

this so-called motor area into squares two millimetres in length, and they excited each square of the cortical surface with a very weak faradic current—in fact, the weakest stimulus that would produce any movement at all. He would illustrate the general result of the observation, and would take for that purpose the representation of the movement of the thumb. The representation of the thumb is focussed in front of the lower end of the intracranial sulcus, and it extends over a great deal of the upper limb area. This representation gradually diminishes in intensity of representation as we pass from the focus upward. The shoulder and the thumb form the two most important parts of the upper limb. The shoulder is represented in exactly the opposite part of the upper limb area to that of the thumb, and it conversely diminishes in intensity downward. The question of the limitation of the whole area of representation of any given segment is most important. Dr. Ferrier has always held that these areas are limited by hard and fast lines, and no one area trenches upon another. Unfortunately, he could not follow his honored teacher in this belief. He was perfectly sure these were what may be called border centres, and in one portion of the brain Dr. Ferrier himself drew attention to the fact that in one spot we have representation of the two limbs. The representation of the face at its upper border merges into the representation of the upper limb. So if they have a focal lesion at that spot there are two “signal” symptoms. For diagnostic purposes it is absolutely necessary for us to be aware of the relation of one focus to another. He would now turn to the question of the representation of the character of movement. Dr. Ferrier, in his monograph published in 1874, pointed out that in certain parts of the so-called motor region there were certain movements represented. Dr. Beevor and himself carried this further, and could trace gradation of representation of different movements. He would give two examples. At the upper part of the upper limb region extension of the elbow is represented, whereas in the lower part of the same region flexion is represented, and between the two there is confusion. This practically holds true of the various segments of the body. He would give one more example, which gives