In this imperfect history of a very interesting case I desire to emphasize a few points, namely:—

- (1.) The convulsions did not recur after trephining.
- (2.) There was no hæmorrhage at the time of operation, but severe intracranial hæmorrhage followed some hours after.
- (3.) Notwithstanding the immense clot that filled the anterior fossa, consequently compressing to a considerable degree the whole hemisphere, there was neither hemiplegia nor loss of any special function, so far as I observed.
- (4.) The unusual surgical procedure of packing inside the skull to arrest hæmorrhage.

FROM THE BRAIN TO THE EAR.

BY E. CHENERY, M. D., BOSTON.

THAT inflammation should not unfrequently extend from the deeper portions of the ear to the membranes of the brain, or even to the brain itself, may be easily accepted both from the anatomical relations of the parts and the observations of practice. But that disease should begin in the brain or its envelopes and pass downward into the bones about the ear and finally into the ear is quite another thing. In an article in the *JOURNAL* for November 1st, by Dr. J. O. Green, of this city, there is reference to such a possibility, and the citation of a case reported by Berndgen supposed to be in point; yet on carefully reading the case there seems to me to be ground for question whether the affection was primarily of the encephalon, since there had been a recent attack of otitis, which, though apparently relieved, may have extended to the cells and to the parts beyond.

In a case which came under my own care many years ago, there seems less chance for doubt, and as it has never been reported I will give an outline of it here.

Mr. J. W. was a resident of the country, of good constitution, twenty-two years of age, and a carpenter. With full consent of his parents he left home, and found employment in the original Pemberton Mills at Lawrence. On one very hot day in July, with a number of others, he was engaged in laying down floor between the brick walls. So intense was the heat that all but him and another man gave out and left their work. Several of them, I learned, were sunstruck, and one subsequently came under my care with headache and inability to bear heat or exercise, as a result of the prostration of that day. He was a long time recovering so as to work again.

Mr. J. W. said he thought he should be obliged to give up also, for his head felt as though it would split, and he could not stoop without an effort to keep from pitching forward. The next day his head ached,

and he did not feel like work. Having lingered about for a few days he came home to see his friends and rest a little. They noticed that he did not seem to be as cheerful as when he went away, and he did not get out his violin, as he was wont to do, and make merriment for the young folks about him. After a week or so he started back on a Bangor steamer, and was so bewildered that he went to several depots before he got the right one for Lawrence. His head ached, he felt weak, dizzy, without ambition, and could not set himself to work, and again returned home. His head grew worse, particularly nights, and he frequently expressed regret for ever going away from home, thought he had done wrong in doing so, and could not be persuaded to the contrary. In September he came into my office in a depressed state of mind, showed me the backs of his hands, which were somewhat mottled, and thought his blood was turning to water. I had never seen him before, but was impressed with his evident mental aberration. The next day he came out with the measles and went under the care of a former family physician, I having gone away for a few days. He recovered from the measles, though not from the trouble in his head. Afterwards he had pain in his right ear, with which he was almost beside himself. It found partial relief in the discharge of purulent matter from the ear, and from this time onward the discharge never ceased. Another physician also saw him, and both of them gave it as their opinion that there was no trouble with the head, — that his pains, mental depression, etc., were wholly in the imagination. His parents, having confidence in the doctors, took the same view, and scolded him for his mourning, and his complaining about his head, and because he showed no ambition to do anything. One day he was in the field with his father, who spoke sharply to him, and told him to take hold and help him, when his eyes glared wildly, and he started for the woods near by.

In this way things went on from bad to worse for several months, when his father, hearing that I thought he seemed to be out of his mind when he came to my office, at length called me to him. He was up and about the house; his ear was running, his countenance looked badly, and he could not sleep nights because of the pain in his head. His father would sit by him in the night and hold his head. "Sit on it, father;" "put it in the vise," he often exclaimed.

Notwithstanding all this his parents could not divest themselves of the idea that "it was all imagination." Seeing that he was not likely to stand it long, I prevailed on his father to call in an eminent physician, some miles distant, in order to undeceive his friends as to the nature of his case, and have something done for him, if possible, before they should be left to reproach themselves for their want of sympathy, for he felt very keenly this lack in the hours of his suffering.

He died nine months after the trouble in his head began, and four after the ear began to discharge. Before he died he left a request that I should open his head and show his friends that he "did not die of imagination."

The autopsy which was performed the next day.

On raising the calvaria the membranes over the right ear were found thickened, softened, covered with purulent matter, and detached from the petrous portion of the temporal, which was dark and its cavities filled with pus. The middle lobe of the cerebrum was softened in nearly its whole extent. Just above the petrous portion there was an abscess the size of a very large hen's egg, having a sac quite the sixteenth of an inch thick. Dividing through the bones, the cells were filled with pus down into the mastoid process, and there was no doubt that the matter discharged from the ear came from as high up as the dura mater. It would seem that nature here sought to remedy the mischief first by incapsulating the pus within the membranes, and secondly by allowing that which formed without to seek an external outlet through the canals of the bones and the ear, there being no observed communication between the interior of the sac and the ear. Here, then, is a case of undoubted cerebral disease for months prior to any trouble with the ear. Though there was an attack of measles preceding the discharge from the ear, there seems no evident connection between the measles and the discharge. If, therefore, the disease in the ear did not originate in the head, it must have occurred as a concomitant, destroying the vitality of the bones above the ear, and communicating with the membranes just at the time when the inflammation within had resulted in breaking down a large mass of the brain and encysting it within. The natural and likely conclusion is that the disease was primarily of the encephalon and secondarily of the ear, and that the latter was consequent to the former.

RESULT OF THE BROWN-SÉQUARD TREATMENT IN TWELVE CASES OF EPILEPSY.

BY JAMES B. AYER, M. D.

NINE of the cases tabulated upon page 746 have occurred in the private practice of Dr. James Ayer; two have occurred in my own private practice; the remaining patient has taken upon herself the full responsibility of treatment.

All cases are recorded in which systematic treatment has been followed.

The following prescription (occasionally slightly modified) has been used in each case: —