the equation (here p represents the perception of the first stroke, which carried no volition with it):

$$(2) \qquad R' = S + p + P + M.$$

Now, repeating the experiment with only one stroke, we have as before:

$$(1) \quad R = S + P + M.$$

Subtracting (1) from (2), we have:

$$R' - R = p,$$

Here R′ and R are readings from the clock. This gives a numerical determination for p. The volition time will then be $P - p$.

From this latter experiment a curious result follows if the successive excitations are of very different intensities. If the more intense follows in fact it is, nevertheless, heard first, and the less intense, really first, follows after; or they may appear to be simultaneous though really successive. This is the case in general whenever the attention is strongly drawn to the second stimulus and follows from the principle already spoken of, that the attention, when concentrated, diminishes the reaction time. This will be the case in general whenever the diminution in the reaction time of the second exceeds the real interval between the two. The same phenomenon is experienced often when one is awakened by a loud noise. He hears the noise after he awakes though it was the noise that awaked him. It simply means that because of the dormancy or preoccupation of attention in dreamland, the reaction time of the sound is lengthened into his waking consciousness, while the shock to the nervous apparatus was sufficient to rouse him from sleep. This reversal of the terms of a succession by the attention has important bearings upon the association theory of causation, which will doubtless occur to the reader. It shews also the dependence of the order of associated states in memory upon the movements of attention in the first experience rather than upon the order of external events. The fact is also important in astronomical observation; a new excitation to the eye, such as the appearance of