

EARTH SCIENCES HISTORY

ART. XXVI.—*Geological Thermometer, shewing the Opinions attributed to various Geologists with respect to the Origin of Rocks.*

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KIRWAN, Geological Essays, 1795.

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WERNER, Theory of Veins, 1791.

LAMARCK, Hydrogeologic.

DEMAILLET, Telluramed.

100	Plutonic Region.	All Rocks affected by heat. The Earth struck off from the Sun by a Comet.
95		
90		All Rocks of Chemical origin igneous.
85		All the older rocks either fused or softened by heat. Metallic Veins injected from below.
80		Granitic Rocks igneous. Granitic Veins injected from below.
75		Some Granite and Sienites igneous.
70	Volcanic Region.	All Trap Rocks igneous.
65		
60		
55		Augite Rocks igneous.
50		Flætz-trap Rocks igneous. Whin-dikes injected in a fluid state from below.
45		Some Flætz-traps igneous; others aqueous.
40		
35		
30	Neptunian Region.	Igneous origin of any Trap Rocks questioned. Whin-dikes contemporaneous with the rocks they traverse.
25		
20		All Rocks (except the Volcanic) deposited from aqueous solution. Metallic Veins poured in from above.
15		
10		
5		Secondary Rocks secreted by animals and vegetables, and formed out of Water.

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(1984)**

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COVER

Our cover is a reproduction from the Edinburgh Philosophical Journal of 1822, (Volume 7, page 376). It's author was Reverend William Buckland (1784-1856) who had this printed originally for use in his lectures at Oxford University. Buckland here appears as a temperate geologist, well distanced from the near-boiling Hutton or near-freezing Werner. The editors of this Journal David Brewster (1781-1868) and Robert Jameson (1774-1854) slightly modified Buckland's version for their publication to the form in which it appears here. The thermometer emphasises the range of opinion to be found in the early practice of European geology and which we hope is reflected a little in this issue of Earth Sciences History.

EDITORIAL

Our cover classification of geological opinion about 150 years ago on a centigrade thermometric scale may have been inspired by the Quaker physician Dr. John Coakley Lettsom (1744-1815)'s earlier Moral and Physical Thermometer which had been published five years earlier by Lettsom's biographer T.J. Pettigrew. In this the advantages of TEMPERANCE through drinking water (Health, Wealth etc.) are instead contrasted with the results of INTemperance from drinking gin, aniseed, brandy, rum and whisky day and night (leading via suicide and the gallows to death etc.)!

Lettsom is not normally today thought of as a geological figure, although he was an important collector of both fossils and minerals. He is also an important symbol of trans-Atlantic co-operation being born in the Virgin Islands and having many links with the New World from his London base. He was assiduous in encouraging such links and contacts between Old and New Worlds. His Thermometer was inspired by an idea from the American physician Dr. Benjamin Rush (1745-1813) and between 1793 and 1796 Lettsom made donations of his great collection of about 700 minerals from all over Europe to Harvard University. This drew from Dr. Benjamin Waterhouse (1745-1846) the encomium "the American public must ever regard Dr. Lettsom as the father of mineralogy in this quarter of the world".

Such links between Old and New Worlds seemed common place at that time despite the distances and difficulties involved in travel. As Joan Eyles here demonstrates (pp. 54-57) even an English provincial like William Smith (1769-1839) had a number of links with the Americas. So too had many other Europeans whose work and influence we need to explore further to make the study of the history of the Earth Sciences more truly international.

Examples that come to mind from England alone include at least two who took direct knowledge of Smith's discoveries with them when they emigrated to America like Moravian minister Henry Steinhauer (1782-1818); in 1815 from the Bath and London circles in which Smith's work was well known or engineer Richard Cowling Taylor (1789-1851) who had been Smith's pupil in 1811 and who again emigrated in 1831. Other geological figures have more tenuous links with the United States through their sons like Robert Bakewell, Jr. (1792-1875) and William Johnstone Bakewell (1794-1861) or Henry Farey (1799-1858), sons of famous geologists who also emigrated. Their significance is that they both took with them family papers which it would be very interesting to trace. Perhaps future collaborative links across the Atlantic (and not only amongst the English speaking sections) can be made to the advantage of all working on the history of the earth sciences? This issue of Earth Sciences History is offered as a link in that chain, with special thanks to the contributors and referees who produced it at a time, historically speaking, of crisis for the advancement of learning.

HUGH S. TORRENS, EDITOR

REPORT OF THE SECRETARY

1983 was a year of growth, as might be anticipated with a new society. At the end of 1983, membership was 343, with members residing in 20 countries. To date, 76 journal subscriptions have been placed. About 20% of membership and journal subscriptions are outside the United States; it is hoped that the quality of the journal will encourage still more substantial growth in membership and subscriptions.

One member, Thomas Schopf, died in early 1984; he will be missed.

During 1983, a nominating committee of Michelle Aldrich, Chairman, Claude Albritton, and Clifford Nelson prepared a slate, following election procedures designed by Past-President Kitts. Hereafter, the President-elect will appoint a member of the examining Committee to serve for three years.

The society is in the debt of the late John Hower, who with President Albert Carozzi organized a drive to help underwrite much of the cost of the George White issue. We are equally in the debt of Millersville State University for preparation of the copy for volume 2, number 2 under the auspices of William Jordan. Without this support the future of the society would have been far more difficult.

During the year, mailing addresses were put on a computer list and checked to correct errors. Mrs. Sue Friedman continues to provide assistance above and beyond the call of duty. Arrangements have been made for manuscripts to fill volume 3, and half of volume 4 is planned. Our new society needs further growth, but one may summarize our position with "so far so good".

Respectfully submitted,

Ellis L. Yochelson
Secretary

Report of the Treasurer

The society completed 1983 with a modest surplus, in spite of tripling the size of the journal over the inaugural year. First, there was brisk sale of volume 1, second, many donations were received, third, some page charges were received, and fourth, considerable volunteer assistance was given. All of these are certain to change in future years. Members of the society and friends of George White are thanked for their donations.

Respectfully submitted,

Ellis L. Yochelson
Treasurer

INCOME

1. Dues	5,498.81
2. Subscription	1,200.00
3. Sale of back numbers	875.00
4. Donations	2,626.00
5. Page Charges	725.00
6. Balance December 31, 1982	3,000.00
7. Interest	344.40

Total Income 14,269.21

EXPENSES

1. Printing volume 2 (two issues)	7,492.15
2. Printing dues and ballot	63.80
3. Total Mailing, mailing-permit, envelopes	236.35
4. Computer time, office supplies, sale of back numbers	1,500.00

Total expenses 9,292.30

Bank Balance as of December 31, 1983 - \$4,976.91