

is well known how these tendencies may be kept in check, altered in their course, or almost extinguished by judicious moral and religious education, and various external influences, social or otherwise. There is nothing irrational in supposing that these tendencies are dependent upon various physical conditions of nerve-cells and fibres, peculiar to feeling, thought and volition, and that they are probably influenced to some extent by the state of muscles, glands, and viscera. In any case, it does not appear unphilosophical to make a division of cells, fibres, and other tissues concerned, into three groups, corresponding to the three-fold constitution of the mind: (1) affective; (2) ideational; (3) volitional. From our knowledge of other parts of the body, we should expect, by a constant and judicious exercise of the parts involved in each group, increase of cells and fibres in number or size, or both; probably some alteration of chemical composition; and, lastly, more decided and efficient action. Feeling would be intensified, thought refined and elevated, and volition strengthened. Conversely, we should argue that, if the cells and fibres in any one group were allowed to remain in a state of inactivity or sluggish action unduly prolonged, it must be followed by obtuse feelings, intellectual degradation, and an enfeebled, vacillating will; and this appears to be strictly in accordance with our experience.

Use or exercise then begets growth, development, and power. Disuse, or the want of exercise, wasting, degeneration, weakness, and in many instances, extinction. To quote a few examples:—

1. Regular physical exercise short of over-fatigue promotes growth, elasticity of muscular fibre, facility of movement, whilst an undue prolongation of inactivity ends in atrophy.

2. In double organs destruction or inefficiency of one throws more work on the other, and as a consequence enlargement ensues.

3. The loss of one sense increases the acuteness of the remaining ones, because they are exercised more frequently and with greater attention and accuracy; and, further, we know that each of the special senses may become educated and developed by exercise to an extent which is almost marvellous. Is there the same physical condition in the educated and uneducated sense? I think not.

4. The complicated movements of the acrobat are executed with the greatest difficulty at first, even when commenced, as they usually are, during childhood. By degrees, after tremendous repetition, they become more elegant and perfect, and at last almost automatic. And so with the accomplished pianist and violinist, who certainly can execute many airs with scarcely any mental effort. The first few notes serve to recall the association of sound, touch, and succession of movements, and the remainder of the piece is completed automatically.

5. Some authorities contend that memory implies growth of new cells and fibres, and possibly further development of old ones. At any rate memory is vastly improved by exercise, and almost lost if not properly cared for and used.