



There are nineteen members in the family of Beckman Reference Electrodes—just so you can select the one best related to your requirements. There are four different types of reference junctions to pick from—asbestos fibre, palladium wire, ground glass sleeve, and porous frit. Each can be properly matched to your specific application for highly reliable determinations.

In all, there are 121 Beckman electrodes immediately available. Call your local Beckman Sales Engineer or write for the Electrode Catalog.

Beckman INSTRUMENTS, INC.

**SCIENTIFIC AND PROCESS
INSTRUMENTS DIVISION**
FULLERTON, CALIFORNIA • 92634

INTERNATIONAL SUBSIDIARIES: GENEVA, SWITZERLAND;
MUNICH, GERMANY; GLENROTHES, SCOTLAND; PARIS,
FRANCE; TOKYO, JAPAN; CAPE TOWN, SOUTH AFRICA

maintained. As a result, this salt-water connection between two oceans would provide a wonderful opportunity for observing the interaction of previously separated marine communities.

The chance to study such a dramatic ecological adjustment must not be lost. Current reports indicate that engineering surveys may start in about a year, with actual construction getting under way about four years later. Completion of the canal might take another 10 years. However, in order to take maximum advantage of the situation, distributional surveys, taxonomic studies, and related oceanographic work should be initiated as soon as possible after the site is selected.

A scientific effort of this magnitude certainly would provide an excellent opportunity for broadening scientific cooperation among the nations of the Western Hemisphere. This, too, cannot be permitted to pass by. I hope that preliminary planning will start soon.

JOHN D. DAVIS

*Department of Zoology,
Smith College,
Northampton, Massachusetts*

The Smithsonian

It seems to me that D. S. Greenberg (12 Mar., p. 1266) unfairly depreciates the original contributions to knowledge made by the Smithsonian in earlier times. When I was elected to the National Academy I believe there was no institution in the United States which had more members in the Academy, unless possibly Harvard University.

Greenberg makes no mention of Secretary Baird, who was decorated by nearly all maritime nations for his work for the fisheries, and who was no less distinguished in herpetology and ornithology besides.

Nor did he mention Secretary Walcott, who was president of the National Academy and probably more influential with Congress and administrations than any other scientist of his time. His advice led Andrew Carnegie to endow the Carnegie Institution. He himself conceived and founded the National Advisory Committee on Aeronautics. I heard a paleontologist remark that Walcott contributed more than all others to the knowledge of Cambrian paleontology, and 75 percent of his contribution was made by his expeditions in the field while secre-

tary of the Smithsonian. He founded the Research Corporation and promoted R. H. Goddard.

It would be improper in me to allude to scientific work of the fifth secretary. But I may at least mention Stejneger, Fewkes, Holmes (who was a leader in three fields of science and art), Hrdlicka, Merrill, Roberts, Stirling. Indeed, space forbids that I should even name those who, during my 70 years at the Institution, have added to the distinction of its scientific researches, and whose discoveries are textbook familiarities.

CHARLES G. ABBOT

*4409 Beechwood Road,
Hyattsville, Maryland*

The article on the current increase in research activity at the Smithsonian Institution must have aroused considerable interest in all centers of taxonomic study. It rightly points out that there are not many centers with sufficiently large collections for extensive work in systematics, although some active academic centers may be surprised to learn that "universities have pretty well dropped out of systematic biology."

The article goes on to say that the Smithsonian does not "threaten any existing institution." The established centers which are doing significant taxonomic work, both within and outside the universities, while applauding the success of the Smithsonian's new leadership, may perhaps be pardoned for wondering what the effects of this success will be on their own institutions, with their far more limited resources. All administrators should be pleased at rising salary levels, if only they can find the money to equal them, and the stimulus of a stepped-up program at the Smithsonian should enliven the field of systematics everywhere, if only the limited supply of well-trained systematists can continue to be available to all institutions traditionally engaged in this work.

Many thoughtful persons, scientists as well as administrators, may raise the question: If the federal government is to increase its support for systematics at the Smithsonian, which has direct access to Congress, will it also (for example, through the National Science Foundation) extend truly comparable support to the other long-established centers of significant systematic study?

JOHN W. BODINE

*Academy of Natural Sciences of
Philadelphia, Philadelphia, Pennsylvania*