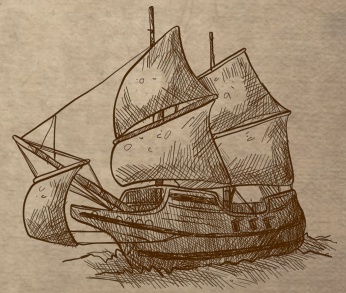
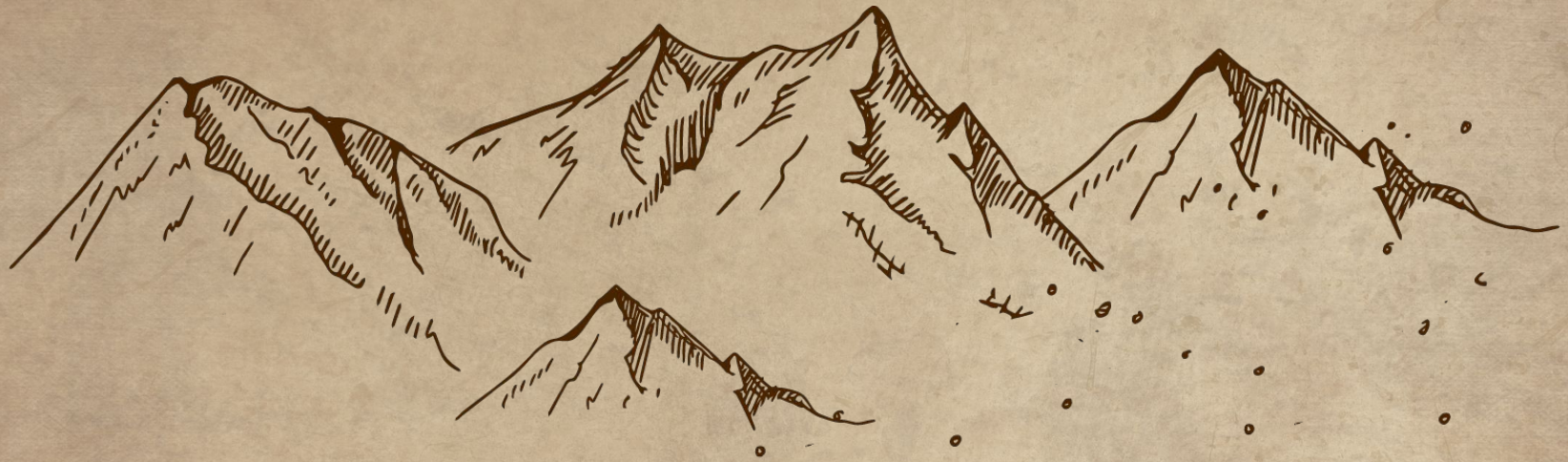
The works of James D. Dana, then and now: An enduring legacy for mineralogy and for libraries

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1 His Life

2 His Correspondents

3 His Works

4 Relevance Today

1. His Life

Date	Event
1813	Birth of James D. Dana
1833	Earns BA from Yale
1836	Obtained post of assistant to Professor Benjamin Silliman at Yale
1838	Wilkes Expedition set sail, returns in 1842
1844	Married Benjamin Silliman's daughter, Henrietta Frances Silliman
1846	Became assistant editor of the American Journal of Science
1850	Secured newly created role of Silliman Professor of Natural History at Yale College, was so busy writing, it wasn't till 1856 he gave his first lecture
1895	Passes away at age 82

2. His Correspondents

Name	Whom	Life span
Berzelius, Jöns Jacob	Swedish chemist	1779-1848
Lyell, Charles	Scottish geologist	1797-1875
Milne-Edwards, Henri	French zoologist	1800-1885
Agassiz, Louis	Swiss born American biologist and geologist	1807-1873
Guyot, Arnold Henry	Swiss American geologist and geographer	1807-1884
Darwin, Charles	English naturalist, geologist, and biologist	1809-1882
Gray, Asa	American botanist	1810-1888
Huxley, Thomas Henry	English biologist and anthropologist	1825-1895
Marsh, Othniel Charles	American paleontologist	1831-1899

