## March 10, 1941

Dr. A. C. Lane 22 Arlington Street Cambridge, Massachusetts

Dear Dr. Lane:

Please accept my thanks for your kind letter and the two interesting little magnets.

My children had a lot of fun with this scientific toy.

I read with great care the separate by C. Diener, "Die Bedeutung der Zonengliederung fur die Prage der Zeitmessung in der Erdgeschichte." This article is a reply to and criticism of M. Neumayr, Jurastudien. III. "Die Phylloceren des Dogger und Malm." Neumayr thought that each sone of the Jurassic represented in the average an equal time interval. With other words, Neumayr thought that each zone represented a time unit. Diener refutes this by showing that the life span or stratigraphic range of some of the zone fossils extends beyond a single zone, and that the zones of central Europe cannot be found in other parts of Europe. The latter argument is based on the fact that the Jurassic of central Europe, the one Neumayr treated, is a condensed section in comparison with the geosynclinal Jurassie of other parts of Europe. It is a common observation that the more complete a stratigraphic section is, the more indefinite zones become; because they are connected by insensible transitions, which on the other hand are absent in the condensed or incomplete sections. I am fully convinced that Diener is right in his arguments. Neumayr had too much of a provincial cutlook on that problem.

I am returning to you by separate mail the reprint of Diener's article. I am rather glad that you sent me this article as it gave me opportunity to review the subject.

We certainly missed you here in Austin at the G. S. A. meeting.

With best regards.

Sincerely yours,

H. B. Stenzel, Geologist

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