

body : and what can this be but a consciousness of the degree of action, and of the adjustment of the muscles ? At one time, I entertained a doubt whether this proceeded from a knowledge of the condition of the muscles or from a consciousness of the degree of effort which was directed to them in volition. It was with a view to elucidate this, that I made the observations which terminated in the discovery that every muscle had two nerves—one for sensation, and one to convey the mandate of the will and direct its action. I had reasoned in this manner—we awake with a knowledge of the position of our limbs : this cannot be from a recollection of the action which placed them where they are ; it must, therefore, be a consciousness of their present condition. When a person in these circumstances moves, he has a determined object ; and he must be conscious of a previous condition before he can desire a change or direct a movement.

After a limb has been removed by the surgeon, the person still feels pain, and heat, and cold in it. Urging a patient to move who has lost his limb, I have seen him catch at the limb to guard it, forgetful that it was removed ; and long after his loss, he experiences a sensation not only as if the limb remained, but as if it were placed or hanging in a particular position or posture. I have asked a patient—"Where do