appears to be the method of evolution. This interpretation is difficult to harmonize with Blackwelder's assumption (p. 365, line 9) that "new species originate not by gradual imperceptible changes, but by sudden mutations." His assumption leads to the idea that some new creature of human lineage will crowd out man, whereas, predicting from the past, man will probably evolve gradually via new Mendelian combinations, chromosome aberrations and gene mutations. There seems to be little chance for off-shoots to diverge from man.

What are the chances that some other species not of human stock may outstrip man? For comparative analysis, consider the birds. When they took to the air, they obtained a practical monopoly among vertebrates despite the prior claims of the pterosaurs and winged insects. With this monopoly, they were able to spread and differentiate into very successful groups. In doing so, they undoubtedly eliminated by competition many of the intermediate stages of development, so there are few forms left to indicate the steps in their evolution.

Man is in a similar position with his monopoly on intelligence. He was the first to develop it to the stage where it could be successfully applied to modification of his environment on a large scale. This environmental control is so enormous by comparison with other animals that he is transforming large sections of the world so as to produce increased density of his own population and his satellites at the expense of other creatures. In so doing, man seems, like the birds, to have crowded out intermediate forms, so there is now a large gap between man and his nearest primate relatives. But there is still a difference between the past divergent evolution of birds and the prospects for man. In contrast with birds which developed divergence in ecological isolation, man is now reversing the process. With his rapidly developing transportation facilities, he is tending to prevent isolation, thus providing more and more mixing of divergent hereditary characteristics of previously differentiated races.

With man applying his intelligence to the control of his biological competitors and with his biological destiny in his own hands (Goodale), it would seem that man has good cause to be optimistic despite the alleged dangerous specializations to which Miller called attention. There may be, however, enough generalized characters of man to nullify the purported dangers from such specializations. There seems to be nothing on the horizon in any direction which shows possibilities of taking leadership away from man or his descendants—certainly not the insects.

ANGUS M. WOODBURY

UNIVERSITY OF UTAH

DEMONSTRATION OF LABYRINTHULA PARASITE IN EEL-GRASS FROM THE COAST OF CALIFORNIA[1]

IN a recent publication of the U. S. Fish and Wildlife Service, Moffit and Cottam describe some current abnormalities in the feeding behaviors of brant along the Pacific Coast.[2] These appear to be related to the depletion of marine eel-grass, *Zostera marina,* that forms the preferred food of brant. Marked loss of the Pacific varieties of *Zostera marina* is limited to a few localities, and the condition is not comparable to the sudden wasting of Atlantic eel-grass in 1931.

At various intervals during the past year I have examined specimens of plants taken from affected beds without obtaining satisfactory evidence of parasitic activity. Recently, however, I received exceptionally well-fixed material in which I was able to demonstrate readily the *Labyrinthula* common to the diseased Atlantic eel-grass. The parasite was clearly present in two specimens collected from North Humbolt Bay, California, and from San Quentin Bay, Lower California. The beds from which they were taken were in good condition with few wasted plants. The *Labyrinthula* shows the same morphological features and peculiar distribution in recently invaded leaf tissue as in diseased leaves of Atlantic eel-grass.[3]

CHARLES E. RENN

GRADUATE SCHOOL OF ENGINEERING,
HARVARD UNIVERSITY

A SYSTEM FOR THE FILING OF REPRINTS

ALTHOUGH we are in sympathy with the recent request of Professor McCay[1] regarding standardization of size of reprints it is not likely that all journals will respond to his suggestion. In any event the change could not be retroactive, and hence we are faced with the problem of filing reprints larger than the usual sizes. The author has adopted recently a system, which may not be original, though I have not seen it used elsewhere, which gives promise of being satisfactory. The present file contains more than two thousand reprints and reports.

Discarding the usual boxes the system makes use of small metal cabinets. The particular cabinet chosen[2] contains 27 drawers, each measuring $3'' \times 9'' \times 12''$. In addition to accommodating the larger reprint sizes of which Professor McCay complains it is possible also to file typed reports ($8\frac{1}{2}'' \times 11''$). Of advantage

[1] Contribution No. 311 of the Woods Hole Oceanographic Institution.

[2] J. Moffit and C. Cottam, Wildlife Leaflet 204, November, 1941, 26 p. (mim.), Fish and Wildlife Service, U. S. Department of the Interior, 1941.

[3] C. E. Renn, *Biol. Bull.*, 70 (1): 148–158, 1936.

[1] C. M. McCay, SCIENCE, n.s., 94: 415, 1941.

[2] Obtained from Hobart Cabinet Company, Troy, Ohio.