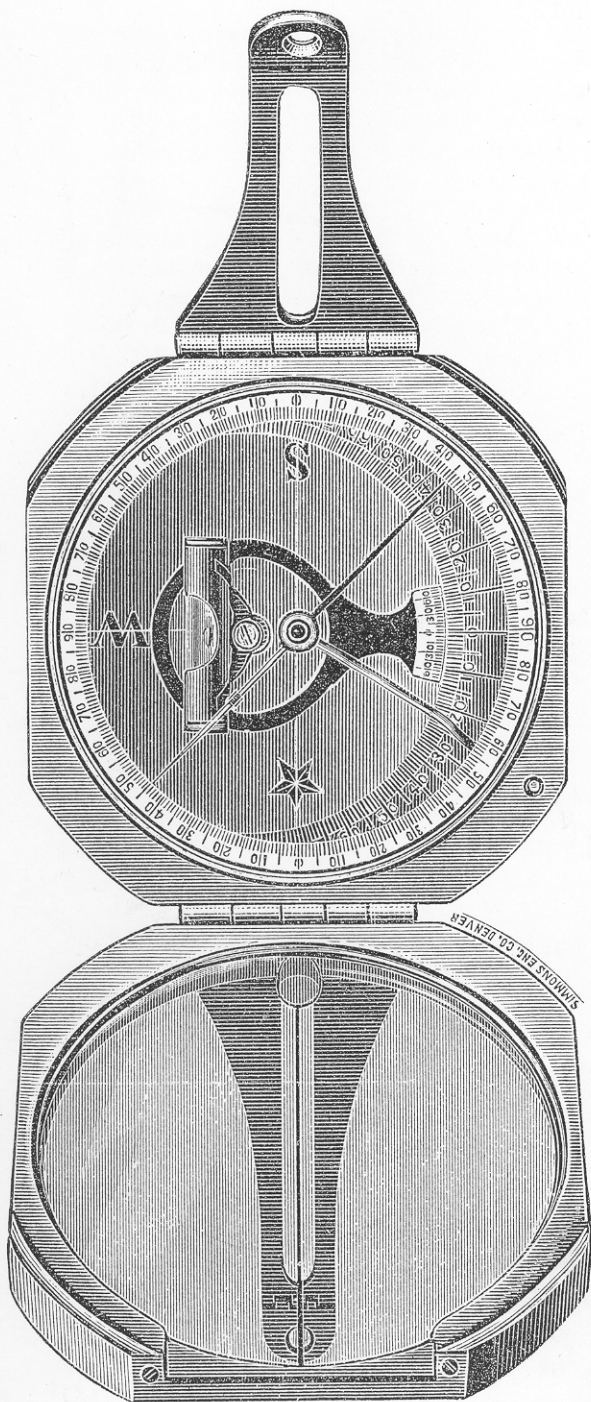


EARTH SCIENCES HISTORY

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David Brunton (1849-1927) Contemplating
Brunton's Patent Pocket Mine Transit
US Patent No. 526,021
September 18, 1894

EDITORIAL

THE VISUAL ASPECT OF GEOLOGY

MOTT T. GREENE
Editor, Earth Sciences History

EARTH SCIENCES HISTORY is fortunate to have received three extremely fine manuscripts which touch on this aspect of the history of the earth sciences. Two of these, submitted independently of one another, focus on the career of that great geologist, Charles Darwin.

David Stoddart takes up the very interesting question of Darwin's limitations as a maker of diagrams and maps—normally an indispensable skill for a field geologist. Sandra Herbert gives us a never-before-published geological manuscript by Darwin, written while he was on board the *Beagle*, a work that also demonstrates his dependence on the cartography of others. Thanks to Professor Herbert's generosity, and that of her institution, U. of Maryland, Baltimore County, ESH presents its first color illustration.

Léo Laporte's paper on G.G. Simpson shows by example some of the many different ways that geologists and paleontologists may use diagrams as representations of thoughts, as well as representations of things (a theme considered by David Stoddart in ESH Vol. 13 #1, 1994 with regard to W.M. Davis's studies of coral reefs.)

EXPERIMENTAL GEOLOGY

Carl-Henry Geschwind here continues and extends his historical investigations of the foundations of North American petrology, with a very convincing explanation of the reasons why economic geologists and other petrologists and petrographers "in the field" took so long to incorporate the results of experimental petrology into their theoretical and practical work. There are some important lessons here—not least that the "introduction of a technique" and the "founding of a field" do not automatically bring a change in professional practice—often for substantial scientific reasons. This meticulously documented study is a wonderful combination of printed sources, correspondence and archival materials and interviews brought together and blended into a single narrative.

