writer to express his thoughts with propriety. This knowledge is attained by the pursuit of the first R-the art of reading. Study is but the impressment of what is read upon the memory of the understanding. In intelligent reading the mind is expanded by the impulses which are continuous in the impression of new thoughts upon the memory. The power of thinking is thereby improved and increased. In the mere impression of words upon the memory, which is done by continuous repetition, mechanically performed, there is but little opportunity for the play of original thought or for the mind's expansion. The reading necessary for intelligent study is that which apprehends thought in the use of words, and impresses both thought and language on the memory. In the intellectual habit, implied in this pursuit, the knowledge of Grammar and Geography and other school sciences may be acquired. The knowledge of words, with the ability to use them, thus becomes education. In such knowledge of words there is the power of thought, and in such use of the knowledge of words and its increase, is the process of education ever progressive.

The Third R-Arithmetic, Numbers.-The knowledge acquired in the use of words, by intelligent reading, expands itself over the science of mathematics in its lower and higher departments, as it does over all the sciences, whether of the schools or of the higher pursuits of intelligent practical life. The process of calculation requires practice. This practice is assisted by mechanical agencies. The term assisted, here used, perhaps needs explanation. The study of Mathematics is quite as mental as any of the school sciences. Some mathematicians believe it to be more so. This may appear in the fact that the slate is ordinarily necessary for its development. It is by the slate practice that the mental powers in their operations of thought are assisted. All that is done by the use of the slate could be accomplished by severe study without it. This would be the case ordinarily were the mind thoroughly trained in the severe use of its thinking powers, as required in the mental study of Mathematics.

The most beautiful and attractive solutions of questions in the higher Mathematics are those which are performed by the blind in the working of their thoughts, and without the aid of the mechanical agencies which have been invented for their use. The blind teacher gives out his original question in Algebra or Mensuration or higher study, which he reads from his mind with great distinctness and accuracy. The ear of the pupil, accustomed to the attention necessary for the mind's apprehension of the subject of its study, is keen in its perception of the sounds by which the words of the problem are expressed. The perception, as keenly active as the ear, apprehends the ideas intended to be delivered, and the memory, well practiced in the retention of the thoughts conveyed by the sounds, holds them in its grasp until the mind has worked them through to the result. After the result is reached and named, the pupil reads his work as it was given him by his teacher, from his mind, with the nicest accuracy, elucidating the principles upon which his mind has operated and the involutions and evolutions by which the result was reached. Ordinarily the learner is assisted in his work by the use of the slate. By making his way in the use of written figures, the memory is relieved from the severe mental operation of holding intermediate results until the mind works them to the final issue. The mental study is that by which the road to the final issue is pursued until that issue is reached. The labor of the memory is that of holding the finger boards by which the various turns and crossings of the road are marked.

In this consideration appears the value of words, and of their employment in reading as a prominent feature in the study of the sciences. In the study of Mathematics and kindred subjects, the mental process is the principal, and the slate practice the assistant. The habits of schools generally have been such as have obscured the mental pursuit by the slate practice. They have substituted the mechanical for the mental by employing the assistant to do too much of the work of the principal. The proper medium is that which should be sought in the employment of the memory as an