

or injury, may derange this delicate machinery, and disturb the outward manifestations of the mind as revealed in thought, speech, and action, or, in other words, in the conduct of the individual.

The child is born without knowledge but with a power to acquire knowledge. This power, day by day, is evolved under the influences of the many experiences that act and re-act upon the child. Heat and cold, hunger and thirst, pleasure and pain, light and darkness, are steadily acting as teachers. When the child is born it does not know one voice from another. But the ears are there and nerves running from them to a brain centre. The impulses of the mother's voice strike upon these ears, travel along the auditory nerves to that centre in the brain, and there become, in time, imprinted in such a manner that the child recognizes that voice. Thus, in due course of time, the child comes to have a recollection of the mother's voice. When the mother speaks, the child not only hears the voice, but remembers that it is the same voice that has spoken so often before. Here we have a memory of the mother's voice.

In time the child comes to have a memory of the mother's face. At first the child does not know the mother's face from any other face; but the image of this face is conveyed by the eye and the optic nerve to the brain. This process is repeated over and over until the child remembers the face as it did the voice. Here, then, we have a memory picture of the face, which can be recalled even when not seen.

In like manner, through the organs of taste and smell, new sensations are constantly carried to the brain, and stored away as memories of these tastes and smells. So that when the same taste or smell is repeated, it is at once identified as one already known. Thus, in time, an object can be recognized by its taste or smell. But the brain centres for taste and smell are not the same as for hearing or seeing.

It will be seen, at a glance, how crude the old phrenology was, which located memory in one part of the brain, as a faculty or power, instead of in many parts of the brain, as the receptive centres for incoming impressions, through the channels of the nerves connecting the various organs and parts of the body with these centres.

It will thus be seen that the location of brain function, as held by the older teachers, such as Goll, was wholly wrong. Their classification, to begin with, had no foundation in fact. A man may be as conceited as it is possible to imagine, yet there is no part of the brain in which such a peculiarity of disposition can be located. One may have great reverence for law and order, and yet it is quite impossible to put your finger on the head and say: "Here is the spot," or, further, say, "It is well developed, because the skull is prominent at that part." Every anatomist knows that elevations or prominences on the skull do not signify corresponding prominences of the brain matter. The activity of the brain centres, and the number or formation of the convolutions on the surface of the brain, cannot be surmised from any simple, crude, or free and easy method, such as laid down by the exponents of phrenology. The sense of hearing might be extremely well-developed, and no indication yielded by the surface of the skull that would enable one to predict the same. A man may be very fond of a good meal, but unless he chooses to give this information, no phrenologist can feel his head and say, that because there happens to be a certain elevation on the skull, such is the case. Take, for example, another person, equally fond of a good meal, and no such elevation may be found; or, in other words, the elevations on his skull may be situated quite differently from those on the skull of the first person. Take any two men equally fond of their homes and families, and after subjecting their heads to the most rigid examination