consideration? His finding that some salts are non-musical can be explained in this manner. If the length of the resonant column is long, the addition of salt or solid to the liquid below will cause only a relatively small change in the length of the resonant column. If, on the other hand, it is short to begin with, and has its length decreased by one half, a change of one octave will occur.

O. C. MAGISTAD

UNIVERSITY OF ARIZONA

BANANA STOWAWAYS

SOME time ago a couple of strange "mice" with prehensile tails, were brought to the laboratory from a neighboring grocery store. They proved to be Marsupials from some one of the Central American States, and belong to the genus Marmosa sp. A visit to the store resulted in the discovery of three more of this marsupial family making five in the single bunch of bananas. They were fed on grasshoppers and bananas and lived until the cold weather came on, when proper food could be secured no longer.

Many animals are imported in banana bunches and many insects, snakes and rats have been collected in the fruit commission houses, but this is the first time in the writer's knowledge that Marsupials of this genus have been included in the list of stowaways.

L. A. ADAMS

UNIVERSITY OF ILLINOIS

ON THE VELOCITY OF SOUND

IN an article entitled as above and published on page 381 of SCIENCE for October 21, 1927, an error was made in the value of a constant in the last line of the article. This line should read

$$V = 331.4 \left(1 - \frac{4.45 \times 10^{-3}}{d\, n^{.53}}\right) \frac{\text{meters}}{\text{sec}}$$

P. I. WOLD

GEO. R. STIBITZ

UNION COLLEGE

SCIENTIFIC BOOKS

Navigator. The Story of Nathaniel Bowditch. By ALFRED STANFORD. New York: William Morrow & Co. pp. 308. $2.50.

IT is only an occasional book in the field of general literature that threads its story about the life of a scientific man. When such a contribution comes from the press it is a pleasing diversion from the technical aspects of one's subject and even from the more conventional types of scientific biography. Such a book is "Navigator" by Alfred Stanford, a recent Amherst graduate.

To one who is interested in things of the sea and the nautical aspects of a brilliant career this novelized sketch of the earlier days of Nathaniel Bowditch, of Salem, will prove a pleasing book.

It is more than a narrative of events in the life of a singular man. It is a book that wrests from the obscurity of eighteenth century science, a reticent but extraordinary personality.

To all who "go down to the sea" in ships, the name Bowditch is tantamount to Hoyle and "The American Practical Navigator" originally by Nathanial Bowditch is the recognized American epitome on navigation which has for so long been printed and reprinted by the Hydrographic Office that the number of its editions is now almost legion. If the aim of Mr. Stanford's book had been to show how and why this celebrated epitome of navigation came to be written, he could not have more strikingly portrayed his character, but his aim has been more than this. It is obvious that the author has solicited a wider circle of readers than mathematicians and astronomers by making human his unique character and detailing his varied experiences rather than his mathematical contributions.

Those who knew Bowditch more seriously through the authentic memoirs or the traditions of Salem's nobility, may find not altogether pleasing the intimacies of imagined conversations or descriptions of conjectured conduct, yet it is surprising and indeed gratifying, to find how consistent with fact is the main artery of events in this kaleidoscopic picture.

So far as the problems of the eighteenth century are concerned, Stanford has shown himself well informed. A scientific mind cringes a bit at the indiscriminate use of "straight line" for a "great circle" course to shorten sailing distances and the spelling of Laplace's celebrated work as "Mechanique Céleste." One might moreover gain the impression that a ship's position could be determined from lunar observations with a far greater degree of accuracy than was ever achieved in practice.

On the other hand, one should not minimize Bowditch's notable contribution to "lunars" in a day when chronometers were scarce and often wanting entirely in a ship's navigating equipment. While the author may have played up (or down) to romance with all allowable license in a book purportingly founded on fact, he has not obscured the Salem lad's love of figures as the *motif* of his career, nor has he failed to make mention of the high honors gained by his mathematical and astronomical attainments.