GEOLOGICAL RHETORIC

Robert Newman, in an original analysis of the debate on Wegener's theory of continental drift in North

America, shows how professional authority and influence and argumentative technique can be employed to attack a theory that one very much dislikes, but that one can neither disconfirm on empirical grounds, nor dismiss on logical grounds. Here again, archival research is the key—correspondence between Charles Schuchert, Bailey Willis and others—showing the way in which responses to Wegener's work were orchestrated "behind the scenes." The politics of this scientific controversy are particularly interesting, and I would very much like to hear readers' opinions on the strategy and tactics used by Wegener's opponents (and his supporters, for that matter).

VARIORUM MAPS

Peter Lessing has done a fine job in tracking down the successive versions of the Rogers-Hotchkiss maps of Virginia and West Virginia—yet another aspect of the "visual aspect" of geology. Here we see both published versions and working versions, and the ways in which a map, like any idea-bearing document, goes through drafts incorporating different selections of data and different styles of representation, and different ideas.

BRUNTON CENTENNIAL

I'm not one for centennials, ordinarily, but here is one I couldn't pass up: The 100th anniversary of the "Brunton." Many thanks to Peter von Bitter for his appreciative note on Brunton and the evolution of his instrument—an object of great beauty as well as utility.

PUBLICATION DELAYS

My apologies to members and subscribers for the (unavoidable) editorial delays in publication of this number (Vol. 14, #1). As we fight toward a uniform style the process of revision has dragged on and on, though I want to thank and commend my authors for their strenuous efforts in this area! I also wish to thank the many authors who have supported us with page contributions. Vol. 14 # 2 will follow in November 1995, 2 months hence.

SUGGESTIONS FOR CONTRIBUTORS TO EARTH SCIENCES HISTORY

1. *EARTH SCIENCES HISTORY* promotes and publishes historical work on all areas of the earth sciences—geology, geography, geophysics, oceanography, paleontology, meteorology and climatology. The journal honors and encourages a variety of approaches to historical study: biography, history of ideas, social history, and histories of institutions, organizations and techniques.
2. Submit **manuscripts** (original and two copies) to the Editor: Mott T. Greene, University of Puget Sound, Tacoma, Washington, 98416, U.S.A. Please include an **abstract** of approximately 150 words. Contributors should retain a copy for reference, and should include return postage or international reply coupons if they desire return of submitted material.
3. Manuscripts should be **typewritten** or processed on a **letter quality** printer and **double-spaced** throughout, including quotations and notes, on paper of standard size and weight. Margins should be wider than usual to allow space for instructions to the typesetter. All copy should be flush left, with the right hand margin left ragged (unjustified) to maintain even spacing and readability.
4. Revised manuscripts should be submitted in double-spaced hard copy and, whenever possible, on **3.25" diskettes** identifying both the platform (Mac, PC or Other) and the word-processing program used (WordPerfect 3.0, Word 5.1 etc.). All diskette copy should have **formatting stripped out**: it should all be flush left, unjustified, with no special character formats other than underlining (italics) or bold-face.
5. Bibliographic information should be given in **endnotes** (not parenthetically in the text), typed separately from the main body of the manuscript, **double-** or even **triple-spaced**, numbered consecutively throughout the article, and keyed to reference numbers in the text.
 - a. References to **books** should include author's full name; complete title of the book, underlined (italics); place of publication and publisher's name for books published after 1900; date of publication, including the original date when a reprint is being cited; page number cited. *Example*:
Eduard Suess, *The Face of the Earth*, 5 vols., Vol. I (Oxford: Clarendon Press, 1904), p. 17.
 - b. References to articles in **periodicals** should include author's name; title of article, in quotes; title of periodical, underlined (italics); year; volume number, Arabic and underlined (italics); number of issue if pagination requires it; page numbers of article; number of particular page cited. Journal titles are spelled out in full on first citation and abbreviated subsequently. *Example*:
David R. Oldroyd, "The Archaean Controversy in Britain: Part I—The Rocks of St. David's," *Annals of Science*, 1991, 48:407–452, on p. 434.
 - c. Succeeding citations of books and periodicals should use an abbreviated version of the title with the author's last name. *Example*: Oldroyd, "Archaean," p. 446.
6. **Figures** are welcome in illustrating articles. Line drawings should be directly reproducible, glossy prints must be furnished for all halftone illustrations. Where authors elect not to make voluntary page contributions (see 8 below), there is a charge of US \$15.00 for each figure in excess of two.
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