

established between the parts on both sides. For this purpose there is provided a set of medullary fibres, passing directly across from one side of the brain to the other; these constitute what are called the *Commissures* of the brain.\*

The question, however, still recurs:—What relation does all this artificial intertexture and accumulation of fibres bear to the mental operations of which we are conscious, such as memory, abstraction, thought, judgment, imagination, volition? Are there localities set apart for our different ideas in the storehouse of the cerebral hemispheres, and are they associated by the material channels of communicating fibres? Are the mental phenomena the effects, as was formerly supposed, of a subtle fluid, or *animal spirits*, circulating with great velocity along invisible canals in the nervous substance? or shall we, with Hartley, suppose them to be the results of *vibrations* and *vibratiuncles*, agitating in succession the finer threads of which this mystic web has been constructed? A little reflection will suffice to convince us that these, and all other mechanical hypotheses, which the most fanciful imagination can devise, make not the smallest approach to a solution of the difficulty; for they, in fact, do not touch the real subject to be explained, namely, how the affections of a material substance can influence and be influenced by an immaterial agent. All that we have been able to accomplish has been to trace the impressions from the organ of sense along the communicating nerve to the sensorium: beyond this the clew is lost, and we can follow the process no farther.

\* The principal commissure of the human brain, called the *corpus callosum*, is seen at a, Fig. 461. Dr. Macartney, in a paper which he read at the late meeting at Cambridge of the British Association for the Advancement of Science, described the structure of the human brain, as discovered by his peculiar mode of dissection, to be much more complicated than is generally supposed. He observed that its fibres are interlaced in the most intricate manner, resembling the plexuses met with among the nerves, and establishing the most extensive and general communications between every part of the cerebral mass.