

ity matriculation. There were thirty-seven possible chances of disease. In thirty-three cases the chances were seized. The number of incorrect forms per word varied from one to eight.

The incorrect forms may be divided roughly into four groups :

- (a) *Peroid, brakefast, conceed, excede, procede, predujice, braed, phrop-ecy, releive, and Thomspen.* (The last four being taken from another list.)
- (b) *Purpos, requisit, excelency, climed, imortality, emmerged, ecclesiastical, and emphasiz.*
- (c) *Spetacle, propospereous, exchaquer, ambiguiety, predudice, and practible.*
- (d) *Harast, exalency, cisim, pregidest, and salarity* (celerity).

In the *peroid* group all the necessary letters for each words are given, but the order or sequence of the letters is incorrect. The general form of the words appears natural, though the details are slightly irregular. In the *purpos* group a letter has been omitted or inserted or substituted, but the sound of the word has been unchanged. In the *spetacle* group letters have been omitted, inserted or substituted without greatly altering the general appearance of the word, though the sounds have been materially changed. The *purpos* group offends the eye slightly but not the ear. The *spetacle* group offends the ear materially and the eye but slightly. The *harast* group seriously offends the eye but suits the ear.

These are the pathological specimens which we are to examine from the standpoint of the educational physician. Where is the disease?

Sir Joshua G. Fitch says : " The person who spells well is simply he who carries in his memory a good visual impression of the picture of the word as it appears in a written or printed book." (Lectures on Teach-

ing, p. 213.) A clear and distinct image of the word as a whole and of its parts is the condition of good spelling. This image is a mental photograph of the word. When the pupil is called upon to reproduce the word he either calls out or writes down each letter as he reads it from his mental image.

There are mental images and mental images. One group comes in through the eye-gate, another through the ear-gate, another through the nose-gate, and so on through the different senses. What kind or kinds of images are involved in spelling?

Sir Joshua Fitch says : " Spelling is a matter for the eye, not for the ear. If it were not that we had to write, spelling would be an altogether useless accomplishment ; and it is only when we write that any deficiency comes to light." (*Ibid*, p. 212.) The consequence of this view is to neglect the ear entirely. The image of the word which the speller appeals to is a visual image. The auditory image is useless. Is this the whole truth?

The general forms of the words of two of the groups given above (*peroid* and *spetacle*) are dictated by the eye. Those of the words of the *harast* group by the ear. While those of the *purpos* group seem to be the joint work of the ear and eye.

How have the mistakes occurred ? The *peroid* class seem to be due to want of attention to detail. The word has been first learned as a whole and then compared with a number of similar words sufficiently to be readily distinguished. This comparison has not emphasized the order of the letters but their difference from other groups, e.g., *bread, braid, broad*.

This same method, which plays a prominent part in the " look-and-say " method of teaching reading, is especially bad for the correct spelling of such words as *exceed, recede, etc.*