

## CORRESPONDENCE OF RAFINESQUE AND CUTLER.

TO THE EDITOR OF SCIENCE: Apropos of the letter from Rafinesque to the Rev. M. Cutler, printed in SCIENCE of May 2 (pp. 713, 714), allow me to point out that another letter from Rafinesque to Cutler will be found in Cutler's 'Life, Journals and Correspondence,' 1888, II. 311-314. This letter is dated Palermo, January 28, 1807, and is signed 'C. S. Rafinesque-Schmaltz, Chancellor of the American Consulate, Palermo.'

ALBERT MATTHEWS.

BOSTON, May 3, 1902.

## MASS AND WEIGHT.

TO THE EDITOR OF SCIENCE: In view of the wide interest at the present time in the subject of measurement and in view of the probable change soon to be made in the national system, I beg to call attention to the great need for a radical change in the title used.

It has long been denoted a system of 'Weights and Measures.' This title, it seems to me, gives much undue importance to the idea of weight which is only a particular kind of a force. The weight idea is of little use except as a convenience in comparing masses at a single location. A standard of weight is of no real value, since weight is only the earth's attraction of a body, and depends upon the latitude, altitude, etc., of the body. Furthermore, since weight is only one of the many measurable quantities, what more is implied in the title 'Weights and Measures' than in the simple term *measurement*?

Commercially, the quantity of matter concerned, *i. e.*, the mass, is the real thing of importance; the balance being merely a convenient apparatus for comparing and so determining the relative values of masses.

I urge due consideration of this topic by all interested, feeling that a change in the wording of an old title is very desirable, and that the proper time to bring this about is the present. I suggest that the title 'Measurement' be employed in place of what seems to me the inappropriate term 'Weights and Measures.'

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## SHORTER ARTICLES.

A SUPPOSED EARLY TERTIARY PENEPLAIN IN THE  
KLAMATH REGION, CALIFORNIA.

IN another paper, now in preparation, the writer will endeavor to show that remnants of an erosion base level equivalent to the late Tertiary peneplain of the Sierra Nevada region may be identified in the Trinity basin, between Trinity Center and Weaverville, in Trinity county, California, at an altitude of about 3,800 feet. While it yet remained a lowland plain, there rose abruptly above it on the west of the Trinity River the serpentine, granodiorite, gabbro and schist peaks of the Sierra Costa Mountains. Climbing to the summit of one of these peaks, we see what appear to be evidences of an older base level, a dissected peneplain.

With all its ruggedness and deep erosion, the Sierra Costa range is virtually a dissected plateau, about fifty miles in length in a direction north of east and twenty miles in average width. The principal peaks attain about the same altitude and none rise prominently above a general level. There is among them the regularity which we should expect from a very old peneplain which has been almost destroyed by erosion. There is nothing in the structure to explain this regularity, as the region is one mainly of huge *massifs* of serpentine, gabbro and granodiorite intruded into each other, with a belt of highly tilted schists on the southwest and limited areas of slate and greenstone toward the northeast.

From a position on the divide between Coffee Creek and its north fork, one of the high mountains between Trinity River and its east fork presents the appearance of an elevated plateau which one imagines to be about one square mile in area. From Grizzly Peak, a prominent mountain standing at the northeastern corner of the McCloud-Pitt projection of the Klamath region, one can look over all the mountains as far west as the Sierra Costa range, and this latter being so far distant, the valleys are not seen, but the peaks coalesce to form a crest-line whose evenness is startling to one used to the irregularity of Klamath topography.