

use of the subject the conclusion seems obvious that not one of the suggested purposes had been accomplished by the forty weeks' work.

A second illustration of waste is caused through the selection of problems and the vocabulary of the text books. In Grade III. 80 per cent. did not know the meaning of dealer, 90 per cent. the meaning of merchant; in Grade IV. 80 per cent. did not know the meaning of mason, and 95 per cent. the meaning of contractor, etc. The confusion is illustrated by the following sentences composed by children: "A carpenter carpets floors; a contractor contracts; the broker breaks rocks; the broker gets broke; the merchant does no hard work, etc."

The children taking an imaginary trip through a farm were ignorant of such terms as poultry, pasture, loading grain, acres, shipping oats, dairy, crops, bin, and a trip through a grocery store showed less ignorance. It was clearly demonstrated that failure in arithmetic is due very frequently to lack of ability to read—that is to understand terms or picture the conditions of the problem.

To sum up in the words of the writer:

Sometimes the subject matter of whole pages may be foreign to the children's experience. For instance, one of the first pages of a fourth grade book deals with "the average income of physicians," "the salary of the president," "the salary of the Governor of Illinois," "the police force of New York City," "the greatest depth of the Pacific Ocean," and the distance of the moon and the sun from the earth. Another page in a fifth grade reader includes "registered votes," "apple blossoms that did not develop," "a poultry raiser," "farmers' crops," "unseasoned lumber," "sugar beets," "beef tal-

low," "experimental farming," and a "dealer's profits."

In addition, some of the problems even though they may be about things or situations that are familiar to children, are yet stated in words that children do not use and consequently do not understand. Thus one book, in asking questions about a children's garden, uses all of these phrases on one page, "rectangular plot," "grow on shares," "cultivate part of an acre," "possible to average a crop," "most scientific way," "results of more nearly perfect conditions" and "seven-eighths of that figure."

Moreover, many of the text book problems are founded on the answer and are consequently worked backward from that answer.

It seems reasonable from all this to conclude that text-book problems may be a source of real waste in the teaching of arithmetic. To summarize: The investigation here recorded has shown, after a careful study of numerous text-books, that many problems involve conditions that are quite untrue to life; that many of the words used were unfamiliar or even quite unknown to the one hundred children tested; and finally that forty-five experienced teachers from various school systems have found the subject matter and the vocabularies of the various texts which they have used quite unsuited to the capacities of their pupils.

Surely if we really do not believe in transfer of training we are not going to ask children to solve those problems whose conditions are not true to life; for if we give them such problems containing unfamiliar situations or words we are going to prevent the very thing for which we are working—clear habits of thinking by which to increase their power to make intelligent use of numbers.

## SCOUTING GAMES FOR THE PLAYGROUND

While most scouting games are intended, naturally, to be played in open country, there are yet many suitable for the playground which would pro-

vide a welcome change from plays grown too familiar.

The scout's staff and handkerchief play a prominent part in his games, but