pear.' If this refers to the common Missouri cactus, would it not be well to follow the Mexican in making it a useful food for cattle and sheep, by cutting the plant to the ground, and throwing it on piles of dry brush, which are fired, and the spines scorched off, when it is greatly relished by the stock.

CHARLES H. STERNBERG.

LAWRENCE, KANSAS.

THE SONG OF BIRDS.

TO THE EDITOR OF SCIENCE: Some time ago Mr. W. E. D. Scott contributed to SCIENCE an article upon the song of birds, drawing the conclusion that when isolated from their kind birds would originate a song.

In the building in which my office is located there is a canary that was taken from its parent bird when quite young, and grew to adult age entirely isolated from other birds. It has developed a song of its own made up, as nearly as I can distinguish, of but three tones sung as a phrase of seven notes. While the song suggests that of the ordinary canary it is not, I would say, actually any part of it; it is sometimes used singly, though generally repeated several times, and there is little if any variation from the original phrase or form.

WALTER S. KELLEY.

THE CONGER EEL.

TO THE EDITOR OF SCIENCE: The U. S. National Museum has recently received from the New York Aquarium a specimen of the larval form of the conger eel, which was captured in Gravesend Bay, N. Y. It measures four inches in length and is in a good state of preservation. Another specimen recently sent to the Aquarium was taken on the New Jersey coast.

Although the adult conger eel is common in New York waters, the *Leptocephalus* form has been recorded but rarely. Brevoort recorded its occurrence in the vicinity of New York City many years ago.

BARTON A. BEAN.

U. S. NATIONAL MUSEUM,
WASHINGTON, D. C.,
April 25, 1902.

CORRESPONDENCE OF THE LATE PROFESSOR LEIDY.

TO THE EDITOR OF SCIENCE: The undersigned has been collecting for some time the correspondence of the late Professor Joseph Leidy. Before the same is published, he would be indebted for any such which may be in the possession of the readers of SCIENCE. Care will be taken to return the originals if requested. Kindly address,

DR. JOSEPH LEIDY.

1319 LOCUST STREET,
PHILADELPHIA, PA.,
April 21, 1902.

SHORTER ARTICLES.

THE HYDROLYSIS AND SYNTHESIS OF ETHYL BUTYRATE BY PLATINUM BLACK.

KASTLE and Lowenhart have shown that the catalytic action of the enzyme lipase is reversible, *i. e.*, that it accelerates not only hydrolysis of fats into fatty acid and alcohol, but also the synthesis of fats from fatty acids and alcohol (*Chemical News*, February 8, 1901–March 15, 1901).

In an investigation on the action of enzymes which I began over a year ago at the suggestion of Professor Loeb, it occurred to us to try experiments with platinum black as the active principle in place of lipase.

I found that platinum black acts quite comparably to lipase. Platinum black hydrolyzes ethyl butyrate as well as synthesizes it from butyric acid and ethyl alcohol.

In my experiments the following chief facts were found:

1. Platinum black hydrolyzes ethyl butyrate, as is shown by the constant and definite increase in the acidity of the solution.

2. The velocity of the action is a function of temperature, *i. e.*, an increase in temperature from 0°C. to 40°C. is accompanied by a correspondingly increased hydrolysis.

3. The velocity of the reaction is a function of the quantity of the platinum black used; but independent of the quantity of ethyl butyrate used.

4. Platinum black synthesizes butyric acid and ethyl alcohol into ethyl butyrate. The odor of ethyl butyrate appears in a short time and increases with the increase in time.