In both these cases there was nothing to be seen subsequently, save the minutest point where the needle penetrated. It was ascertained, later, that both had been properly vaccinated, though the marks now pointed out are equivocal. These cases show, however, that subcutaneous re-vaccinations may not be unlike many other re-vaccinations performed in the usual way, in general nugatory features and results; and are recorded here chiefly to show this, and the comparative harmlessness of the subcutaneous operation. The last was not so clear previous to the trial, and the responsibility, in case of untoward event, had to be fully assumed at the outset.

It is certain, however, that in the first case the boy *x* had never been vaccinated previous to our experiment. To his case, therefore, no exceptions can be taken.

These are the only instances where subcutaneous vaccination has as yet been permitted; but now that it has proved to be unattended by disagreeable results, the experiment can be repeated, without risk, by others who may incline to try it for additional confirmation of the fact now established.

EPILEPSY FOLLOWING INJURY TO THE HEAD.

Read at a Meeting of the Suffolk District Medical Society. By I. H. HAZLETON, M.D., Boston.

On the evening of Friday, Sept. 8th, in New York city, —, a young man 22 years of age, weighing about one hundred and forty pounds, fell upon the floor, from a height of nine feet, striking upon the back and left side of his head. He was insensible over twenty minutes. Vomited on recovering consciousness; body cold; pulse, about an hour after, 32. There was no paralysis, nor trouble with any of the special senses. There was a large ecchymosis over the left mastoid process, without any signs of fracture of the bones of the head. In a fortnight, he had so far recovered as to return to his store, gradually resuming work, and feeling about as well as ever.

About the 10th of October, he began to have a cough without any expectoration, loss of appetite, night sweats, vertigo, and pain in the head, which he thought was occasioned by the severity of his cough. When in bed, was not troubled with vertigo, and cough was less severe. His stomach could not tolerate much food. There was a slow but steady progress in the severity of his symptoms.

I saw him Sunday morning, Oct. 22. He was in bed, a little emaciated, eyes lustrous, pulse 88 and soft; tongue moist and clean; bowels regular. He complained of cough and of being light-headed. Could only eat simple food. The cough was dry, frequent and paroxysmal. Could not detect any physical signs of lung trouble. He said that the night sweats varied in quantity. As he was unwilling to go to any of the hospitals, and could not receive proper attention at his boarding-place, he concluded to come to my house for treatment. We left New York Oct. 24th in one of the Fall River boats. He remained in his room till we took the cars. Was but very little fatigued by the journey, and appeared better the next day, but was advised to keep his room. The syrup of iron, quinia, and strychnia, one teaspoonful twice a day was prescribed.

On Saturday, Oct. 28th, he began to be dull and depressed. In the afternoon, his face was flushed; head hot; pulse 96, full and bounding; tongue clean, but less moist. There was perceptible throbbing of carotids. Said that his head did not ache. Discontinued the syrup, and gave simple fever drops. At 11.30, P.M., went into his room and found him unconscious, on his left side, with the left arm extended, hand clinched, head drawn to the left, eyes rolled up and drawn to the left. There were slight convulsive movements of the right side. In a few minutes the whole body was convulsed, the right side more than the left. The pupils were widely dilated. There was the same turning towards the left. No protrusion of the tongue. No involuntary discharge of urine or feces. Near the end of the attack, there was twitching of the face, which continued some time after the other convulsive movements had ceased. From the commencement of the attack till after all spasmodic action had disappeared was about fifteen minutes. The body was bathed in perspiration. He then went into a deep sleep. Twenty minutes after, he had another seizure of the same character, but much less severe, and of shorter duration. Gave a solution of bromide of sodium (gr. x.) twice during the night.

