desperately ill until 48 hours after the injection, when she seemed to rally somewhat and was better. I gave her another injection of 25,000,000 of mixed vaccine on Saturday (the seventh day of new attack), and after a temporary rise to 102° her temperature fell in 15 hours to 100·4° and her respirations to 22. She seemed decidedly better, and we hoped that she was round the corner. She had, however, still considerable pleuritic pain, and another injection of morphine and strychnine was given that evening. Her left thigh and leg then swelled very greatly, though the previous swelling and pain in the left calf had ceased for nearly a week. This swelling went away gradually in four or five days. As I then went away for a previously arranged holiday my partner, Dr. H. M. Stewart, kindly took over the case, and he informed me that she steadily and gradually got better. He, acting under Dr. Eyre's advice, nevertheless gave the patient another injection of vaccine (dose, 50,000,000) on the next Sunday (the fifteenth day of the last attack); after this the temperature soon returned to normal and remained so. On my return a week after this I found the patient convalescent, but still weak and with a few physical signs of the pneumonia just discoverable, and she was expectorating some frothy white sputum, but these disappeared within a few days, and she seemed well eight weeks after the attack, being only bothered with slight swelling of both legs, the right, curiously enough, being the worst. Three months after she was quite well in every way, and has remained well. She took her liquid nourishment wonderfully well all through and was most carefully and efficiently nursed by two most excellent and capable nurses. Her baby also did and is doing very well. I here append Dr. Eyre's notes of the bacteriological aspect of the case, which I think are most interesting and suggestive.

Dr. EYRE'S report.—The sequence of events is somewhat as follows:—16th day after confinement: Specimen of sputum examined. Pneumococcus predominant organism present. Swabbing from uterus, contained mixture of pneumococcus and *B. coli communis*. 17th day: Opsonic index of blood to pneumococcus from uterus, 0·55. Index to pneumococcus from sputum, 0·49 (that is, practically identical). 18th day: Injected 25,000,000 mixed pneumococcus vaccine containing equal parts of the pneumococci from each source. 20th day: Blood index to pneumococcus, 1·43. 21st day: Injected 25,000,000 "mixed pneumococcus" vaccine. 24th day: Blood index to pneumococcus, 1·3. 29th day: Injected 50,000,000 "mixed pneumococcus" vaccine. 31st day: Blood index, 1·5. N.B.—On April 28th, 1908, blood index to patient's *B. coli* = 1·6. Therefore, it was not considered necessary to inject *B. coli* vaccine, which, however, was prepared and held in readiness. As the patient's efforts at immunisation against the *B. coli* were entirely successful the administration of coli vaccine was not found necessary at any time. The chief interest in the case to my mind lies in the fact that pneumococci were present in uterine swabbing as well as in sputum, and would seem to indicate a fairly extensive infection, and that the septic uterine discharge and the focus in the lung were part and parcel of the same infection.

The whole sequence of events seem to me (Dr. Batten) to be as follows. Attack of influenza with bronchitis and prostration probably breaking down the patient's resistance to other germs, especially pneumococci. Childbirth further decreasing this resistance and allowing pneumococci to greatly multiply. Probably emboli separating from uterine veins and passing into left lung and either carrying pneumococci there or setting up a condition of infarct in a lung already infected with pneumococci. Thrombus in the left popliteal vein due to the same cause. Almost ordinary course of this left-sided pleuro-pneumonia. Sudden attack due to large emboli blocking large areas in right lung, causing infarcts there with fresh infection by pneumococci on that side, with accompanying critical condition of the patient. Opsonic indices to the two pneumococci found to be 0·55 and 0·49 respectively, proving that lung and uterus were affected by the same pneumococcus. Injection of vaccine of these mixed pneumococci; general improvement in the patient within 48 hours and increase of the opsonic index to 1·43. Further injection of similar vaccine and great further improvement in the patient in 24 hours; opsonic index maintained at 1·30. Still further injection of double dose nine days after with opsonic index

increased to 1·50. Gradual convalescence and complete recovery of patient.

It may be argued that the patient may have had the second pneumonias following the first without any emboli and without any infarcts, but the very sudden attack of dyspnoea initiating the very large and curiously distributed right pneumonias, with existence of similar pneumococci in the womb, point most strongly to emboli. It may be urged also that she might have recovered without the injections and of course that is so, but it is not the opinion of the nurses and of those of us who watched her through it all. I myself believe that the injections helped her to turn the corner, though of course the good food-taking, the strychnine, the oxygen, and the most excellent nursing kept her going.

Dulwich, S.E.

DISAPPEARANCE OF A TUMOUR (? SARCOMA) FOLLOWING INJECTIONS OF COLEY'S FLUID.

By WALLACE C. G. ASHDOWNE, F.R.C.S. ENG.,
SURGEON TO THE METROPOLITAN HOSPITAL, KINGSLAND-ROAD, N.E.

A MARRIED woman, aged 45 years, was admitted to the Metropolitan Hospital on April 23rd, 1908, with a swelling in the right arm, which she had first noticed seven weeks previously, and to which her attention had been drawn by pain and weakness when using it at her occupation.

