

royal road to learning. Words must be used again and again, not simply in sentences made for sake of phonic drill but in a story or game.

### PHONICS

The phonic difficulties should be carefully graded and constant repetition should be given. Reading forms must be reduced to habit; habit is only gained through repetition.

The two words, phonics and phonetics, have been used by different authors for the name of the science of speech. A phonogram is the written representation of a sound. A phonetic study of words used in the rhymes, etc., serves to develop in the child the ability to recognize words. Phonograms do not lend themselves easily to classification. A common form, however is that of simple phonograms or one-letter as f, d, t; while a compound phonogram is one which contains a number of letters, ight, ing.

Ward, in his "Rational Method of Reading," gives the following three principles that determine which phonograms shall be taught early:

1. Those that are uttered with ease by the children: m, p, f, s, are examples of these, while w, h, r, cannot be included under this head.

2. Those that can be prolonged into words without losing their identity. The phonogram ight is compound, its sound, is as clear as when it is sounded by itself. But, let the reader sound the phonogram ar, er, or, first, as separate sounds and then speak the words beggar, editor, singer. The untrained ear hardly differentiates the sound of beggar from beggar, or editor from editor. Hence, er, ar, ir, ur, or are classed as difficult phonograms.

3. Those that are common to many words of frequent use. The phonogram th (voiced as in them) is difficult, but must be taught early because the frequency of its occurrence tends to make its correct enunciation more simple.

The method of teaching phonograms is made quite clear by Klapper in his book "Teaching Children to Read." The teacher must determine that the phonogram is in its correct place in the grade series of phonic lessons; that it grows out of previous sight words learned; and that it will be useful in later word building.

Having considered these problems and decided upon the phonogram suitable for lesson the teacher's first task is "ear-training." The teacher should tell a story in which words containing the phonogram are used. Then call upon the children individually, watching the pronunciation carefully. Another help is to ask children to give words which rhyme with the word containing the phonogram. Suppose "ight" is being drilled upon. A story containing might, fight, right may be told. Then ask the pupils to think of a word rhyming with "might."

—Klapper, "Teaching Children to Read," p. 109-110.

The next step is the phonetic analysis of the word containing the phonogram. This may be done by exaggerated slowness of speech f f f—it, m m m—ti, or by comparison of the words containing the phonogram. In this step ight is isolated from the other letter or letters in the word.

The last step is that in which the children are taught to continue the nasal phonogram ight with other phonograms and thus forming words. The teacher should always strive for speed in this step. Quick recognition is desired and some drill device should be used to encourage the children to instantaneous response.

### ARITHMETIC

By Inspector O'Blenes)

(Continued from Sept. Number)

The next step should be to omit the row of figures at the side but ask the pupils to imagine they see them.

The last step should be to read the addition thus: nine, eleven, thirteen, fifteen, &c

Give short lessons so as not to tire the pupils. As soon as the pupils can do the work alone give questions on the board to be done at their seats. Two or more short periods each day are better than one long period.

As soon as any degree of speed has been acquired by the pupils have them run races in adding, two at a time. Always choose two of about the same ability.

In the class drill have one pupil add out loud from the board while the others follow to see if any mistakes are made.

Impress upon them the need of adding slow enough to avoid mistakes. Extra credit should be given for work that is correct at first trial.

Give a few long questions at each lesson as it encourages a pupil to find that he can do long questions.

As soon as the table with threes has been learned by any pupil put threes along with the ones and twos in his questions. This helps to create rivalry and secures better work. Continue in the same way with the fours, fives, &c., up to and including the nines.

In writing the tables be sure to keep the nine digits in the left hand column, because if they are written in the middle column all the tables must be mastered before beginning to add. In the units figures in the side row may be found any or all of the digits and if the question to be added contains only ones and twos then those are the only tables needed.

There is another method of teaching the addition tables called the combination method. It is more difficult to make questions when the combination method is used, but many teachers claim that they get better results by using it. Briefly stated the method is as follows:

Teach the addition of each of the digits to 0, thus 0