

studying the fishes of the State of New York, to examine numerous specimens of the Common Whitefish from the Great Lakes and interior lakes of New York and of the so-called Labrador Whitefish from lakes of New York and New Hampshire and from rivers in New Brunswick and Labrador. As a result of these investigations he is forced to the conclusion that Richardson's species, *Coregonus labradoricus*, is identical with the Common Whitefish, *Coregonus clupeiformis*, there being no characters by which the two can be distinguished. Every individual of the Common Whitefish, young and old, was found to have teeth on the tongue and to possess the other characters by which Richardson's species has hitherto been separated.

This conclusion has an important bearing upon fish cultural operations by the States and the United States, as it will tend to simplify the work of artificial propagation and, perhaps, extend its scope.

TARLETON H. BEAN.

WASHINGTON, D. C., March 3, 1899.

A DATE-PALM SCALE INSECT.

DR. A. S. PACKARD writes from Biskra, Algeria, January 23, 1899: "I find myself in this oasis of the northern edge of the Sahara, where there are 170,000 date palms. In a beautiful garden I found a date palm, indeed several, affected by Coccids, which I enclose." The Coccids are crowded on the pieces of leaf and prove to be *Aonidia blanchardi*, Targioni-Tozzetti, Mém. Soc. Zool. France, 1892, Vol. V., p. 69. The insect, however, is not an *Aonidia*, but belongs to *Parlatoria*, and must be called *Parlatoria blanchardi*. It was originally found in the oasis of Ourir, and has never, I believe, been noticed since its original description until now rediscovered by Dr. Packard.* The figures of Targioni-Tozzetti represent it well, except that in one of them (Fig. 3) there is an impossible lobule between the median interlobular squames. The female turns bright olive green on being boiled in caustic soda. There are four small groups of circumgenital glands. This insect is likely to

* Unless Maskell's *P. proteus* var. *Palmar*, found in Australia on date palms imported from Algeria, is the same, as indeed seems likely.

be of some economic importance, as it is allied to, though easily distinguished from, *Parlatoria vitrix*, Ckll.; which, introduced from Egypt, has proved a pest on date palms in Arizona, California and Queensland. The manner of the infestation is quite the same in the two species.

T. D. A. COCKERELL.

MESILLA PARK, N. M., February 16, 1899.

THE CHOICE OF ELEMENTS.

TO THE EDITOR OF SCIENCE: Once upon a time, according, I believe, to Messrs. Gilbert and Sullivan, a magnet hanging in a shop window fell in love with a silver churn, but, to its great distress, was unable to awaken any response. Its pathetic plaint ran:

"If I can wheedle
A nail or a needle
Why not a silver churn."

I used to think the magnet very unreasonable, because I supposed the atoms of iron and steel were necessarily drawn to it willy nilly, while there was no such tendency in the silver atoms, which were consequently quite unable to respond to its call. Major Powell (SCIENCE, February 17th) puts the matter in a new light, which awakens my sympathy for the magnet. It appears that the particles have choice. Both common sense and the dictionary tell us that choice is the power of choosing. Thus it was not of necessity, but of their free will, that the nails and needles were so responsive. The silver churn evidently considered the magnet ineligible. The case of the latter is a truly sad one, worthy of all serious commiseration, for if, as Major Powell tells us, the particles have intelligence, why should they not have love also? True, the magnet as a whole does not know, but what can assuage the grief of each of its myriad particles? Is there any hope that in time the silver will think better of it?

T. D.

HARVARD MEDICAL SCHOOL, February 27th.

ASTRONOMICAL NOTES.

TUTTLE'S COMET.

THIS comet was discovered by Méchain at Paris in 1790. Only a few observations were