

THE RIDDLE OF THE UNIVERSE

hemispheres. That is a most important point in view of the genealogy of our race; for man bears all the marks of a *true catarrhina*; he has descended from some extinct member of this sub-order in the Old World.

The numerous types of *catarrhinae* which still survive in Asia and Africa have been formed into two sections for some time—the tailed, doglike apes (the *cynopithec*i) and the tailless, manlike apes (the *anthropomorpha*). The latter are much nearer to man than the former, not only in the absence of a tail and in the general build of the body (especially of the head), but also on account of certain features which are unimportant in themselves but very significant in their constancy. The sacrum of the anthropoid ape, like that of man, is made up of the fusion of five vertebræ; that of the *cynopithec*us consists of three (more rarely four) sacral vertebræ. The premolar teeth of the *cynopithec*i are greater in length than breadth; those of the *anthropomorpha* are broader than they are long; and the first molar has four protuberances in the former, five in the latter. Furthermore, the outer incisor of the lower jaw is broader than the inner one in the manlike apes and man; in the doglike ape it is the smaller. Finally, there is a special significance in the fact, established by Selenka in 1890, that the anthropoid apes share with man the peculiar structure of the discoid *placenta*, the *decidua reflexa*, and the pedicle of the allantois. In fact, even a superficial comparison of the bodily structure of the *anthropomorpha* which still survive makes it clear that both the Asiatic (the orang-outang and the gibbous ape) and the African (the gorilla and chimpanzee) representatives of this group are nearer to man in build than any of the *cynopithec*i. Under the latter group we include the dog-faced *papiomorpha*, the baboon, and