thalami. In *Phoca vitulina* the pineal body also projected behind the corpus callosum, and resembled in shape and in its relations to corpora quadrigemina, cerebrum, and cerebellum the epiphysis cerebri in the Elephant Seal. It was 16 mm. long, 8 mm. in greatest breadth, and 6 mm. in greatest vertical diameter.[1] The length of the cerebrum in this specimen was 78 mm. (3 inches). Dr. James Murie is, I think, the only anatomist who has systematically described the brain of an Eared Seal, and he states that in *Otaria jubata* the pineal body is "relatively large," but he does not give its actual dimensions, though, if I may judge of its size as represented in his fig. 44, it does not seem to have been more than about 8 mm. long. It would appear, therefore, that in the Seals this body is undoubtedly larger than in Mammals generally, though, as will be shown later on, it is when largest in them only about one-half as big as in the Walrus, and does not project so far back as to be visible between the two hemispheres of the cerebrum.

Cerebellum.—This was of large size, and consisted of a middle and of two lateral lobes. On the tentorial aspect of the cerebellum the middle lobe was greatly elevated above the lateral lobes, and from its summit the surface sloped rapidly downwards and outwards to the sides of the organ. At the superior border of the cerebellum, which corresponded to the ossified tentorium, there was a slight notch opposite the termination of the middle lobe. On the ventral surface the middle lobe formed the roof of the 4th ventricle and was situated in a fossa between the two lateral lobes. The middle lobe was separated in the greater part of its extent from the lateral lobes or hemispheres by a deep fissure on each side. Each lateral lobe, much thicker when in apposition with the middle lobe than at the borders of the hemisphere, was separated into a tentorial and an occipital surface by a deep fissure, which corresponded to the great horizontal fissure of the human cerebellum, but owing to the different plane occupied by the cerebellum in the Elephant Seal, it may more appropriately be called the *vertical transverse fissure.* The surface of both the middle and lateral lobes was subdivided into numerous folia, but as this surface was much broken up by fissures possessing considerable depth, and often tortuous in direction, the folia were short, and did not have the broad plate-like character one sees in the human cerebellum. These fissures were especially marked on the occipital surface of the hemispheres, on which they ran from within outwards, but were not quite symmetrical on the two sides.

Pons Varolii.—The pons had the usual form. Its mesial line on the ventral surface was marked by a shallow groove for the basilar artery, and this surface consisted of the superficial transverse fibres. It gave origin at the posterior part of its lateral and ventral aspect to the two roots of the 5th nerve, the motor root being immediately internal to the sensory. The sensory root was much thicker than the motor, and its fasciculi were

[1] That the pineal gland in *Phoca* is larger than is usual in the Mammalia was recognised by Ehlers, *Zeitschr. f. wiss. Zool.*, Bd. xxx. p. 628, Supplement, 1878.