exertion of the will, unaided by the energy of motion from without. This very feebleness of the mental image, when compared with the vividness of the actual perception, enables us to make the necessary distinction between actual existence external to ourselves, and mere reproduction of a representation. By very close and absorbing attention to any one single object, and by long practice in calling up the mental image of that object, we may succeed in causing the group of brain molecules, representing in its vibratory period the object, to swing in amplitudes comparable in intensity with those excited from without in the act of perception. When this occurs, we are unable to distinguish the mental image formed from what would be perceived were the object bodily present. In this case we would confuse the product of our will with the impression made from without. We would actually see what has no existence outside of us. We would be in a state of hallucination.

To remember an object, then, is to set into vibration, by exertion of the will, the group of brain molecules representing the object in its vibratory period. Gradually as our perceptions multiply, the brain becomes more and more differentiated into molecular groups, the representatives of the objects seen and dwelt upon. From these groups nerve tracks ramify throughout the substance of the brain, to be finally collected at the base of the brain into that broad band of fibres which unites the two hemispheres of the cerebrum.

If now I have seen a pine tree and an oak, and can readily call up the mental image of each, it is easy to see how I may strip the image of the pine of its leaves by simply quenching the vibrations of the groups of brain molecules representing them. I further substitute the leaves of an oak by exciting to vibration the molecular groups corresponding to them. This requires an exertion of the will which is spent in causing the vibrations. The most complicated mental image may thus be built up like mosaic from the parts furnished by the memory.

That such impulse can be sent along a nerve track and produce motion at the end should not surprise us any more