

or with the easiest vowel and easiest consonant together; whether one sound of the vowels shall be taught by itself, or the two most common sounds be introduced in connection with each other, each instructor must decide for himself. As we have now to do with both the sounds and forms of letters, those letters should come first which are, in both respects, the easiest to apprehend and use. Letters which are represented by single characters should come before those whose characters are complex, especially if the pupil be required to make them on the slate or blackboard. Of those of similar form only one should be learned at a time, and that should be the one most frequently occurring in words; for the memory is embarrassed by the necessity of nice distinctions, whereas it is aided by striking contrasts. Consonants which have different sounds according to their position, diphthongs, and, in fact, all irregularities should be excluded from the first lessons. I know, indeed, that one cannot proceed very far in teaching the elements of our language without encountering difficulties arising from anomalous sounds and combinations of letters. But of this apparent chaos in English orthography, some parts are much less chaotic than others. Great irregularities, or those which do not extend to large classes of words, belong not appropriately to the primary school. The fact that vowels in a certain position are generally long, and in a certain other position are generally short, may be made very simple, if we dismiss for the time being the numerous exceptions. So, also, the fact that the long sound of each of the vowels is represented by certain diphthongs, may be easily recognized and followed, if we limit our attention to large classes of words. The influence of the letter *r* upon certain vowels, modifying their sounds, can be made obvious to any child. Indeed, all that part of orthography which belongs to the primary school, may be taught without occasioning very great perplexity to the pupil.

When a child comes to put words together in reading, so as to form a sentence, no pains should be spared by the teacher to preserve the natural tones of human speech. Children are the most natural speakers in the world, and would, without instruction in inflection, tone and emphasis, read well, if they could be made first to feel and speak short and easy sentences, like those to be read. Suppose a sentence to begin with the salutation, "Good morning." The child may be directed to repeat the words with such feelings as would naturally arise in different circumstances. The teacher might say, "Imagine yourself coming from a cold chamber, early in the morning, and meeting your brothers and sisters sitting by a cheerful fire, bright as larks, how would you speak these words to them? If you were to enter the room of a sick mother, in what tone would you address these words to her? If the weather were dull, and your feelings sad, and you were to meet your teacher who had reproved you for some improper deportment the day before, how would you salute him? If, you would go out early and find your companions full of glee, what would be the way in which you would say 'Good morning' to them? Well here we are about to read of a girl, who was a little out of humor with her old sister the evening before, and now wishes to make amends for it, how would she be likely to speak these words to her sister on approaching her?"

Suppose a quarter of an hour were spent in such an exercise on a single phrase, and the residue of the sentence were left for the next exercise, could the time of the teacher and the pupil be more profitably spent? All that is necessary to insure natural reading at the outset, is to *ply the imagination of the child, till it has produced the appropriate feeling*. The tones and inflections will take care of themselves. When the result has been properly brought out, and every one knows and feels that the utterance of the words was as it should be, then it may be well to note it and record it as a thing ascertained by observation. Thus, by constant transitions from reading to speaking and from speaking to reading,—working every word and thought and image into the understanding, imagination and feeling of the young reader,—an effectual barrier will be raised against that grotesque habit of mouthing and drawling words which is not yet banished from our schools.

The subject of the piece to be read, the thoughts conveyed, and words employed, ought not to be such as require much explanation. Still the teacher should be satisfied with nothing short of positive evidence that all these are perfectly understood, before any attempt is made to read the passage aloud. But the faults of the voice, and of articulation, will be likely to be so numerous as to require

much vocal training. It is absolutely painful to go into some of the schools and hear the screeching voices, the outlandish and provincial vowel sounds, and the defective or exaggerated articulation which constantly offend the ear. The importance of a pure, rich and pleasant tone of the voice, both in school and domestic and social life, is rarely estimated as it should be. It is the natural interpreter of the heart, and carries with it agreeable or disagreeable impressions and associations, as it bears marks of rational control, dignity, gentleness and sweetness, or of the want of all these qualities. A decidedly bad management of the voice in the teacher should be a bar to his admittance to the school. The attention now given to music in the schools, besides improving the feelings, taste and deportment of the pupils in other respects, has had the effect to prune off the grating harshness of the voices of both teacher and pupil. It is still a common defect in both the speech and reading heard in the school-room, that the vowel sounds are wanting in purity and exactness. As these constitute the body of the sound heard in speech, the main current, as was once said by an accomplished teacher of music, on which the consonants fall like leaves and are borne away by the streams, they should be truthfully given. They should, moreover, have a full and sonorous utterance so as to give them their proper musical effect. One of the incidental evils resulting from efforts made to improve the articulation of difficult consonants, is, that the latter have been given with an exaggerated force; whereas distinctness and delicacy only are required; and thus not only have the harsher elements of our language been needlessly rendered harsher still, but they have been made to compress and almost crush the vowel sounds, and thus injure the music of the language. Let me not be understood as disparaging elocutionary exercises on the consonant sounds. I only speak of the mistake that is often made in confounding force with distinctness, leading to a violation of the principles of true taste, and putting the teacher of reading at war with the teacher of music. The true teacher of elocution and the true teacher of music recognize the same principles of taste, and work as coadjutors rather than as antagonists.

## SHORT MEMOIRS OF EMINENT MEN.

No. 2.

WILLIAM HARVEY, M. D.

(*The Discoverer of the Circulation of the Blood.*)

"The wisdom of the Creator," it has been well said, "is in nothing seen more gloriously than in the heart and blood-vessels;"—the action of the latter is essential to the performance of every function, and diffusing life, health and vigour, through the entire animal frame; the cessation of the former, for a short period, absolutely fatal: the whole, nevertheless, so constructed as to go on at the rate of a hundred thousand pulsations in every twenty-four hours, for a period of from seventy to eighty years without disorder, without interruption, and without weariness! And yet so simple is the contrivance by which all this is brought about, that the next thing which astonishes us is the fact, that so many years elapsed before it was at all accurately understood. The arteries were found empty after death; it was, therefore, concluded that they merely conveyed air or some kind of "animal spirits." The veins alone were supposed to convey blood. By some it was propounded that the fluids move along the vessels in one direction during the day, and in the contrary direction during the hours of sleep, with many other equally chimerical and unfounded hypotheses. In the sixteenth century, a little more light was thrown upon the subject. By the researches of Servetus and of the Italian anatomists, Colombo and Gesalpini, the lesser circulation through the lungs, the fact of the blood being acted upon by the air, the existence of valves in the veins, and a few other particulars, were made out. But it was reserved for our illustrious countryman, in the century before last, to connect the whole into one harmonious system; to announce to the world the great discovery of the true doctrine of the circulation of the blood; to open up a new era in medical science; and to introduce as great a revolution in the sciences of anatomy and physiology, as Newton afterwards did in those of astronomy and optics, by his theories of gravitation and light.

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