

capsules, although he does not mention their site. He merely observes that the phenomenon is interesting as being one which is frequently observed in regard to a neighboring organ, the spleen. "Une anomalie primitive très générale consiste dans leur petitesse extrême ou même leur absence totale, qui accompagne le développement incomplet de l'encéphale et de la moitié supérieure du corps en général. On ne connaît que deux ou trois cas de cette espèce dans lesquels les capsules surrénales aient été trouvées, offrant le volume qu'elles ont ordinairement." The capsule is composed of an external or *cortical*, and an internal or *medullary* portion. The *cortical* structure forms the greater portion of the substance of the organ, is firm and striated, and of a deep yellow colour; the *medullary* is soft, pulpy, and brownish-black in hue. From the dark colour of their interior, and from a supposition that they were the organs which secreted the *atrabilis*, Caspar Bartholinus, and the older anatomists, named them the atrabiliary capsules. According to Simon, the *cortical* portion consists of closed tubes, having no communication with each other, arranged in columnar masses perpendicularly to the surface of the capsule. They are surrounded by a plexus of blood vessels supported by fine processes sent inwards from an outer fibrous investment of the organ. Their interior is lined by a delicate liminary membrane, and in this opinion he is supported by Ecker and Frey, and Hassall. The tubes are filled with a granular plasma, nucleated cells and oil globules. Mr. Gulliver has found that the *granules* form the principal mass of the gland. Their size varies from 1-6000th to 1-24000th part of an inch in diameter. The *nucleated corpuscles*, according to the same observer, are few in number in the human subject, although they are numerous in the ruminantia. Kolliker describes the *cortical* portion as being composed of a fibrous stroma of connective tissue, so arranged as to leave oval spaces, which are filled with a granular plasma, oil particles, and nucleated cells. He denies that these spaces are lined with a proper liminary membrane, thus differing from Simon, Ecker and Hassall. The *medullary* portion consists of a stroma of connective tissue derived from the cortical substance. It contains numerous blood vessels, a plexus of minute veins, according to some anatomists, and a large supply of nerves derived from the sympathetic system. The tissue is arranged in laminae, and the interspaces are filled by a granular plasma, in which are nucleated cells in different stages of development. "The recent observations of Kolliker upon the nature of these cells," says Dr. Carpenter, "which are confirmed by the researches of Leydig upon the corresponding organs in the amphibia, seem to indicate that they are really *ganglionic* in their character."