

communion with God—the pleasure of a human being as such is in the exercise of his mind, and that the more mind is mind, the more is joy the condition of its existence. And not only is pleasure thus the invariable attendant on mental exertion, but some of the highest and most exquisite enjoyments are amongst its most frequent rewards. Let me refer you to three facts illustrative of my meaning. Can you doubt the ecstatic state of Archimedes when he jumped from the bath and ran home, oblivious of his nudity, crying Eureka? Or is it to be doubted that Franklin felt something of the same kind when he identified lightning with electricity, and when his friends had to force him away from his experiment lest the fluid should strike its devotee to the ground? And must we not say that Kepler was thrilled with joy and with awe, when, establishing the truth of his conceptions his celebrated laws, by rigid mathematical demonstration, he exclaimed, ‘O God, I think thy thoughts after thee!’

Some young men, especially if they possess a little more than ordinary ability, take up the notion that minds of genius—as it is called—have no need to work as ordinary men have; and, carried away by this notion, they do not work, lest forsooth their friends should give them no credit for genius. But a greater mistake was never made than to think that any mind can grow, or become great, or possess the use of its powers, without work. For while the fact is undoubted that some minds have greater native vigour than others, and while it is also undoubted that some are superior to others, not because of any inherent difference of mind, but because of the difference in the weight, that is the quantity, or in the quality of their brain, or both; it is still more undoubted, by all whose opinions on the subject are worth anything, that no mind, however great its power, or however high the eminence it attained, ever reached this eminence at a bound, or ever possessed the use of its powers without arduous labour. No doubt there have been cases in which men have suddenly burst upon the world, in a blaze of brilliant dazzling light; but though sudden to the world, the secret history of such men has invariably disclosed the fact that the fire had been long kindling, and the combustibles long in gathering. Do not then, ye young men, fritter away the morning of your life, or waste your opportunities, from supposing that you can ever attain anything worth possessing without habits of study, or these without arduous and incessant work.

We shall get a clearer conception of our subject if we set forth to our minds the design of study, that is, what are the ends it should attain. So far as we have got the conception that it is work, we have made an advance; still the notion is but vague. For there is much work that cannot be distinguished as study because worthless, and there are workers who are nevertheless but laborious triflers. The primitive meaning of study is to pursue, and as to pursue implies an object of pursuit, the very term involves that to study is to set before the mind some object and steadily pursue it. If, again, we look at the conventional or current use we shall find that it embodies this primary fact. To study, in common parlance, is to apply the mind to some subject till it is mastered. It is to examine and con in order to learn, and it is also to convince ourselves by investigation and thought of the truth or falsehood of any subject to which we apply ourselves. But if we were to rest here we should still have but obscure notions of our subject. Let us then more minutely examine it, so as to be able to answer what we mean by study, and what is the character of a student. Now this, it strikes one, will appear from considering its four-fold design.

The lowest aim of study is by the application of attention and memory to furnish the mind with knowledge, and with the materials of a higher culture. By attention is meant the withdrawing of the mind from other things to the one thing it is intended to learn. In learning this thing, whatever it may be, there will be employed various faculties of the mind, or, if it please you better, the mind will engage in several distinct operations. Now, attention is simply the condition of the faculty at the moment of its exercise. In other words, it is to say that the faculty is doing its

work at the moment. The next moment some other faculty may be required, and if it is forthcoming at the right moment in its right order, then we say that it too is in the state of attention, and if this goes on consecutively and completely to the end, then we say that the mind has been in the state of attention. When a subject has been thus acquired, it is the office of the memory to retain it, and to have it forthcoming whenever required. Now, in such an act of study as this, the test that we apply to its value is the amount of knowledge that has been acquired. It is true that such a continuance of effort secures to the mind itself a certain advantage, but it is not this advantage that is the aim, but the possession of knowledge. And this we regard as the lowest result of study.

A higher design, with a corresponding result, of true study, is the discipline of the mind itself. Such discipline when complete includes three things.

The first mark of a disciplined mind is the mastery it has of its several powers. These powers are entirely under the control of the will, and they can be bent at any time to any work, and for any length of time, as far as physical conditions will admit. They are also so under control that a subject of thought can be taken up and pursued day by day, for months together, each day commencing at the point of suspension of the preceding day. The second mark of a disciplined mind is the condition of the faculties themselves. Each has been rendered more acute, each has been endued with greater vigour. There has been nothing one-sided in its development, but the mind can not only control its operations, but can strenuously exert its several powers. The third mark of a disciplined mind is its power of original thinking. The mind generally is occupied with the labours of other minds, a very valuable thing truly, but that mind gives up its birthright that yields itself solely to this, and does not itself exercise an originating or creative power.

Now this design of study is more important both in its nature and results than the former. Not that you can accomplish it without the former, nor can you secure the former without, to some extent, securing the latter. Still, of two students, the one who measures his progress by ascertainable results, that is, by the knowledge he possesses, is not such a student, and has not as valuable an estate as he who measures it by what he can do. Two persons may go through the same amount of muscular exertion in a day, one in breaking stones, and the other in well-directed gymnastics. But they are not in the same state at the end of the day. 'Tis true, the one can point to a heap of stones, though that is not all the result, only that which is measurable, and the other cannot. But can any one doubt that for the purpose of life, activity, vigour, and command of his limbs, the latter is the better of the two?

Another design of study is to give a right tone and direction to the ordinary current of thought and feeling, and to make the mind the master and not the servant of the brain. This design is really involved in the other two, but it requires a distinct notice because of its importance. At Greenwich Observatory there is a table on which is placed some prepared paper, and this paper is under the point of an instrument, which by its ever-varying motion, records the direction and force of the magnetic current of the earth for every instant of time. Now, suppose that a similar process could be applied to mind. Suppose that an infallible transcript could be made of the varying currents of idea and sentiment and thought and feeling which ordinarily occupy a mind not under the control of a vigorous will, nor endued with habits of study. What a poor, paltry, meagre, contemptible condition it would depict! Or, to change the illustration, suppose that by some mode of mental photography every successive phase of the mind could be pictured, what poor shrivelled pigmies would most men be found! ‘Doth any man doubt,’ says the father of modern science, ‘that if there were taken out of men’s minds vain opinions, flattering hopes, false valuations, imaginations as one would, and the like, but it would leave the minds of a number of men poor shrunken things?’