

lately proved very successfully to be the case. Breuer stimulated the ampullæ of the various canals by the galvano-cautery and electricity. He found that on stimulating the utricular end of the ampulla there was a movement of the head in the plane of the canal so stimulated and to the same side as that to which the canal appertained; while if the canal end of the ampulla were stimulated, the movement was in the plane of the canal, but to the opposite side.

However, there is little doubt but that the ampulla and canals have something to do with sound perception, and that likely in the way of perception of the source of a sound. I will dilate on this theory later on.

It is well at the outset to bear in mind that hearing is a mental act. Every auditory sensation is an affection of the mind, recognized as connected with an extra mental reality through the activity of the auditory nerve.

All mental sensations arising from stimulation of the auditory nerve are called sensations of sound. We know nothing directly through sensations either of the structure of the ear or of vibrating strings, or particles of air or of the physics of music.

That there is a certain sense of space or localization attendant on all sense perceptions there can be no doubt, but it is still a question what determines this power of localization. It is undoubtedly a matter of memory, experience and education.

Preyer of Jena, in 1884, made a series of very interesting investigations on infants and very young animals, in order to determine, if possible, the nature and development of this space sense. As a result, he found that at a very early stage of psychical development, animals and children regard the various parts of their body as entirely distinct from themselves. The chick plucks at its own nails, just as it would at the corn thrown out to feed it. The child tried to tear off its finger or divide its foot from its leg. Only later on do they begin to grasp the idea that limbs, etc., appertain to themselves and are distinct from the surrounding world, and then begin to locate each sensory impression correctly in a certain spot or direction.

It would be quite impossible, after this, to have any conscious