daughter, a young lady twenty-two years of age, was suffering. He described precisely the affection of the integuments of the fingers which had occurred in the case described above, erythematous inflammation, desquamation, and ulceration around the borders of the nails. Struck with the resemblance which her malady bore to that of my friend Dr. C., I inquired if she had been taking chloral. He replied that she had taken it, as a hypnotic, every night for a month, and that he had suspected this article to be the cause of her disease. The young lady was not suffering constitutionally at that time, but about ten days after I was called to see her. I found her extremely ill. There was universal anasarca, the action of the heart was exceedingly feeble, the pulse 140 and extremely weak. Her respiration was much embarrassed, and the recumbent posture was impossible. Procuring some of the urinary secretion, I tested it with nitric acid, and discovered a notable quantity of albumen. I was very apprehensive of a fatal result, but immediately prescribed stimulants and diuretics, digitalis being the constituent most relied upon.

On visiting the patient, after an interval of a day, I was much surprised and gratified to find her greatly improved. Her pulse had been reduced to 90, and was much improved in tone. The kidneys had acted freely, and the anasarca had much abated. Having been myself confined by sickness, I did not again see her. On meeting her father some three weeks later, I was gratified to learn that she had entirely recovered. I have knowledge of two other cases in which the same affection of the fingers resulted from the use of chloral.

Within the last ten days two deaths have occurred in Baltimore, manifestly from the toxæmia caused by an overdose of chloral. The subject of one of these accidents was a gentleman who had been under the care of an irregular physician, and by his advice had taken chloral in ordinary doses for the relief of a painful neuralgic affection of the neck. After the medical attendant had discontinued his visits, the patient persisted in the use of the hydrate, taking it, as I was informed by his brothers, in doses of not less than half a drachm. On the day of his death he was known to have purchased three drachms of the article. How much he took during the day is unknown. In the evening he retired to his chamber, and in about twenty minutes afterwards was found dead beside his bed. He was undressed, the bed-clothes were turned down, but the bed was undisturbed, and it was manifest that death had arrested him at the moment that he was prepared to step into bed. The coal-oil lamp which he used was extinguished, but the glass chimney was still hot. The glass from which he had taken the chloral stood on a small table near the head of the bed, and in it were a few drops of the medicine, recognised by his brother by taste and smell. There can be no doubt, therefore, that he fell almost instantly dead from the effects of the poison.

Another instance of almost equally sudden death has occurred in this community. The fact is well known, but I