When he awoke in the morning, he said he had had another one of his night sweats, and thought it was worse than any of the others. At stool he was much amused by the twitching of his left leg. Solution of bromide of sodium (gr. v.) four times a day was ordered. The next day, noticed that he used left arm but very little, and was more or less helpless, and found that both the arm and leg of the left side were para-

lyzed—the arm more than the leg. Sensibility was much diminished, equally on both sides. The temperature was not taken, but appeared, by hand, to be a little more elevated upon the left side than upon right. The cough was unchanged, but continued to give him much uneasiness.

Nov. 2d, at 4.30, A.M., while asleep, with no premonitory cry, he had slight clonic spasms of the left side (the body being turned as in previous attack). They did not follow as rapidly and lasted nearly ten minutes, gradually involving both sides, but the right side more than the left. Unconscious during both of these stages, which continued nearly twenty-five minutes. About five minutes after, the respiratory muscles were convulsed, making respiration nearly one hundred per minute. This third stage lasted a little over ten minutes, during the whole of which he was conscious, begging me to “give him something to relieve him or he would die.” Gave him twenty-five grains of bromide of sodium after the spasms began to be less severe. The whole attack lasted about fifty minutes.

A blister was applied to the back of the neck, and solution of bromide of sodium (gr. xx.) *pro re nata* (the indications being the rapidity of the pulse, and the increased temperature) was ordered, the head being kept cool by evaporating lotion. In the evening, had an attack of twitching of the paralyzed side, much less severe than the one in morning; was unconscious during the whole of the fit. There was less perspiration, although large in quantity. When he awoke, he asked if he had not been having another spell like the one in the morning, and if his night sweats had not been all along occasioned by fits. The paralysis was more complete after this attack. The cough unchanged, causing great pain in head.

Nov. 4th.—Dr. Webber saw him in consultation. The paralysis had so far improved that he was able to flex the forearm and fingers a very little, but could not extend them. The left hand was slightly oedematous, possibly from dependent position. Could bend the leg a little. There was no facial paralysis. The pupils were normal, responding to the stimulus of light, a little sluggishly, however. The tongue was protruded and drawn in, sometimes in a straight line, and sometimes not. When protruded, there was slight trembling. It seemed to be a little full on the right side. He has good control over the muscles of deglutition. There was a slight secretion from the eyes. Of the five special senses,

that of touch seemed to be the only one affected. There was a marked loss of sensibility on both sides. He could distinguish a touch or pinch, but thought we were pulling hairs when using the æsthesiometer with some little force. The two points were felt as one at a distance of two and a half inches across the arm. All mental phenomena were sluggish, but normal. The solution of bromide of sodium to fluid extract of ergot (m xx.). After the administration of the first dose, an erythematous blush began to appear upon the face. Soon after the second dose he vomited. The ergot was discontinued, and the solution of bromide of sodium was resumed.

Nov. 5th.—Began to be troubled with severe tonsillitis, with strawberry-looking tongue. In the evening, had epistaxis from the left nostril. There was a slight diarrhoea, which lasted for five days. The appetite and strength began to fail. Slept a great deal, talking often in his sleep.

Nov. 9th.—Had hallucinations of sight after awaking, but could correct the false perception. Slept most all day, breathing heavily. Tonsillitis almost well. Cough still present, not so troublesome as formerly.

Nov. 11th.—His left arm was flexed. On attempting to straighten it, he cried out that it hurt him. His condition would fluctuate from comfortable—with good pulse, quiet sleep, and no hallucinations—to quite low, when the pulse would be small and very rapid, the sleep heavy, free perspiration, the hallucinations frequent and a longer time elapsing before they were corrected.

Nov. 22d.—Incontinence of urine, when asleep, appeared and continued for three or four days. Always dreamed he was on board a yacht and was wet by the spray.

