half an hour respiration was regular and the color good, but the child did not cry.

The use of the ordinary Simpson forceps in this case was certainly very satisfactory. They were easily applied and locked, and showed no tendency to slip, as in a case previously reported² by me to this Society, where the Miles forceps, especially intended for the breech, were used. The use of the axis traction-rods in the present case partly explained the success. Without the forceps, delivery of the child could only have been effected by the drawing down of a leg, a proceeding, which owing to the beginning thinning of the lower segment of the uterus, would have involved some danger of rupture of the uterus.

The child, a male, showed not the slightest mark of the forceps. It weighed seven and one-half pounds, was feeble, but on the third day took nourishment well, and the breathing became more vigorous. On the morning of the fourth day, however, two large cephalhæmatomata appeared, one on each parietal bone. The child had a convulsion at 3 A. M., and at 11 A. M. died. The autopsy showed, besides the two large hæmorrhages beneath the pericranium covering the parietal bones, a hæmorrhage at the base of the brain. The lower lobes of both lungs were in a partial atelectatic condition. A careful examination of the abdominal viscera was made in order to learn if there had been any lesions there caused by the use of the forceps, but everything was found to be perfectly normal. As the head had been subjected to but little pressure during the labor, there having been no delay in the pelvis, it is difficult to understand why these hæmorrhages occurred, unless the child had a tendency to hæmorrhage. That the cephalhæmatomata were not due to pressure in labor is probable from the fact that they did not begin to appear till the morning of the fourth day.

The mother made an excellent recovery, her temperature remaining below 99°, except on the day the baby died and on the day following, when it reached 100° in the morning. She was discharged well on the tenth day.

Clinical Department.

A CASE OF FRACTURE OF THE SPINE.¹

BY A. J. ABBE, A.M., M.D.
Visiting Surgeon to the Fall River Hospital.

On February 16, 1889, D. H., forty-eight years old, of Irish nativity, was driving into a barn upon a load of baled hay. In order to avoid the beams on the ceiling, he bent forward as far as possible, putting his head down between his knees. In this doubled-up position a beam struck him on the back of the neck and shoulders, and crushed his body still farther together. He was picked up in a condition of extreme shock. The next day he was admitted to the Fall River Hospital, service of Dr. Thompson, and was seen by the consulting surgeons and many of the staff. He had rallied from the shock, but complained of extreme pain in the legs when they were moved. Complete paraplegia existed with retention of urine and fæces. The patient was etherized, and there was found a fracture and dislocation of the spine, with separation of

the processes by a finger's breadth just above the twelfth dorsal vertebra, fracture and displacement of seventh, eighth and ninth ribs on left side in axillary line, large contusions over and below left scapula and left hip. On account of these latter lesions it was deemed best not to put on a plaster jacket or anything of that nature, but extension was made manually from axillæ and legs, with the man in a horizontal position, and a six-pound weight was applied to each foot, counter-extension being secured by raising the foot of the bed. Adhesive plaster bandage to whole chest. Patient was placed on a fracture-bed, and morphia, one-eighth of a grain, given subcutaneously.

February 18th. Great pain in legs all day. Weights removed at night, and not again used. Pulse 80, temperature 100.2°.

February 19-21st. Delirious and screaming with pain in legs. Morphia, one-quarter of a grain every three hours by mouth. Hyperæsthesia throughout legs. Alcohol lotions on back and buttocks. Pulse 72, temperature 98.6° to 99.8°.

February 22d. Abrasions appeared on back, and bed-sores on buttocks. Great pain produced by any attempt to change position of body to get at back. Impossible to keep him on his side on account of pain. Morphia one-half of a grain every three hours. Bismuth subnitrate as dressing for sores.

February 25th. Less pain in legs. No dejection procured by laxatives or enemata. Fæces removed with the fingers. Heretofore has been catheterized twice daily; now urine has become alkaline, and must be drawn four times a day.

February 26th. Temperature has been gradually rising for a week; now 102°. Pulse 90, weak. Constantly delirious and moving about in bed by means of his hands. Less pain in legs, but great pain if attempts are made to move them.

February 27th. Increased pain and great delirium.

February 28th. A little worse. Pulse 100. Temperature 101.8°.

On March 1st, I came on duty and the case was transferred to me. Urine alkaline, and double the former quantity, about two quarts. Bladder washed with bichloride 1 to 1500, followed by warm water. Soft rubber catheter tied in.

March 2d. Condition not so good. Pulse 110 and weak. Spiritus frumenti, one ounce, every three hours, and all the liquid nourishment possible.

March 5th. Impacted fæces removed digitally.

March 10th. Has improved considerably. Temperature has reached normal. Pulse fairly strong at 90. Catheter has remained in, a slight urethritis not troubling him. Bladder washed out every few days. Impacted fæces removed as often as he feels them. Diet stronger.

March 12th. Delirium gone. Whiskey stopped.

March 23d. General condition about the same. Spends his time reading. Bed-sores on both ischia in good condition. Can slightly move toes of right foot.

April 1st. Greatly improved. Catheter removed, and he is taught to use it on himself.

April 15th. Very slight motion in both feet. After several attempts, enemata of glycerine one drachm, succeed with a little digital aid on his part in producing evacuations.

April 25th. Is twisted around in bed and legs allowed to hang. Considerable discomfort.

April 26th. Is put into a chair. During the past

¹ Part of a paper read before the Fall River Medical Society.

