

of a word first and the other meanings afterwards, without regard to logical order or historical precedence; as a consequence of which it frequently happens that some special meaning stands first and the general meaning follows. For instance, *allegiance* is first defined as "the obligation of fidelity and obedience that an individual owes to his government or sovereign, in return for the protection he receives," and then as "the obligation of fidelity in general, as to a superior or to a principle." The reason given for this arrangement is that the most common meaning is the one most frequently sought for, a proposition which as regards the ordinary words of literature we incline to doubt, as most persons who will consult such a dictionary as this are already familiar with the usual meaning of such words, and will turn to the dictionary either for some rarer meaning or to trace the etymology of the word and the logical development of its various significations. For these purposes it is obvious that the arrangement here adopted will not serve, yet experience only can determine which arrangement is better.

The editors are interested in spelling reform, and though they have not attempted to change the established orthography, they have used the alphabet devised by a committee of the American Philological Association to indicate the pronunciation of words, which purpose it serves fairly well, though some of the vowel characters are used in a way that will be strange to the merely English reader. Scientific terms have been defined by experts in the various subjects to which they relate, and we note that the editors have adopted certain changes in the spelling of chemical terms advocated by the chemical section of the American Association for the Advancement of Science. The dictionary is well printed, as, indeed, a dictionary in these times must be, and the illustrations, nearly five thousand

in number, add to the usefulness and attractiveness of the work.

Domestic Science. By JAMES E. TALMAGE, D.S.D., Ph.D., F.R.M.S. Salt Lake City, Geo. Q. Cannon and Sons Co. 2nd Edit., 389 p.

THIS is an admirable little work containing a systematic review of those principles of science which we encounter constantly in our daily life. Familiarity has led us to accept without thought the many details of household routine, but by so doing there is lost to us a vast amount of enjoyment which may be had by a clear understanding of the phenomena we see about us. The laws of nature enter into the most commonplace, and most of us would be surprised to discover how "near home" are chemistry and physics. We are only too apt to look upon these sciences as special studies for university scholars, as something apart from and foreign to our every-day life, while in reality we are constantly, as it were, at work in a laboratory applying principles of science and carrying on experiments. Dr. Talmage's work is now in its second and revised edition, having been somewhat altered to better meet the needs of students. The four main divisions are divided into chapters, the subject being treated under the general heads of air and ventilation; heating and lighting; water, its character, impurities, and purification; foods and cookery; cleansing agents; bleaching; poisons and their antidotes. It is safe to say that the students of "Domestic Science" (it has already been adopted in all the district schools of Utah) will gain a vastly greater amount of useful and permanent scientific knowledge than will those who have pursued only the customary text book course in chemistry and physics.

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