Dec. 2d.—The pulse was small and 120. Only a slight cough. No profuse sweating. After unpleasant dreams he would try to get out of bed, but a solution of hydrate of chloral (gr. x.) would quiet him in a few minutes. Milk punch (whiskey 3ss.) was administered four times during the day, and the pulse was found to be less frequent. Continued treatment through the night and for three days after, gradually decreasing the quantity of whiskey as the pulse improved, till the fifth day, when it was discontinued. He improved slowly from this time, recovering the use of the left arm and leg; sensibility returned on both sides. On January 25th, 1872, the day he left me, the index of the dynamometer marked 80°

when the right hand was used; 63° , when the left.

The mental phenomena during his illness were very interesting. Until after the severe convulsions of Oct. 28th, the mind was unaffected; then a little more time was required for him to collect his thoughts and answer. But his answers were always correct. He gave the number of his Post Office box in New York when he appeared to be quite stupid. At one time I believed it was almost impossible for him to live, and requested him to sign some checks, payable to his only sister, for the whole of the money he had deposited in different banks. He seemed to understand why I desired this, consented, and laughed when he found he was no longer able to write, but had to make his mark.

After Nov. 9th the hallucinations of sight became more frequent, but always after awaking from sleep. When awake for any length of time, nothing but sluggish mental action was noticeable. After sleep, however, and whilst awaking, he would have hallucinations of sight, hearing and touch, and delusion later on. All of these he could correct with the assistance of his nurse. The moment his mind was drawn to any other subject for a short time, he was able to correct his delusions. After he was able to walk out, he had a faint remembrance of two or three things only that occurred subsequent to Nov. 2d. When the money orders were handed to him he was much astonished, remembering nothing about them. It is very interesting to the medical jurist to note that the memory was so little impaired during the progress of the disease; that he seemed to understand everything that was said to him, and could also converse correctly, but forgot everything that happened after he had recovered.

HYDRATE OF CHLORAL IN RIGID OS-UTERI IN A CASE OF MISCARRIAGE.

By M. L. BROWN, M.D., Winchendon.

MRS. —, a well-formed and muscular woman, primipara, miscarried at about the fourth month. I was called at 4 o'clock, A.M. The miscarriage had been in progress for three days and the waters had passed away the day before. On examination, the vagina was found hot, though somewhat moist, and the os was too small to admit the tip of the fore-finger; it felt hard, and gave a sensation as if bound

round with whip-cord. At the end of two hours, the pains coming regularly and increasing in strength, another examination was made, when I found the same condition as at first. At 8.39, A.M., no progress having been made, I gave one-third of a grain of sulph. morphia, as in labor at full term; I have several times seen the best results from giving an opiate when the pains were strong and the os rigid and unyielding. At 11, A.M., there was no change, all the while the pains occurring regularly every five minutes. I then gave two grains of opium, but with no effect towards dilating the os, though it materially increased the strength of the pains. At 1.30, P.M., applied the extract of belladonna after the manner of Prof. P. Dubois (a pellet of the extract the size of a pea on the nail of the index finger is carried to and applied upon the os uteri). Towards evening, as this had produced no result, several applications of very warm water were made, by means of vaginal douches, with the effect to soften and cause the os to dilate so as to admit the finger. After this, no perceptible progress was made, and I thought of incising the os. The pains had become more frequent, powerful, and were agonizing, and the patient complained of great fatigue, a feeling of complete exhaustion, was very thirsty, had severe headache, the tongue was dry, brown and burning, the abdomen was tender on pressure, and the pulse was hard and frequent.

Having some hydrate of chloral at hand, I gave her forty grains in half a glass of sweetened water; very soon after, she passed into a quiet and refreshing sleep. Slept an hour and a half, when she awoke, and immediately after it was discovered that the fœtus was in the bed; slight traction was made upon the slender cord and the placenta was drawn from the vagina. The uterus was found firmly contracted; the tongue was moist, and the headache was gone. The patient made a very quick and perfect recovery.

Reports of Medical Societies.

RHODE ISLAND MEDICAL SOCIETY.

THE quarterly meeting of the Rhode Island Medical Society was held March 20th, in the Franklin Society rooms, on North Main Street, and was quite largely attended.