

s'observent dans cet ordre sont maintenus dans des bornes qu'ils ne sauraient dépasser; les races des corps vivants subsistent toutes, malgré leurs variations; les progrès acquis dans le *perfectionnement* de l'organisation ne se perdent point; tout ce qui paraît désordre, renversement, anomalie, rentre sans cesse dans l'ordre général et même y concourt; et partout et toujours la volonté du sublime Auteur de la nature et de tout ce qui existe est invariablement exécutée." Lamarck rather rarely uses the word *perfectionnement*; hence I have italicized it.

The passage concerning the aquatic animals very clearly shows a belief in a tendency toward perfection apart from other factors. The other passages, especially the last, are fully confirmatory.

I have been unable to consult the *Histoire Naturelle*, except as quoted by Professor Osborn and others. Possibly it is there that Professor Osborn finds authority for the statement that Lamarck denied absolutely the existence of a perfecting tendency. But so far as the *Philosophie Zoologique* is concerned the case is clear.

The point I have raised is important now only as a matter of history, but in the interest of accuracy it seems desirable that Lamarck's true views should be emphasized. It would appear that he was not 'completely carried away with the belief that his theory of the transmission of acquired characters was adequate to explain all the phenomena' (Osborn l. c., p. 180); rather, the 'Lamarckian factor' played a subordinate part in his scheme of evolution. And, if this interpretation be correct, it would seem that Darwin's criticisms of Lamarck are more nearly just than is generally supposed, and that, as Perrier says, he was, 'by an astonishing contradiction, at once a finalist in his general views, and a determined opponent of final causes in details.'

JOHN GARDINER.

UNIVERSITY OF COLORADO, BOULDER, COLO.

MEMORIAL MEETING COMMEMORATIVE OF ALLEN AND HORN.

A GENERAL invitation is extended to all those interested to be present at a memorial meeting, commemorative of Harrison Allen, M.D., and

George H. Horn, M.D., to be held in the library hall of the Academy of Natural Sciences of Philadelphia, on Friday evening, December 31st, at eight o'clock. The following gentlemen will make addresses:

Dr. Edw. J. Nolan, 'The Relations of Doctors Allen and Horn to the Academy and other Societies.'

Mr. S. N. Rhoads, 'Dr. Allen's Work in Zoology.'

Dr. D. G. Brinton, 'Dr. Allen's Contributions to Anthropology.'

Professor John B. Smith, Sc.D., 'Dr. Horn's Contributions to Coleopterology.'

Rev. Henry C. McCook, D.D., 'Dr. Horn as a Physician and Naturalist.'

E. G. CONKLIN, PH.D.,
J. CHESTON MORRIS, M.D.,
D. G. BRINTON, M.D.,
REV. HENRY C. MCCOOK, D.D.,
HENRY SKINNER, M.D., *Ch'm.*
Committee.

THE ACADEMY OF NATURAL SCIENCES
OF PHILADELPHIA,
LOGAN SQUARE.

SCIENTIFIC LITERATURE.

Memorials of William Cranch Bond, Director of the Harvard College Observatory 1840-1859, and of his son, George Phillips Bond, Director of the Harvard College Observatory 1859-1865. EDWARD S. HOLDEN. San Francisco. 1897. Pp. iii+296. 8oc. With illustrations.

In this work Professor Holden has given a most interesting account of the two men who established the Observatory of Harvard College and carried it on for its first quarter of a century—a time of great importance for the development of astronomy in this country.

In 1840 the beginnings of permanent observatories in this country had already been made; in 1865 the Observatory at Cambridge had acquired, under the Bonds, a recognized position in the astronomical world, and the Bonds had contributed to the general progress of the science.

Professor Holden's work has been rendered important, and at the same time difficult and thankless, by circumstances which he finds