3. His Works



- There were lengthy reports to write upon return from Wilkes Expedition. He returned in 1842 and kept writing till 1854. Kept him financially secure.
    - In total it was over 3,000 pages with 178 plates, describing over 200 new species
    - This work was treated by Congress as a display piece, 100 such copies were printed, and only another 75-100 more for sale; Dana secured 25 of these copies to distribute to fellow scientists. About a decade later he published Synopsis of the Report on Zoophytes for scientists who couldn't access the original report
- Hundreds of articles, or communications
- A number of book series: A system of mineralogy (4 edt.); A text-book of geology (2 edt.); Manual of mineralogy (4 edt.)

The System of Mineralogy

- Mineral identification information
- A mineral classification scheme that Dana devised
- Each mineral is assigned a number as a unique ID
- J. D. Dana wrote up to the 5th edition, his son Edward S. Dana wrote the 6th
- 7th was published in 1941
- The most recent edition is the 8th, from 1997



Mineral Identification Numbers

	5th Edt (1868) Flat	8th Edt. (1997) Hierarchical
Quartz	231	75.1.3.1
Halite	138	9.1.1.1
Pyrite	75	2.12.1.1
Diamond	24	1.3.5.1
Graphite	25	1.3.6.2



Diamond



Graphite

Photos from mindat.org

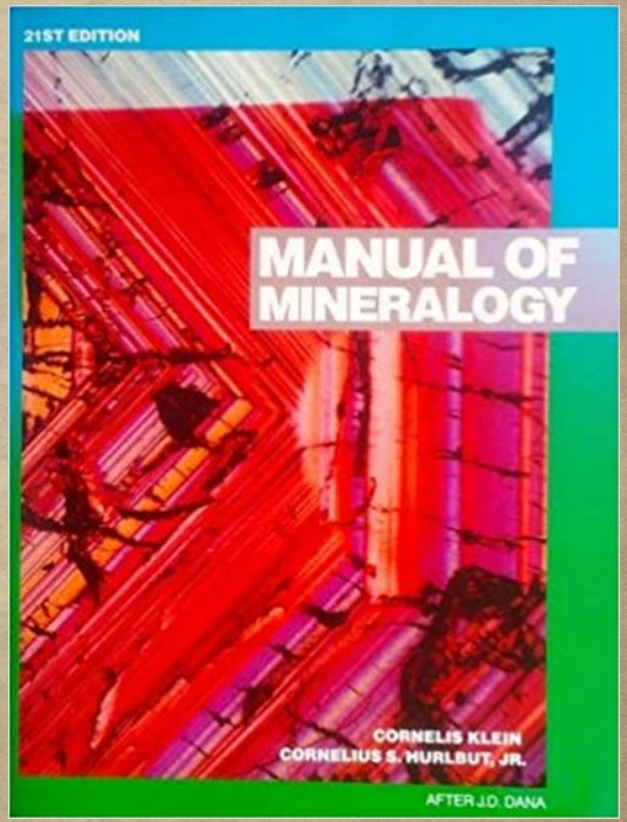
4. Relevance Today

Akin to chemical identifiers (eg. CAS registry numbers), mineral identifiers help solve the problem of names

Often used in mineral collections, rather than literature searches

Still around in the books he began, such as Manual of Mineralogy, a textbook today for mineral identification and classification

21st Edition



After J.D. Dana

Thanks for Listening

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Adams, K. (2023). Mineral identification numbers for librarians, explained through a short history of Dana's classification scheme. Lightning talk presented at presented at STEM Librarians Collaborative, virtual, Jul. 28, 2023.

Adams, K. (2022). Revival of a historic bibliography for a modern bibliographic analysis. Presented at Institute for Research Design in Librarianship's Online Research Conference, virtual, Nov. 10, 2022.

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