² Boston Medical and Surgical Journal, January 3, 1889.

month the daily range of temperature has been between 98.4° and 100°.

May 1st. Dr. Dolan takes charge. Pain on bending legs. Bed-sores healed.

May 4th. Supported in the upright position and as much weight as possible allowed to come on his feet.

May 10th. Assisted to stand on crutches every day. Bowels will move with the aid of aloin and podophylin tablet. A Faradic battery used on spine and legs.

June 1st. Is able to go about on crutches by himself. More power in the left leg than in the right.

July 15th. Has continued to improve. Can walk with one crutch and a cane.

August 28th. Has succeeded in voiding urine, which has become normal, without using his catheter. Discharged.

His present condition (October 15th), is as follows: At the twelfth dorsal vertebra there is a knuckle about quarter of an inch in elevation. He walks without a cane slowly and carefully, swinging his right leg outward. Has very little power in the flexors of the right thigh, and in going up or down stairs can use the left leg only. Bladder normal. Uses laxative pills. No pain. "Knee-jerk" absent. Right thigh measures 13½ inches, calf 11½; left thigh 14½, calf 11.

Reports of Societies.

AMERICAN GYNECOLOGICAL SOCIETY.

FOURTEENTH Annual Meeting, held in the Hall of the Massachusetts Institute of Technology, Boston, September 17, 18 and 19, 1889, the President, Dr. H. P. C. WILSON, in the chair.

FIRST DAY.—MORNING SESSION.

THE ADDRESS OF WELCOME

was delivered by Dr. J. P. REYNOLDS, of Boston.

THE USE AND ABUSE OF ANTISEPTIC INJECTIONS IN OBSTETRIC PRACTICE,

by Dr. H. J. GARRIGUES, New York.

When one was satisfied that puerperal fever, in any given case, was the result of infection, the use of antiseptic injections was indicated. At the Maternity Hospital, New York, from 1874 to 1884, the mortality had been 4.17 per cent. From 1884 to 1888, during which time the author's method of treatment had been employed, there had been a mortality of only a fraction of one per cent. Vaginal injections before delivery were useful, though they were objected to by many authors on the ground that they were dangerous, that the lubricating mucus of the vagina was removed, etc. While the bacteria on the surface of the vaginal mucous membrane are innocuous, they are not harmless when they penetrate the underlying tissue. They also constitute an element of danger when carried from the vagina into the uterus. A vaginal injection, repeated every three hours during labor, renders the canal aseptic enough for practical purposes. The external parts should be disinfected by rubbing with cotton soaked in the antiseptic used. In normal cases the vagina should not be touched, but only protected by the application of the antiseptic occlusion dressing. Intra-uterine injections should be given when it has been necessary to enter the uterus or vagina by the

hands or instruments, or when the fœtus is macerated. A vaginal injection should be used as a therapeutic measure when the lochia are fetid. Vaginal or intra-uterine injections are used in puerperal diphtheria before and after cauterization of the affected locality with zinc chloride. Curetting should be preceded by a vaginal and followed by an intra-uterine injection. In abortions, a vaginal injection should be given before removal of the remains of the ovum, and a uterine injection after removal. He has collected twenty-two cases of death from mercurial poison in obstetric cases; in some of which the mercurial had been employed by men of the highest professional standing and skill. He, therefore, prefers less dangerous agents. Recently he has used a two per cent. emulsion of creolin and is pleased with it, except where he wishes to judge of the condition of the uterus by the condition of the returning fluid, and where it might mask offensive odors. It had valuable lubricating and hæmostatic properties. He prefers for injection a fountain syringe with a glass single-current tube, the patient being always on her back. The bag should be suspended not more than two feet above the body. The tube must not be forced into the uterus, but introduced with great care. Failure to preserve this precaution has resulted in perforation of the uterine wall. Not more than two or three pints of fluid should be used, and if the fluid ceases to return from the uterus, the bag of the syringe should be brought down below the level of the bed, so as to reverse the current by siphonic action. The fluid should ordinarily be lukewarm, except when used as a hæmostatic, when it should be as hot as can be borne. Injections properly administered are a most valuable means of prophylaxis and cure, and are not so difficult to handle but that every intelligent practitioner may employ them.

DISCUSSION.

Dr. Lusk, New York, agreed wholly with the fundamental principles of the paper. He believes that all cases of puerperal septicæmia, where the poison has entered through the vagina, are caused by neglect of ordinary antiseptic precautions by the attendant. Cases resulting from putrid infection, from decomposing organic material, in the interior of the uterus are those most successfully treated by the douche. They are not true septicæmia. In true septicæmia the douche can only benefit before the infecting germs have gained access to the general lymphatic system. Do not interfere with uterus without reason. With repeated douching a portion of the injected fluid will remain behind each time and may cause symptoms of poisoning by the antiseptic used. A slight elevation of temperature or moderately rapid pulse are not symptoms calling for repeated douching. A fetid odor is not necessarily an indication for an injection, for quite commonly it is caused by an ordinary catarrhal endometritis. When the douche is indicated, use it once thoroughly, introduce an iodoform pencil, and let the uterus alone. Do not attend infectious fevers and obstetrical cases at the same time, for in spite of antiseptic precautions you will have cases of puerperal sepsis. Remember that certain other fevers, as typhoid, may resemble true puerperal septicæmia.

Dr. H. C. COE, New York, said that it was often by no means easy to determine the point of septic infection. Douching should be limited to once or twice in all cases. He had used creolin and thought it was