vapors, and hopes later to publish data on this subject. JOHN K. ROBERTSON

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AUTOPSY OF A BLACK FISH

TO THE EDITOR OF SCIENCE: On July 5, 1920, a large female Blackfish, Globocephalus malas, a species of whale sixteen feet long came ashore near Woods Hole, Mass., and was brought to the Fish Commission Laboratory at this place for autopsy. The task was new to all present and when a large sac capable of holding a pailful or two was seen near the posterior end of the body, it was at once recognized as probably the empty bladder. This, however, proved to be incorrect for the empty urinary bladder was found near as a hard, flesh-colored organ contracted to the size of a man's large elongated fist. The sac when more closely examined was found to be a recently delivered uterus, completely relaxed, upon the inner surface of which the site of the placenta could be plainly made out and with its open mouthed sinuses capable of receiving the tips of a little finger. This therefore was probably an unique case of death from post-partum hemorrhage, damp bed and absence of a marine accoucheur with his ergot. A few days later the history of the case was completed by the finding of the infant, a youngster about three feet in length, also cast ashore near where the body of the mother was found.

There is no doubt the character of the case would certainly have been undiagnosed had there not been present at the post-mortum, an old general medical practitioner who recognized first that the body of the animal showed an almost exsanguine state, corroborated later by the condition of the relaxed uterus.

G. A. MACCALLUM Woods Hole, Mass., July 26, 1920

QUOTATIONS

THE NATIONAL BOTANIC GARDEN

THE plan for the creation of a national Botanic Garden and arboretum that will be comparable with government gardens in other

countries, and with public gardens in cities of the United States, should not be allowed to rest. There is force and sound argument in the proposal and no contrary argument. The present national Botanic Garden is national only in its name and in the fact that it is maintained at a slight cost to the nation. It is not national in its exhibit of plant forms. It was a pleasing little spot when the capital was a village. It carries one's thought back to when the mighty Library of Congress was housed in one small room in the Capitol. The Botanic Garden has made little growth in fifty years because it could not expand outside of its tall iron fence. Now the little space within that fence is being dedicated to monuments.

The weight of opinion among government and private botanists and landscape architects is that the Mount Hamilton tract should be the site of the great new and really national Botanic Garden. It fronts on one of the main boulevards. It is already accessible by steam and electric railroads. It adjoins the vast public park which the government is building up from the bottom, the marshes and the margins of the Eastern branch. It thus fits into and becomes a part of the park system. These are among the reasons which botanists urge to bring the matter into public favor. But to them the strong reasons are that in this tract of land are high hills, steep slopes, gentle slopes, thick woods with many varieties of timber, deep ravines, meadows, marshes, brooks and rivulets, and about all kinds of soil which all kinds of American plants pick out for home.

: It is a great idea that the United States should have a Botanic Garden of which all Americans could say, "It is the greatest thing of its kind on earth."—Washington *Evening Star.*

A NEW BIOLOGICAL JOURNAL

DURING the past two decades the development of ecological studies in this country has been rapid. Five years ago, as a result of continued and insistent demand, the Ecological Society of America was organized and at once included in its membership botanists and zoologists of the pure biological sciences, foresters and economic entomologists of the applied sciences, and climatologists and geographers, whose work is closely connected with ecology. Beginning with the study of statics, the description of conditions as they exist. the science progressed rapidly into dynamics, the investigation of the behavior of plants and animals and the development of the communities in which they live. Now, by refined observation and precise experiment, ecology seeks to discover the fundamental causes which control the natural existence of living things. As ecology has broadened in its scope, so also has it deepened; as it has included questions of greater and more fundamental biological importance, so has it attracted investigators in larger numbers and of greater ability: as the products of ecological research have become more numerous and more scholarly, so has the necessity grown for adequate means of publication.

Ecology, the official publication of the Ecological Society of America, is the latest addition to American biological periodicals. Yet it does not add to the number of scientific journals, for it is a continuation of the old and useful *Plant World*, which for several years has been largely ecological. At the St. Louis meeting of the affiliated scientific societies the Plant World Association most generously turned over its magazine, free from all liabilities, to the Ecological Society. But the new title, the new cover, the new volume number, the new editorial board, and above all the opening of its pages to articles on all branches of ecology, stamp it as a distinctly new periodical. Ecology begins its career under favorable circumstances. As the official organ of a growing society it is not wholly dependent on a subscription list for its financial stability. It is printed by the New Era Printing Company and managed through the Brooklyn Botanic Garden, the editorial control remaining with the society, undoubtedly fortunate arrangements. Its editorial board, headed by Major Barrington Moore, comprises fifteen men chosen from the leading ecologists of the country and repre-

senting a wide diversity of interests and activities.

The first two numbers set a high standard and illustrate the broad scope of the science. The editor-in-chief contributes a short article on the scope of ecology: Ellsworth Huntington correlates atmospheric conditions with the prevalence of influenza and pneumonia; A. E. Douglass describes a new method of correlating tree-growth with precipitation; C. E. Esterly describes experiments on the behavior of a copepod in relation to its diurnal migration: W. E. Praeger contributes a note on the ecology of herons; E. T. Wherry, using his new method of determining soil acidity, discusses the distribution of plants around salt marshes; and J. V. Hoffmann describes the establishment of a Douglas fir forest. In the second number E. B. Powers publishes the results of his experiments on the influence of temperature and concentration on the toxicity of salts to fishes; W. H. Burkholder discusses the effect of soil temperatures on healthy and diseased bean plants; C. C. Forsaith describes the anatomical reduction in alpine plants from the higher White Mountains; and there is presented the first part of an extensive report on the ecology of the plants and animals of Mount Marcy, New York, by Messrs. Adams, Burns, Hankinson, Moore and Taylor, comprising the committee on cooperation of the Ecological Society. From the foregoing it is evident that the first numbers contain material of interest to climatologists, marine biologists, zoologists, botanists, agronomists and foresters as well as to geographers, and even to the medical profession.

Ecology is an illustrated quarterly, octavo; a volume of four numbers will contain 300 or more pages.

H. A. GLEASON

SPECIAL ARTICLES

CHROMOSOMAL DUPLICATION AND MENDEL-IAN PHENOMENA IN DATURA MUTANTS

THERE are 12 separate and distinct mutants of the Jimson weed (*Datura Stramonium*) which have recurred with more or less fre-