

clear to all the real nature of the subject under consideration.

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#### THE EUROPEAN POND-SNAIL.

TO THE EDITOR OF SCIENCE: It may prove of interest to some of your readers, interested in geographical distribution and its problems, to learn that there is a well established colony of the European pond-snail *Limnæa auricularia* Linnæus in Flatbush (Brooklyn). So far as I am informed this is the only occurrence in America of the well-known 'wide-mouthed mud shell' as it is called in England. The colony is well established, a number of individuals having been collected that were over an inch in length and correspondingly broad. They feed on pond-lily leaves, destroying the epidermis on the under side almost completely. They were no doubt introduced through accident on water plants, since the pond contains several well-known European hydrophytes. Inasmuch as the visits of water birds to this pond may lead to the young shells being carried away to stock other ponds, the occurrence of this species should be recorded.

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#### TEXT-BOOKS.

THE evolution of educational methods in this country is interestingly set forth by President Harper in 'The Trend of University and College Education in the United States' (*North American Review*, April, 1902) and the university of the future is portrayed as centering about the library. Professor Harper names two centers for the university—the library and the laboratory; but for present purposes the laboratory may be regarded as the workshop in which are tested the 'receipts' of the text-books, so that the laboratory may in a broad sense be taken as an annex to the library.

In a university library to-day the books are so numerous as to require special training or assistance to find and use their information to best advantage. Books of course are written from many standpoints and for many

purposes, from scholastic erudition to the mere passing of an idle hour, and wide is the range between the needs of the specialist and those of 'that delightfully vague person, the intelligent reader,' as Mr. Haddon puts it in his introduction to 'The Study of Man.'

As text-books have been the outgrowth of the needs of schools and colleges they reflect in extent and method the needs and limitations set by the requirements of each case. And since these requirements differed widely in different institutions, the number of text-books in each subject is large and their treatment varied.

The chief peculiarity of a text-book is brought about by the fact that it has been prepared for use, not in imparting knowledge, but in the training of the student mind. Its method of presentation is therefore frequently such as to require rather the maximum than the minimum of mental effort to master its contents.

The second limitation to an ordinary text-book, as felt by one who wants only to learn facts, is that set by the length of time given that study in some particular school or college or grade of schools. Hence the ground is covered sometimes quite incompletely, and quite often a limited view is presented in a way most valuable for use in mind-training, but with important topics omitted wholly rather than a less detailed but more complete outline of the subject.

A third limitation is set by the omission of much detailed 'elementary' information imperative to a full understanding of the subject, and assumed either as already known or that it will be (but too often is not) imparted by the intelligent teacher. This criticism of the teacher is fortunately becoming less pointed as the science of teaching is being learned and put into practice.

There exists however to-day a large class of would-be pupils who by force of circumstances must be self-instructed. They are mostly tied down by the necessity of earning a living for themselves and usually for others. Their minds may or may not be trained but they want to learn the known facts and their