

man from the stolid, and the civilised man from the savage. A careful study of the subject, however, shows some remarkable deviations from such a scale of progression. In this Mr. Darwin would recognize an analogy to greatly more ample proofs of inequality between the organic source of power and the manifestations of mental energy; as, for example, in the ant, with its cerebral ganglia not so large as the quarter of a small pin's head, displaying instincts and apparent affections of wonderful intensity and compass. Viewed in this aspect, "the brain of an ant is one of the most marvellous atoms of matter in the world, perhaps more marvellous than the brain of man." Here, however, we look on elements of contrast rather than analogy; and seek in vain in this direction for any appreciable test of the soundness of the popular belief in the size of the brain as a measure of intellectual power. It is otherwise when we turn to the anthropomorpha. There, alike in the scientific and in the popular creed, very special and exceptional affinities to man are admitted; and the more careful study of their anatomical structure tends to increase the recognized points of analogy.

Mr. Lockhart Clarke, in a contribution to Dr. Maudsley's work on the Physiology and Pathology of Mind, gives a minute description of the concentric layers of nervous substance which combine to form the convolutions of the human brain, and of the forms and disposition of the various nerve-cells of which its vesicular structure consists. Comparing the human brain with those of other animals, he says: "Between the cells of the convolutions in man and those of the ape tribe I could not perceive any difference whatever; but they certainly differ in some respects from those of the larger mammalia—from those, for instance, of the ox, sheep, or cat."* Apart from the difference in volume (55 to 115 cub. in.), the only distinctive features, according to Professor Huxley, between the brain of the anthropomorpha and that of man, are "the filling up of the occipito-temporal fissure; the greater complexity and less symmetry of the other sulci and gyri; the less excavation of the orbital face of the frontal lobe; and the larger size of the cerebral hemispheres, as compared with the cerebellum and the cerebral nerves."

The brain of the orang is the one which seems most nearly to approximate to that of man. In volume it is about twenty-six or twenty-seven cubic inches; or about half the minimum size of a

* "Insanity and its Treatment," by G. F. Blandford, M.D., p. 10.