

she liked and others disliked. If an attempt was made to take her from her mother she would put both arms around her mother's neck and her legs around her waist and cling to her, and if any attempt was made at forcible removal she would cry. She knew the dog, would play with his ears while holding her face back for fear of his nose; he once scratched her, after which she avoided him. She soon began to understand words, and would hide with "mamma's ribbon," her hand, or her pinnie, as she was told. She knew the words dinner, Uncle John, auntie, mamma, ribbon, pinnie, Carlo, "pretty, pretty," for broach, and she also improved by distinguishing objects at a greater distance.

November 3rd.—I again removed a portion of the skull of the same size just behind the first, with slight improvement, especially in the parallelism of the eyes, which were now almost straight. The spasm of the peronei muscles was not affected in the least. It was also observed by some friends that her cry was changed, sounding more like a coaxing or fretting cry of a baby. She is not so easily startled by a noise, neither does an emotion cause her to go into so violent and long-continued state of ecstasy.

She returned to her home in Ontario on the 9th of November. From a letter dated the 11th Dec. the father says she is improving in intelligence, that when they are eating, her eyes follow the food from the plate to their mouths as much as to say "give me a bite," and when the mother chews some food for her, she opens her mouth in anticipation of it. A letter of a later date shows some attempt to talk. When asked if she loves papa or mamma, she answers "Ah!" and if asked if she loves some other person whose name is mentioned, she will not answer. At the words "up again," "down again," she will raise or put down her arms, suiting the action to the words. She will also make a "funny face" when asked, and laughs as if she thought she had done something cunning. The parents are very persevering, and show a remarkable intelligence in drawing her out, for which they deserve great praise.

February 6th.—I paid a visit to my patient in order to satisfy myself of the improvement and its permanence before completing this paper, and I felt gratified to observe that she had gone back in no respect. She could bal-

ance herself so as to sit up, could stand in a corner, had made some attempts at locomotion by rolling from one place to another, and her countenance certainly wears a much more intelligent look. She winks when the hand is brought suddenly toward the eyes. I saw her reach for a glass of water with her mouth open, asking in her way for a drink, and take a cracker in her hand, bite off a piece and chew it as another child would, though she is not yet over the habit of throwing things down in order to hear the noise. The pulsation of the brain is visible at the site of the wound, which is slightly depressed below the level of the scalp, but not the skull. I saw her only about two hours.

April 5th.—A letter states that she has learned to kiss, turn her head and open her mouth when asked to do so, and many other little tricks have been learned.

It is noticeable in these observations that those motions of the body which belong to the instinctive actions were immediately developed upon removal of the cause which interfered with their function, while perception and association of ideas were slowly attained in the manner in which we acquire knowledge.

Having now stated what is most interesting to the psychologist, I will give a daily record of what pertains to the operation, which is more interesting to the surgeon.

Sept. 24th.—The evening of the operation the child was nervous and startled by the slightest noise. A small dose of morphia about $\frac{1}{2}$ gr. was given at 4 p.m. and another at 10 o'clock.

Sept. 25th.—Restless night; temperature 102° ; very nervous, especially susceptible to sounds. Tumefaction of the wound, and scalp swollen around it. Opened two stitches and allowed a tablespoonful of bloody serum to escape. Bathed the head with warm water, wet her shirt, and gave morphia. 8 p. m. temperature 101° ; rested well to-day.

Sept. 26th.—Restless and very nervous; temperature 101° . Morphia, wet shirt, and bathe the head frequently with very warm water. 8 p. m. quiet; temperature 101 .

Sept 27th.—Rested much better; not so nervous. Temperature 99° ; appetite, when it was noticed that she chewed for the first time. Morphia omitted.

Sept. 28th.—Rested well; temperature normal.