omy the writer fails to see much force in the objections raised in the February 18 number of Science to the name "Historical and Philological Sciences" for Section L of the American Association for the Advancement of Science. From the fact that the special committee appointed by the President of the Association recommended that the words "and philological" be dropped it appears that the rest of this name would have been satisfactory to the committee. If this is the case the main objection to the suggested name seems to be due to a fear that the philologists might at some future time "step in and give rise to a heterogeneous, incoherent group of workers, having no interests in common."

It is not much more than a century ago that the philologists opened for mathematical historians rich fields by the discovery of a key to the cuneiform inscriptions of the ancient Babylonians and the discovery of a key to the writings of the ancient Egyptians. The history of the ancient scientific developments is fundamentally connected with the languages of the people of antiquity and hence there seems to be little reason to object to a closer contact between the philologists and the historians of science, especially during the early stages of the development of the history of science in our country. As an instance of the fruitfulness of this contact it may be noted that L. J. Richardson, professor of Latin in the University of California, contributed an interesting article on "Digital reckoning among the ancients" to the first volume of the American Mathematical Monthly after it became the official organ of the Mathematical Association of America in 1916.

During the Chicago meeting of the American Association for the Advancement of Science a good beginning was made towards the encouragement of workers in the history of science in our country. It would seem that only the most serious considerations should be allowed to interfere with the continuance of this encouragement under the influence of a strong national organization. In particular,

differences of opinion as to the most suitable temporary name of the section which aims to unite the workers in the history of science in our land should not be allowed to curtail seriously the efforts of those who believe in such a union. If the modern mathematicians and the modern astronomers could work harmoniously for so many years it seems clear that the historians of science have nothing to fear from the presence of the philologists, especially in so far as these two types of scientists are seeking common ground.

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## FOSSILS—ARE THEY MERELY "PREHISTORIC," OR MUST THEY ALSO BE "GEOLOGIC"?

I am perfectly willing in my proposed definition of "fossils" to accept a substitute for the term "age," as suggested by Professor Field in his contribution to Science for February 4, if only authorities can agree on what it shall be. Of the various terms used for geological and archeological time divisions—era, period, epoch, age-each have been used as designations for the time since the Pleistocene. LeConte refers to this time indifferently as "Psychozoic era," "age of man," and "recent epoch." Schuchert practically agrees with these designations, Chamberlin and Salisbury call it the "human period," Professor Field in the contribution above referred to, speaks of it in one place as the "Psychozoic era," and in another as "the recent geological epoch." For other coordinate or subordinate divisions we read in various works such expressions as "Quaternary period" and "Quaternary epoch" (Brigham), "Neolithic period," "Gunz glacial stage" (Osborn), "Sixth glacial period" (Geikie), "Reindeer period" (Lartet), "Prehistoric period" (Lubbock).

We see in the above variations in usage the usual fate of recommendations of scientific congresses when they attempt to reform and draft into the exacting service of science words that have long led a life of freedom as a part of our common vernacular.

"Prehistoric," however, is not a term of this character. From the time (1851) when it was

first coined by Sir David Wilson in his "Prehistoric Annals of Scotland" to express the "whole period" (age or epoch) "disclosed to us by archeological evidence as distinguished from that known by written records," down to the present it has retained in scientific literature its original meaning. It distinctly refers to a portion of the human period (epoch or age). I fail to find Dr. Schuchert anywhere using it in any different sense. He certainly nowhere "begins the Psychozoic era" with the "historic period" as claimed by Professor Field. In spite of the latter's protest, therefore, I fail to see wherein I have misstated his position. For in between his "mastodon" (mammoth ?) "preserved in the arctic ice," which is admitted to be a fossil and his "leaf buried in the gutter," which is not, there is a vast deal of time, from younger to olderhistoric, prehistoric and geologic-from only the last of which—the glacial or interglacial portion-would traces of organisms be considered fossil. Neolithic man is not fossil; some of the remains of Paleolithic man are fossil. Both are prehistoric.

Recurring to the propriety or the practise of using the term "fossil" in other than its strict scientific sense, the question presents itself: how about the use of other geological terms in analogous senses? In an article in the last Geographical Review entitled "Race Culture and Language," the author, Griffith Taylor, is found applying the terms "inlier" and "outlier" (giving credit to geology for the idea) to certain races in Europe. The former is applied to the Basques, because they constitute an island of ancient people surrounded by younger races, and the latter is applied to the Finns because they are a body separated from the main ethnic group to which they belong, and with which they were once continuous. Most of us, I think, will be disposed to congratulate Professor Taylor on the felicity of these expressions, regardless of how much Professor Field may shake his head over the liberty taken with geological terminology.

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## THRICE TOLD TALES

To the Editor of Science: Referring to the letters of Professor Wood¹ and Professor T. C. Mendenhall² (semper juvenis), I too have a story about the Lick Observatory; and following their lead, hasten to make it public; and then will patiently wait for the various transmutations. Perhaps some one will prove a similar occurrence in the days of Archimedes!

Going up to the observatory in the stage with its load of Saturday night tourists, suddenly one of them asked aloud—"Who was this Mr. Lick, any how? Did he invent the telescope?"

Shades of Galileo! It is time to come forth and be filmed as Professor Mendenhall suggests. In the cast we could have a tourist, same species as Professor Mendenhall's "damned fraud" person. He will be shown asking—"Who is this Mr. Galileo anyhow? Did he build this leaning tower?"

ALEXANDER MCADIE

Blue Hill Observatory, February 16

## AMERICAN PUBLICATIONS AND INTERNA-TIONAL EXCHANGE

In a note just received from Professor Charles Julin, of Liége, he mentions the present unequal international exchange and how difficult it is, in consequence, for the Belgian universities to obtain foreign publications. He says that separata from our American workers will be most welcome, and asks that this suggestion be brought to our students. I think the fact is quite generally appreciated, but it can do only good to bring it again to our attention.

MAYNARD M. METCALF

## SCIENTIFIC BOOKS

History and Bibliography of Anatomic Illustration. By Ludwig Choulant. Translated and Edited by Mortimer Frank. The University of Chicago Press, 1920.

- 1 Science, January 14, 1921.
- <sup>2</sup> Science, February 11, 1921.