

such an interest in science as is indicated by the presence of local scientific societies strong enough to publish proceedings of some sort; and the result appears to be, that these societies are not, to any appreciable extent, feeders of the association. It is more probable that they are oftener its children. Thus San Francisco numbers but seven members; Denver, two only, losing one during the past year, which has witnessed the publication of a whole volume of proceedings from the local society; the great city of Chicago has but thirty members, even with an increase of four during the past year; Davenport, Io., has only two; Albany, with its long-established Albany institute, only fifteen, a loss of one during the year; Buffalo, with more than one society flourishing from time to time, eleven, a loss of one member during the year; Poughkeepsie, five, a loss of one; Troy, twelve, a gain of three; Wilkesbarre, six, a gain of four during the past year; Milwaukee, four, a gain of one; Toronto, twelve, a gain of one; and Halifax, N.S., a single member.

University and college towns are very generally represented, but, excepting at large centres, by only three or four members. How widely distributed the membership has become, is shown by the significant fact that no less than 597 places contribute to the list; indicating clearly that the assembling of five hundred or a thousand scattered members once a year, must be an important factor in the advance of science in this country, far more than it is possible it should become in such a country, for instance, as England.

AMONG RECENT naval orders, we note that of Rear-Admiral Franklin to the command of the European squadron. That this able officer, who has been superintendent of the observatory only about a year, should be so soon relieved of his duties and assigned to another station, will be a matter of regret to all those friends of the observatory who hold to the belief that its efficiency under an exclusively

naval management is as great as it ever would be under any other.

LETTERS TO THE EDITOR.

**** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The carnivorous habits of the Rodentia.

IN recent numbers of *Science* several observers have spoken of the habit possessed by the muskrat, *Fiber zibethicus*, of feeding upon certain mussels to be found at its places of resort. As already referred to by one of these contributors, instances were brought up before the Biological society of Washington, a few months ago, of their destroying for food-purposes carp in the carp-ponds. I wish to enter here but one additional charge against this animal, which has been the subject of so much abuse lately. Several years ago, when I lived in a town situated upon Long Island Sound, I saw upon a number of occasions, when collecting during moonlight nights, muskrats swimming along the stone wharves where the shipping moored. It never struck me, however, that they were in search of food, until I observed one, on one occasion, dive, and return in a moment to the surface with a fish in its mouth some five or six inches long. I killed the animal in the act, and secured both fish and rat. The former proved to be a specimen of *Gadus tomcod*, — a fish which in early winter swims sluggishly along close to the wharves in those latitudes, and one easily captured, I imagine, by such a good swimmer.

The muskrat, however, does not stand alone in this particular propensity among the Rodentia. While collecting near Fort Wingate, N. Mex., a few days ago, I was so fortunate as to capture alive a specimen of *Hesperomys*, of what species I am not positive as yet. This truly beautiful little animal was taken from its nest in a tree in the immediate vicinity of several lodges of *Neotoma floridana*. On arriving home, about nightfall, it was consigned to a wooden box in my study. My work-table in this room was covered with things familiar to those who are acquainted with the doings of a naturalist in the field. Among them was a vessel containing coarse cornmeal, used in skinning animals and birds. Near this lay fresh specimens of pine-linnets, blue crows, and several other birds, which I intended to convert into skeletons. My *Hesperomys* escaped during the night, and although he had been a prisoner but a few hours, and presumably not hungry, he ate nearly the entire body of one of my pine-linnets, never touching the saucer of cornmeal which stood immediately by it.

Next morning the contents of his stomach proved his guilt. The flesh-eating habits of rats are too well known to call for comment in this connection.

R. W. SHUFELDT.

Fort Wingate, N. Mex.,
March 20.

Mr. Melville's plan of reaching the north pole.

If you can spare the space in your journal, I would like to make a few concluding remarks on Dr Boas's criticism of my proposed route toward the north pole, and my theory thereon.

Dr. Boas, in his letter to *Science*, confines me to