

Correspondence.

"Audi alteram partem."

MAN'S EVOLUTION FROM THE ANTHROPOID.

To the Editor of THE LANCET.

SIR,—I feel I must be only one among many of your readers who have found of exceptional interest Prof. L. Bolk's lecture on the Part Played by the Endocrine Glands in the Evolution of Man, which appears in your current issue. That the structural changes attendant upon animal evolution are in large measure brought about through the instrumentality of the endocrine system none can doubt. This system, as the professor observes, controls both ontogenesis and phylogenesis. Many human characteristics, such as orthognathy and hairlessness, he attributes to a suppression, brought about by the endocrine system, of anthropoid characters; and he further suggests that the retardation in the developmental rate of man, a condition essential to his high grade of evolution, may be due to the change in "the nature of his food, the frugivorous ancestor of man becoming omnivorous or carnivorous."

This latter surmise—as to the truth of which I am not prepared to offer an opinion—I find of peculiar interest, inasmuch as it accords with a view already put forward by me in this journal¹—namely, that man's evolution from the anthropoid was determined by the search for animal food—the abandonment of the forest for a hunting career. I argued that the evolution of *homo sapiens* depended upon the difference in point of difficulty between plucking a sessile fruit and catching an elusive prey. Herein lies the key to the situation. I may, perhaps, be permitted to quote from the second of the two papers referred to.

"It was the conditions entailed by a hunting career which brought about the evolution of the pre-human ape into man. For observe the peculiar situation—assuredly one of the most eventful and dramatic in the whole of man's evolution—when this creature took to hunting. Here was a being lacking the stereotyped equipment for slaughter, instructive and anatomical, of the carnivora, but gifted with an intelligence surpassing that of any other creature, and endowed with prehensile hands capable of giving effect to that intelligence. It was a situation in which intelligence counted in the life-struggle as it had never counted before, and it inevitably led to the evolution of a higher type. This agile, intelligent, hand-endowed precursor of man was compelled to rely upon his intelligence in hunting his prey—to live by his wits: for blind instinct he had to substitute strategy; for natural weapons, weapons made by hand. Once the pre-human ape started on his career of hunter, he began a struggle in which it was inevitable that a higher and ever higher grade of intelligence should continue to evolve by natural selection until sufficient mental capacity had been attained to render its possessor supreme in the chase."

It is obvious that something must have happened in the case of the pre-human anthropoid, alone of all the anthropoids, which greatly increased the survival-value of intelligence. That something was the adoption of a hunting career by a highly intelligent prehensile mammal lacking the special hunting equipment of the carnivora.

It is conceivable that the adoption of a highly animalised diet may have facilitated man's evolution from the anthropoid in the manner suggested by Prof. Bolk; but that the initiation and maintenance of that evolution were due to the conditions necessitated by the procuring of animal food rather than to the effect of animal food upon the organism may, I think, be regarded as certain.

I am, Sir, yours faithfully,

Wimpole-street, W., Sept. 11th, 1921. HARRY CAMPBELL.

¹ Man's Evolution, Past and Present, THE LANCET, 1913, i., 1260, 1333, 1408, 1473. The Biological Aspects of Warfare, THE LANCET, 1917, ii., 433, 469, 505.

THE SWIMMING-BATH AND CATARRHAL OTITIS.

To the Editor of THE LANCET.

SIR,—In the annotation upon the above in your issue of Sept. 3rd, you state that Dr. K. Amersbach seems to have been discouraged from making any bacteriological examination by the fact that investigations of the kind undertaken by ophthalmologists on swimming-bath conjunctivitis had been inconclusive; and in his letter of Sept. 10th Dr. Dan McKenzie also deals with ear infection, stating that every effort should be made to render and to keep swimming-bath water as clear as possible. I should like to remind you that in September, 1909, in two somewhat lengthy reports, and in my annual report for the year 1909, I pointed out to the Baths and Washhouses Committee of the Poplar Borough Council the horrible dangers of the public swimming-baths, inter alia mentioning how quickly swimming-bath water changes its pristine sweetness even after being used only by a few bathers, particularly so in warm weather, and becomes after use by a number of bathers nothing more nor less than diluted sewage, and this condition exists often before the first day's use is finished. The formation of slime in the bath water was also mentioned and commented upon at length.

As it is during the months of July, August, and September that swimming-baths are mostly used, it would be of considerable interest if bacteriologists would take into consideration the possible connexion with disease of polluted swimming-bath water, more especially the slime which forms and settles at the bottom of the baths and becomes stirred up by the swimmers, and to find out if such slime plays any part in disease. I am sorry I cannot oblige with any of the slime from the Poplar swimming-baths, as they are kept free of it by the addition of electrolytic fluid manufactured by the Poplar Borough Council and added in the proportion of one part of chlorine to two million parts of the bath water. In swimming-baths a vegetable growth also occurs on the sides, but since the treating of the water in the Poplar baths such growth is absent.

I would also call Dr. McKenzie's attention to the "Report on Purification of the Water of Swimming Baths" by a Committee of the Royal Sanitary Institute, November, 1912 (excerpt from Vol. XXXIV., No. 1, 1913, of the *Journal of the Royal Sanitary Institute*).—I am, Sir, yours faithfully,

FREDK. WM. ALEXANDER,
Medical Officer of Health.

Bow-road, E., Sept. 10th, 1921.

THE NATURAL HISTORY OF ENCEPHALITIS LETHARGICA.

To the Editor of THE LANCET.

SIR,—Dr. H. Willoughby Gardner, in the important and interesting letter published in your columns this week, shows that, concerning the cases now called "encephalitis lethargica," he has arrived at certain conclusions which he shares with not a few physicians who, like him, have practised as consultants in wide and somewhat thinly populated country districts, and who have been able therefore to adopt the epidemiological point of view, or, in his own words, *to observe the natural history of diseases*.

Briefly, Dr. Gardner finds that the cases now referred to the fluctuating and arbitrary concept denoted by the term "encephalitis lethargica" should be considered as the nervous manifestations of a disease which is (1) very widespread, (2) markedly infectious, and (3) "new in character," whilst otherwise indicated by (a) fever, (b) sore-throat, (c) gastro-intestinal, and (d) bronchial catarrh, together with (e) an inconstant erythema, (f) marked prostration, and (g) slow recovery.

It was on precisely similar clinical and epidemiological observations that Fernel, Benedetto and others, in the sixteenth century, based their famous doctrines