ing sense of pleasure as he realizes the success of his friend—the student.

During several years of experience as a teacher I have been brought in close contact with students whose success varied greatly in degree. This caused me to carefully consider the problem of why it is that some people succeed in learning so much more than others who are apparently studying under the same conditions. I have come to the conclusion that success as a student does not depend so much on the possession of quantity of brains as it does on the exercise of this organ of mentation. A dull-appearing, stupid-looking and uncouth acting student may be the laughing stock of his class when college opens, but before the term closes he may stand at the head of his class and cause bright-looking, smart-appearing and attractive students to blush for their own ignorance on subjects of lectures to which both have listened. The first student has carefully ascended the incline of the road to knowledge by hard study, close application, and systematic training of mental faculties. The second young man felt that he was intellectually endowed and depended upon his mental ability to take care of itself, with the result just noted.

But many of you before me to-day have never attended a college of pharmacy and perhaps never will have an opportunity of profiting by the systematic course of instruction given in such an institution. However you are anxious to improve your professional ability and take advantage of the opportunities for study presented in the ordinary routine of the average druggist's life. I shall not advise you to take up one of the dispensatories, Remington's Practic of Pharmacy, or any other text-book and read a certain number of pages per day. This you could accomplish without adding materially to your pharmaceutical knowledge or practical value as a pharmacist. What we learn of practical value is not dependent so much on how much we read, or the number of pages turned over in the text-book, as it is on how well we read and comprehend the text.

There is the same difference in intensity and quantity of reading as there is in intensity and quantity of observation. Who has not walked along the street with a lady who would pass numerous friends and strangers without being able to describe their costumes, but would suddenly meet some person who was considered a rival and through a momentary glance observe every fault in the article of dress and could tell for a month afterwards how the hat was trimmed, how the dress was made over, and what year such colored gloves were in fashion. Thus the student should read when he picks up a text-book. Not with the idea of letting his eye glance over the pages but with the determination of absorbing in detail and being able to profit by the information given.

The earnest drug-store student should immediately procure a good dictionary, such as Gould's Medical Dictionary or Thomas' Medical Dictionary, and in it look up the meaning of every word that he stumbles over when he is reading. Words are added to our speaking vocabulary through a process of evolution, so the student should not be discouraged when he looks up a word and fails to remember its meaning when the same combination of letters appears before him the next day. When we refer to the dictionary for the meaning of a new word it is probable that both the word and the definition will fall into oblivion unless we find it in subsequent reading. Perhaps the next time we look it up a feeling of chagrin is experienced at our forgetfulness. Then the word has passed to our select vocabulary. The word may convey rather a vague meaning when we observe them but through frequent recurrence possibly occasional reference to the dictionary the word no longer troubles us in our text-books but seems to occur with singular frequency. It is now a part of our reading vocabulary. The next step in the process of evolution is our attempt to make use of the word in a hesitating, half-hearted manner, but after awhile we assume that boldness, born of experience, and adopt the word in our regular speaking vocabulary. Constant use and continual familiarity causes us to loose reverence for its special pharmaceutical appropriateness and we apply it metaphorically in conversation no way connected with pharmacy. The word triturate may have been entirely foreign to our vocabulary a few months ago except as used in connection with that pharmaceutical manipulation, but after awhile we find ourselves using the word triturate in its broader sense and possibly threatening to triturate the customer who refuses to pay his bills, or possibly praying that some great calamity may befall the cutter and triturate him as fine as Dover's Powder. To aid in remembering words it is advisable to make a list of them as they are looked up in the dictionary and follow the practice of glancing over the list at least daily.

Now for practical directions in regard to studying drugs, chemicals and preparations. While I fully appreciate the value of a thorough pharmaceutical education and a systematic professional course of study, I no longer advise the average drug clerk to attempt to lay out for himself a complete course of study embracing botany, materia medica, chemistry, practical pharmacy, microscopy and the various branches. My advice is to study Bastin's College Botany and Maisch's Organic Materia Medica, and as a work of reference one of the dispensatories. Do not open the dispensatory at that old and familiar landmark of *Absinthium* and follow it to the last mile-stone *Zingiber*, where you will arrive tired and worn out in both body and mind; but let your subjects for study be selected in accordance with the nature of everyday trade. Start in by picking out some drug which you frequently sell, study this thoroughly, then pass on to another in the list of those which are in general demand. There will be time to learn about these medicines after you have become acquainted with what to you are the more important ones.

We will take licorice as an example of a drug that is frequently sold, and see how it should be studied. Turning to the index in Maisch's Organic Materia Medica we find that licorice is described on page --. We first note that it is under the classification of roots, a subject which we should read in Bastin's College Botany. We then learn that the pharmaceutical or main name of licorice is *Glycyrrhiza*. That the origin of the plant furnishing this medicinal root is *Glycyrrhiza glabra*, while the habitat or home of the drug is southern Europe or western Asia; also that the drug is cultivated as well as gathered wild. These points should be fixed in our memory. Then procure a fair sample of licorice from the supply in stock and compare it with the description. The first thing the eye observes is that the drug comes in long pieces. Closer scrutiny shows that they are round or cylindrical in shape, varying from one-fifth to one inch in thickness. We find that they are longtitudinally wrinkled, and by reference the work on botany we discover the cause of the wrinkles and gain considerable information of importance in identifying the drug. Licorice is found to be grayish-brown externally, and its warty appearance should not escape our notice. We next turn our attention to the internal structure, which is more of a tawny yellow color. The drug is found to be pliable in an attempt to break it and we learn that it is fibrous after it is once fractured. All this has been observed by aid of our sight and sensation of touch. We next make use of our olfactory nerves and observe that licorice is nearly inodorous. This, however, is of as much importance in identifying the drug as would be a strong odor. Lastly we taste the drug and are impressed with its sweetness, which becomes somewhat acrid. We next observe the discoloration of the saliva produced by the drug. We may also study a little about the constituents of the drug and make mental note of its medicinal properties, and thus the meaning of the words demulcent and expectorant, mentioned under its properties, should be learned from the dictionary, as should any other unfamiliar word appearing in the text.

After having become thus casually acquainted with the drugs that are sold frequently and having formed a habit of studying daily we will be in a position to take up the subject of licorice again and study it more in extenso as the description appears in the Dispensatory. Here we learn more about the botanical appearance of the plant, the general properties of the drug and the distinction between the various varieties appearing under different trade names. We pay more attention to the microscopical structure of the drug, for by this time we are more familiar with vegetable histology. Then