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AN ANTARCTIC CLASSIC REVIVED

COLD: THE RECORD OF A SLEDGE JOURNEY. Gould, L. M. 1984. Northfield, Minnesota, Carleton College. 213 p. \$19.95. (Available from the Book Store, Carleton College, Northfield, MN 55057 USA)

Laurence McKinley Gould, born in August 1896, served as a geologist and second-in-command of Richard E. Byrd's first Antarctic expedition, 1928–30. This book, first published in 1931 by Brewer, Warren and Putnam of New York, has been republished by Carleton College, where Gould was for long head of the Department of Geology, and college president 1945–62. It is a reprint of the earlier edition, with an introduction by Carleton's 1984 president, Robert H. Edwards, a foreword by James H. Zumberge, friend and Antarctic colleague of Gould's, and an 11-page epilogue by Gould himself, highlighting Antarctic events since the Byrd expedition, particularly the work of the International Geophysical Year 1957–58.

The book tells first of a geological reconnaissance to the nearby Rockefeller Mountains, 200 km east of the main base at Little America on the Ross Ice Shelf. Gould vividly describes the blizzards that demolished the airplane which had brought his field party to the mountains. It tells also of life in the close quarters of Little America during winter, a time spent mainly in preparing for the field work of the following spring and summer, making sleds and preparing food rations for field parties. Boredom was relieved by comedy skits and plays that spoofed various members of the expedition. Most of the rest of the book describes the sledging journey and geological survey of the Queen Maud Mountains. Gould was exhilarated at being the first to walk on rocks never before seen, except for the pathway sledged through the Oueen Maud Mountains by Roald Amundsen on his South Polar trek in 1911. He discovered new mountains and compared their rocks with those of the South American Andes and New Zealand, and speculated on land connections between the southern continents. His main results were published in geological journals, but this book tells of the adventurer in Gould, the drama of day-to-day survival, and the bonds developed between Gould, his companions, and the dogs that pulled the sleds. As in Amundsen's time, some of the dogs had to be killed as the food rations were depleted, and emotions are apparent in Gould's discussion of this unfortunate but necessary practice. As a geologist, Gould summarizes well the reasons for conducting research in Antarctica and enduring the associated hardships and privations. In the last sentence of the 1931 edition, he stated that he 'had rather go back to the Antarctic and find a fossil marsupial than three gold mines.' There are still no gold mines in Antarctica, but Gould has lived to see the discovery of fossil marsupials, and his speculations on land connections fully justified. (John Splettstoesser, University of Minnesota, St Paul, Minnesota 55114-1057, USA)

ENGINEERING, THE ARCTIC OCEAN AND THE FUTURE

ARCTIC OCEAN ENGINEERING FOR THE 21st CENTURY. Gerwick, B. C. Jr. 1985. Washington DC, Marine Technology Society. 234p, illustrated, soft cover. ISBN 0-933957-00-9.

I wish I could have attended the First Spilhaus Symposium, on which this book is based. Dr Athelstan Spilhaus is a founder member of the Marine Technology Society, author of numerous learned articles and books, cartoonist, inventor—a man of many talents. The Spilhaus Concept, as the volume editor calls it, is a series of symposia modelled on the Gordon conferences in science, but addressing future developments in ocean engineering.