The final chapter is indeed a dramatic ending, and the more captivating for the knowledge that it is substantially according to fact. Rumor states that Captain Bowditch gained one glimpse of shore or of a familiar coastal light that piloted his landfall on the

stormy return of the *Putnam* to Salem. Like Lindbergh's flight to Paris, aside from a piece of good navigating ability, it was probably a piece of good luck as well, that made possible the spectacular arrival. One might gain the impression that Bowditch's happy landfall was made possible by the accuracy of his newly developed "lunars," which, of course, is much overdoing it. Such a criticism is perhaps trivial for a book of much dramatic value, of distinctly human interest in things scientific, and perhaps on the whole as delightfully written as any fictional biography of the day. One can but wish equally competent authors would explore the fruitful and relatively untouched field of science for recreating in the literature of the day great personages of the past.

H. T. STETSON

HARVARD ASTRONOMICAL LABORATORY

REPORTS

AMERICAN SCHOOL OF PREHISTORIC RESEARCH

IN certain respects the work accomplished by the American School of Prehistoric Research in 1927 marks a departure from preceding years. In addition to the regular program there were four prospecting parties in the field. Moreover, during the term, the group of students was successfully turned over twice to former students of the school.

RECONNAISSANCE

Southern France.—The prospecting trip by the director and Mrs. MacCurdy was in southern France: the cavern of Aldène at Fauzan near Olonzac (Hérault); the Grottes des Fées on the Pic d'Ambouls near Nant (Aveyron); and the much discussed site known as Glozel near Vichy (Allier). Aldène is one more of the many caverns in southern France on the walls of which Paleolithic man left examples of his art; these were discovered in February, 1927. It has also yielded remains of Neolithic man including fine examples of pottery. The Grottes des Fées near Nant may also have been the abode of man in both Paleolithic and Neolithic times, but as yet only Neolithic remains have been discovered. As for Glozel, the prehistoric problems it has forced upon the attention during the past three years are now up for solution before an International Committee.[1]

Rumania.—One of our students, Dr. V. J. Fewkes, of the University of Pennsylvania, spent a part of June exploring a group of caves in the vicinity of Steierdorf, Rumania.

Austria.—Under the auspices of the school, a party in charge of Dr. Kurt Ehrenberg, of the University of Vienna, explored the newly discovered *Schreiberwand* cavern on the Dachstein mountain near Salzburg.

Greece.—After the close of the summer term, two of the students spent a month in Greece with a view to the checking up of prehistoric collections and sites.

[1] This committee has since reported against the authenticity of the Glozel specimens.

SEVENTH SUMMER TERM

The seventh summer term of the school opened in London on June 27 and closed in Cologne on September 15. The special fields covered were southern England; a section of the Somme valley in the region of Amiens; Paris and St. Germain; Brittany; the region of Civray (Vienne), where the members of the school dug for a week as the guests of Mr. James T. Russell, Jr., a former student of the school; Charente; Dordogne with a season of digging at Castel-Merle near St. Léon-sur-Vézère and local excursions to important prehistoric sites and museums; an excursion to the caverns of Ariège and Haute-Garonne on the invitation of Count Begouen; Altamira, northern Spain; Neuchâtel, Zurich, St. Gallen, and Bâle, Switzerland. Attendance at the annual meeting of the German Anthropological Association marked the close of the term.

SUMMARY

Of the eleven students taking part, about half were unable to remain for the entire term; these were permitted to join for short periods. In addition to the student body, permission was granted thirty-four other persons interested in our work to take part in our program—especially in Brittany and the Dordogne.

Of the fifty conferences given, twenty were by the director and thirty by twenty-eight specialists. To the latter, the director desires to express his deep sense of appreciation. Sixty-three important prehistoric sites and thirty-five museums and special collections were examined. As a result of the twenty-five days of digging, collections were sent to seven contributing institutions. At the end of the season five students remained in the Old World for further study and field work.

PROSPECTS AND NEEDS

The school has demonstrated its ability to give a limited number of students intensive training in prehistoric archeology during the summers. It should be able to follow up these short periods of intensive training by taking the initiative in the location and development of new projects either alone or in cooperation with other existing institutions. During the