

assumed that the pale, spherical bodies, near the caudal end of the kidney, on its ventral or dorsal surface, were the homologues of the adrenal bodies in higher vertebrates (Swale Vincent, *Trans. Zool. Soc. Lond.*, 14, Part 3, 1897). The corpuscles of Stannius, as these bodies were named, appeared, in fact, to have roughly the structure of the inter-renal of the elasmobranch, and the cortex of the adrenal of higher vertebrates.

In 1908, E. Giacomini (*R. Acad. delle Scienze dell' Istituto di Bologna*, 24 maggio, 1908) put forward another claimant for the position of teleostean adrenal cortex, namely, groups of glandular-looking cells in the lymphoid head-kidney, and stretched out along the blood vessels in this region. Since that time it has been customary to refer to the anterior and posterior cortical adrenals in these fishes.

The work of Giacomini seemed to minimise the importance of extirpation experiments carried out upon the corpuscles of Stannius, in which experiments eels were found to live indefinitely after extirpation of these bodies (Swale Vincent, *Proc. Roy. Soc. Lond.*, 62, 1897).

We have recently had occasion to study the microscopic structure of the corpuscles of Stannius and the 'anterior adrenal bodies' of Giacomini. Using approved modern histological methods, we are satisfied that we have to deal not with two isolated portions of the same structure or organ, but with two totally separate and distinct glands, having in all probability different functions. This is indicated by a striking difference in the general appearance of the sections and is confirmed by measurements of the various elements. There are also obvious microchemical differences in the two structures.

In examining the detailed cytology, we have received much assistance from Dr. C. da Fano, of King's College, London, who has made for us preparations to show the Golgi apparatus. He agrees with us that the two structures bear very little resemblance to each other and that the Golgi apparatus has a different arrangement in the two cases.

We are inclined to believe that it is the anterior adrenal body in the head-kidney which ought to be considered the homologue of the adrenal cortex; and, if this is correct, this body should be styled simply the adrenal cortical body. If this is so, what are we to say of the corpuscles of Stannius? Here is a perfectly definite circumscribed organ for which we have to find a place, both morphological and physiological. One is tempted to place it, provisionally, in the group of epithelial organs, in which are included the anterior pituitary, corpus luteum, the parathyroids, islets of Langerhans, etc. It has occurred to us that it may, in fact, be an insulin-producing tissue, and if sufficient material can be collected, it is our intention to test this. We hope to publish a full account of this work at a later date.

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#### Scientific Achievement and Aptitude.

THE excellent editorial in NATURE of Nov. 13 suggests a few comments. Several years ago, Lady Gregory came to the University of Colorado and lectured on the Irish drama. She insisted on the importance of each country or region fostering its own dramatic art, and cultivating dramatic expression among its citizens. Under such conditions, she urged,

not only is there a quickening of the general intelligence, but also genius finds its appropriate setting and chance for appreciation. Surely the same argument may be used with reference to science. It is not possible to determine the native ability of various nations from such statistics as are cited by Dr. Slosson. Very much depends on popular recognition, and even the discovery of new chemical elements is largely controlled by opportunity. Although the genius is an asset of incalculable value, he is only of value to communities intelligent enough to profit by his labours. In 1914, 105,681 infants under one year died in Great Britain. In 1924 the number was only 65,259. In the same period the deaths per thousand were cut down from 23.9 to 19.3. This was not done through the brilliant inspiration of some genius, but by the incessant labours of thousands of relatively or absolutely obscure persons using the knowledge communicated by scientific men of all grades of distinction.

My own interest in natural history was greatly stimulated by J. W. Taylor and W. D. Roebuck, who were preparing a "Monograph of the Land and Freshwater Molluscs of the British Isles." Their methods were in direct contrast to those of some monographers. We not rarely hear that so-and-so is monographing the —. All specimens must be sent to him. No one else should have anything to say on the subject. By the time the great work appears, interest in its topic has so long been dead, that it is received with due reverence but little real joy. There are, of course, some fields of science which are necessarily cultivated in this manner. Only a few men of unusual training and powers, provided with unusual and costly apparatus, can do anything with them. The 'man in the street' is absolutely out of it, except as a possible contributor of funds. But in other fields this is not the case. Taylor and Roebuck, from the beginning, did everything to interest young conchologists in the possibilities of doing things, of making discoveries. The result was a great deal of enthusiasm and the accumulation of an enormous mass of data which eventually went into the monograph. It is lamentable to have to record that this beautifully illustrated and minutely detailed work has ceased publication, because the cost of printing is too high. As a contribution to national culture it would abundantly pay the country to continue the printing at the public expense.

The moral seems to be, that whether we desire material benefits or increased happiness, bread or song, it is of the utmost importance to cultivate scientific interest among the people at large. This interest should not simply take the form of open-mouthed astonishment at the works of the learned, but should be inspired by the hope and expectation of personal accomplishment, and the sense of having part in a great undertaking.

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Nov. 24.

#### Behaviour of Silicic Acid Gel during the Drying-up Process.

IN the *Proceedings of the Indian Association for the Cultivation of Science* for June 1926, K. Krishnamurti in a short note describes the formation of fibres of potassium chloride when crystallised from silicic acid gel. This note was apparently written as the result of an observation made in May 1924.

On October 18, 1924, we communicated to the *Journal of Physical Chemistry* a paper, "Some