

A STUDY OF APHASIA.¹

By DR. B. ONUF,

Brooklyn.

(ABSTRACT.)

The case reported concerns a woman who suffered an apoplectic stroke from embolism. After the general symptoms of the insult had passed away, right hemiplegia with motor aphasia, alexia and agraphia remained. At the time of the first examination, about 10 months after the apoplectic insult, the aphasia was almost entirely recovered from, but the faculties of reading and writing were still greatly altered. Vision $\frac{1}{10}$ on both eyes. Normal visual fields. Sense of color perception normal. In short, no visual disturbances of any kind.

The interesting features of the case were:

1st. Marked disturbances of the faculty of reading, but the patient can read words better than spell them; she often reads a word correctly but spells it wrongly. In some instances it can be shown that she spells from the sound of the word read. She, for instance, reads "one" correctly but spells it w, o, n. These facts tend to prove that Grashey and Wernicke are wrong in stating that reading is always done by spelling.

2d. Written characters are read with more difficulty than printed ones.

3d. Copying is done better than dictation-writing which may be explained from the fact that in copying the memory has to be taxed much less, as the patient has the text to be copied from constantly before her eyes. A similar explanation may be given for the fact that dictation writing is much more impaired than reading if we further keep in mind that both these functions are in intimate connection with the motor-speech concepts.

Although the motor-speech concepts had been recovered, their association with the visual memories (for reading) and the indirect association (over the sound memories) with the graphic motor memories had not

¹ Read by title.

yet been re established. Other things being equal, it is natural that dictation writing should be more impaired than reading, as in the first case part of the dynamic nerve energy (Neuroeym activity—Forel) has to be spent in remembering the words dictated.

4th. The patient shows the reduction in function of the reading "apparatus" which Bastian has called attention to. The memories of some letters cannot be evoked voluntarily, although they can be called up by association. The patient does not recognize the letter g, v, x, at first, but finds them by spelling the alphabet until she comes to the letter in question.

5th. The patient shows the peculiarity of using printed types, instead of script, in writing. She is not absolutely unable to write script, but she does it so badly and with such difficulty that she prefers to write with printed characters. Writing with the contractured right hand was not possible, she had to do it with the left.

In accordance with Pitres and Charcot the writer concludes from his observations that there must be a homologon of the motor speech centre, viz., a special graphic centre containing the memories of the motions required for the execution of written characters. Destruction of these memories causes inability to write in written characters while writing with printed characters may be possible with the help of the visual letter and word memories. This centre of the graphic memories is, however, probably situated in close proximity to the arm centre; possibly both may be contained within the same cortical area.