

between the repetitions of its activity, as every one must know who is in the habit of playing on a musical instrument, or performing any other actions entailing the acquirement of dexterity. It may also be observed that when such is the case the particular activity forgotten by the ganglion may be more easily re-acquired than originally it was acquired, which is just what we find to be the case with mental attainments.

As particular illustrations of these facts I may state two or three cases, which will also serve to show of how little importance (on the objective side) is the occurrence of consciousness to the memory of a ganglion.

Robert Houdin early in life practised the art of juggling with balls in the air, and after a month's practice was able to keep four balls in the air at once. His neuro-muscular machinery was now so well trained, or remembered so well how to perform the series of actions required, that he could afford to withdraw his attention from the performance to the extent of reading a book without hesitation while keeping up the four balls. Thirty years afterwards, on trying the same experiment, having scarcely once handled the balls between times, he found that he could still read with ease while keeping up *three* balls; the ganglia concerned had partly forgotten their work, but on the whole remembered it wonderfully well. Again, Lewes gives the case of a waiter asleep at a coffee-house, with much noise of talking around him, who was instantly aroused by a low cry of "Waiter;" and Dr. Abercrombie gives the case of a man who had long been in the habit of taking down a repeater watch from the head of his bed to make it strike the last hour, and who was observed to do this when otherwise apparently unconscious from a fit of apoplexy. But perhaps the most remarkable of all the cases that can be adduced are the most familiar ones of walking and speaking. When we remember the immense amount of neuro-muscular co-ordination that is required for either of these actions, and the laborious steps by which each of them is first acquired in early childhood, it is indeed astonishing that in after life they come to be performed without thought of their performance; the ganglia concerned have fully *learned* their work.

So much for memory. But memory would be a useless faculty of mind if it did not lay the basis for another, and really the most important principle of subjectivity; I mean