FIG. 1.

Reproduction of skiagram of right arm on first examination.

On examination a fusiform swelling of regular outline and well defined limits could be felt in connexion with the lower part of the right humerus (Fig. 1). It felt firm throughout.

with no suspicion of fluctuation or egg-shell crackling about it, the skin and muscles were not implicated, but the superficial veins were a little prominent and there was an enlarged gland in the right axilla. The arm was wasted and the muscles were weaker than those of the opposite side; the movements of the elbow-joint were unimpaired. Pain was only complained of when using the arm or on applying firm pressure. No other bone abnormality could be made out. There was no history of injury or of fracture, and the question of syphilis was carefully gone into, but no evidence

FIG. 2.

Reproduction of skiagram taken on Feb. 1st, 1909, showing maintenance of improvement.

of it could be obtained. The skiagrams showed marked changes in the structure and outline of the bone, and suggested to most of those who saw them the presence of a new growth.

To exclude the possibility of a syphilitic origin mercury and potassium iodide in increasing doses were given for ten days, but as at the end of that time the swelling had increased both in measurement and as seen by skiagram, that treatment was abandoned, and the patient was advised to submit to an exploratory operation, to be followed if necessary by amputation; this, however, she refused to agree to, and, as an alternative, treatment by Coley's fluid was suggested and adopted.

We began with half-minim doses and increased them by quarter, half, and one minim until a maximum of nine minims was reached; the first injections were given into the arm outside the limits of the growth, but the later ones were injected into it, and 23 injections in all were given. They were followed by pain and swelling at seat of injection, with general malaise and headache, nausea and vomiting, and pains in the limbs and joints followed by the appearance of subcutaneous hæmorrhages resembling bruises, but with only slight rise of temperature and increase of pulse-rate. These

after-effects were so unpleasant that we had some difficulty in persuading her to continue the treatment; she, however, submitted to it until August 13th, when the swelling had almost disappeared and the structure and outline of the bone had resumed its normal appearance.

A skiagram taken on Feb. 1st, 1909, shows that the improvement has been maintained.

Devonshire-street, W.

A NOTE ON NORMAL MENSTRUATION WITH ABSENCE OF THE BODY OF THE UTERUS.

By ALEXANDER BROWN, M.B. LOND., M.R.C.S. ENG.

THE patient, who had been married for nearly three years, consulted me on account of sterility. She was most desirous of having a child. Bred in the country and of fine physique she had been perfectly regular in her periods from the age of 13 years. She was now 28 years old, about the same age as her husband, who was tall but not so strong-looking as herself. The periods lasted for four or five days and an experienced nurse testified to the normal loss. This nurse, who had known the patient from infancy, informed me that although she knew her to be an affectionate wife and very fond of children she was sexually cold and during childhood had pursued the sports of boys and had formed no girl acquaintanceships.

I examined the patient in bed, and bimanually could find no uterus and I failed to introduce a sound. On withdrawing my finger there was a little blood; the vaginal cervix appeared to be of normal size and shape but was congested, and the blood evidently came from the external os. I advised a full examination under an anæsthetic. Accordingly a few days later I placed the patient under ether, and my friend Dr. A. Alexander conducted the examination, the result of which I afterwards confirmed. He found complete absence of the body of the uterus. On bimanual examination the state of the pelvic contents was striking; the examining finger and the outside hand clearly approximated with the vaginal cervix alone between them. There was absolutely nothing to be felt within the pelvis to represent the body of the uterus.

I am aware that a post-mortem examination could alone disclose the exact representation of the parts and that developmentally a uterus might then be demonstrated, but the case appears to be of considerable interest in that so gross a deficiency existed with normal monthly periods. No doubt the vaginal cervix supplied the monthly loss.

Bartholomew-road, N.W.

A FUTILE INQUEST.—An inquest reported in the *Western Gazette* of May 7th affords another proof that the coroner's law is in urgent need of reform. The jury were directed to inquire into the death of a woman, aged 28 years, who had died suddenly with symptoms of severe abdominal pain before the medical man who was summoned could reach the house at Thornford where she resided as housekeeper. No poisonous substance was found in the room. The witnesses who spoke as to the nature of the symptoms were unskilled, and no medical evidence was called nor was any necropsy made. The jury told the coroner that "Deceased appeared to have died from natural causes," and the coroner replied that "he had entered the statement that deceased was suddenly taken ill and suffered from severe pains, probably due to indigestion, which caused acute gastritis, and that she died in a natural way and not in an unlawful way." This elicited a protest from the foreman to the effect that "the jury said 'appeared' to have died," to which the coroner replied that "it was the same thing." Accepting the report as correct, the jury appears to us to have had a much sounder view of the nature of the evidence than the coroner. However the woman died, the coroner has taken a heavy responsibility in neglecting to prove his supposition as to the cause of her death in the only possible way—i.e., by ordering a post-mortem examination to be made. In the absence of any medical evidence the jury in effect very properly refused to bring in a verdict, and we trust it will afford a salutary lesson to the coroner in question on the futility of guess-work inquests.