

took place wholly different from what they had expected, they could decide on the spur of the moment what should be done and thus meet the emergency just as well as if it had been embraced in their original plans. This often changed defeat into victory. We all know that the very presence of Sheridan at Cedar Creek, Sherman at Atlanta, and Grant at Richmond did far more to insure success to our arms at those critical periods than all the treatises on military tactics that have ever been written. This is a talent that every true teacher possesses in some measure. He may use with success certain methods for years, but if he is then thrown in contact with a different class of students, he will change his tactics to meet the case. Teachers often fail from the lack of this talent.

Emerson says in his essay on Character that the biographies of such men as Mirabeau, Philip Sidney, Walter Raleigh and Washington, do not justify our estimate of their genius; that the men were greater than their deeds. He then adds: "The largest

part of their power was latent. This is what we call character—a reserve force which acts directly by presence and without means." What is true of those great men in their spheres, is also true of the great teacher in his sphere. You may read all about the internal workings of the Rugby school for the purpose of getting light on the subject of teaching, and you will be compelled to admit that Dr. Arnold was far greater than all his methods and plans; yes, greater than all the encyclopædias and journals of education that the age has produced. The great power that such men as Socrates and Plato exercised over their followers cannot be accounted for on the ground of the principles that they promulgated alone. Those disciples were so fortunate as to come under the personal power of those giant intellects, and they thus received their inspiration from them. Happy indeed is the student who can sit at the feet of an earnest, wide-awake, enthusiastic teacher and feel the touch of his personal magnetism.—*Ohio Educational Monthly.*

MATHEMATICS AS A PART OF A COURSE OF LIBERAL CULTURE.

BY JOSEPH J. HARDY.

BUT far more valuable than this useful information is the mental discipline and power which the Mathematics gives. We are not among those who claim that the Mathematics is the greatest of all means of mental training, but we do believe that it trains the mind to certain habits, and gives it a certain power better than any other means, and that there is a kind of training given by it which can be got from the study of no other science.

In the recitations of a class in Algebra we may recognize two distinct

kinds of work at least. One is done when the pupil is demonstrating theorems or rules, the other when he is solving the abstract examples given for practice. The first kind of work is largely deductive reasoning; the latter appears to be quite mechanical in its nature. In a recitation of a demonstration properly conducted, the student is required to state the theorem to be proved, often the plan to be pursued in proving it, give the arguments which make up the demonstration in their proper logical order, and draw his conclusion, all to