

as well as the relative size of its several parts, vary much in the different classes and families of vertebrated animals. This will appear from the inspection of the figures I have given of this organ in various species, selected as specimens from each class, viewed from above; and in all of which I have indicated corresponding parts by the same letters of reference.

The portion (m) of the brain, which appears as the immediate continuation of the spinal marrow (s,) is termed the *medulla oblongata*. The single tubercle (c,) arising from the expansion of the posterior columns of the spinal marrow, is termed the cerebellum, or little brain. Next follow the pair (r) which are termed the optic tubercles, or lobes,* and appear to be productions from the middle columns of the spinal marrow. These are succeeded by another pair of tubercles (h,) which are called the *cerebral hemispheres*, and the origin of which may be traced to the anterior columns of the spinal marrow. There is also generally found, in front of the hemispheres, another pair of tubercles (o,) which being connected with the nerves of smelling, have been called the *olfactory lobes* or *tubercles*.† These are the principal parts of the cerebral mass to be here noticed, for I purposely omit the mention of the minuter divisions, which, though they have been objects of much attention to anatomists, unfortunately furnish no assistance in understanding the physiology of this complicated and wonderful organ.

On comparing the relative proportions of the brain and of the spinal marrow in the four classes of vertebrated animals, a progressive increase in the size of the former will be observed as we ascend from Fishes to Reptiles, Birds, and Mammalia. This increase in the magnitude of the brain arises chiefly from the enlargement of the cerebral hemispheres (h,) which, in the inferior orders of fishes, as in the

* In the Mammalia, and in Man, they have been often designated by the very inappropriate name of *Corpora quadrigemina*.

† Several cavities, termed *Ventricles*, are occasionally found in the interior of the principal tubercles of the brain; but their use is unknown.