birthplace); Beechey Island (where the Franklin expedition wintered in 1845–46); and Westminster Abbey, with its memorial to Sir John Franklin. In each case, his description of the site adds enormously to the colour of the narrative.

For all the undoubted strengths of Palin's writing, it also reveals a number of weaknesses. For such an experienced world traveller, he is surprisingly confused with regard to compass directions. Thus on page 29 we are informed that on his way south along Prince Regent Inlet, John Ross mapped the west side of Boothia Peninsula—in fact, the east side. Then on page 105, in the Antarctic, James Ross is described as sailing east along the front of the Ross Ice Shelf from Mt. Erebus—in reality of course, he sailed east. Equally surprising is Palin's evident unfamiliarity with standard nautical terms; on several occasions he refers to a ship "mooring up," when from the context it is clear that he means "dropping anchor"; elsewhere in several places, ships are described as "weighing anchor" when clearly "dropping anchor" is meant. His knowledge of ornithology is also evidently limited: at Port Stephens on West Falkland, he encountered the species known throughout the Falklands, confusingly, as "Johnny rook" but refers to them as "crows." The species was actually the Striated Caracara (Phalcoboenus australis), a member of the Falconidae, which bears no resemblance whatsoever to crows.

More disturbing is Palin's limited knowledge of Arctic exploration history. A few examples of his many errors will suffice. On page 40 he reports that the expedition of Captain Constantine John Phipps in 1773 reached the Barents Sea before being blocked by ice; in fact, it reached a highest latitude of 80°48' N, just west of the Sjuøyane, north of Svalbard (Phipps, 1874). On page 245 Cape Walker is listed as the northern point of Prince of Wales Island; in fact it is the northern point of Russell Island, as was established by Captain Ommanney's sledging campaign in 1851. John Ross's ship on his 1850–51 expedition was the *Phoenix*, not the *Mary*; the latter was the small escorting yacht commanded by Charles Phillips. And Cornwallis Island (p. 305) was discovered by Lieutenant William Edward Parry in 1819, not by *Erebus* and *Terror*.

The officers and men of Franklin's expedition, plus the several dozen men who died during the searches for the missing expedition, deserve better.

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ON THE ARCTIC FRONTIER: ERNEST LEFFING-WELL'S POLAR EXPLORATIONS AND LEGACY. By JANET R. COLLINS. Pullman: Washington, State University Press, 2017. ISBN 978-0-87422-351-4. vii + 297 p., maps, color & b&w illus., notes, bib., index. Softbound. US\$27.95.

Ernest de Koven Leffingwell was one of those men who, a century ago, journeyed to the frozen ends of the Earth in the interests of scientific and geographical discovery. But Leffingwell didn't just visit the Arctic; he made it his home for the greater part of a decade. For nine summers and six winters, Leffingwell toiled on the icy northern coast of Alaska. As a naval war veteran, Arctic explorer, and scientist, he deserves to be more widely known.

Leffingwell was meticulous in many aspects of his life, notably in writing his detailed daily journal. His biographer set herself the difficult challenge of creating a readable narrative from this material, also using Leffingwell's surviving letters and published works. In this task she succeeded admirably.

The author, Janet R. Collins, graduated in geography and was a director of the Huxley Map Library at Western Washington University, the northernmost university in the contiguous United States. Retiring in 2008, she spent four years researching Leffingwell to create this book. Her interest had originally been piqued in 1992 while she was backpacking in the Sadlerochit Mountain range of the Arctic National Wildlife Refuge in the northeastern corner of Alaska. The catalyst was a point marked on a map as "Camp 263." This spot turned out to be the location of just one of some 380 camps that Leffingwell pitched during some eight years of Arctic fieldwork, and it was to set in train the genesis of this biography.

Collins begins her account by explaining how, in November 1897, as a 22-year-old graduate student, Leffingwell felt his passion for the Arctic ignited in a lecture hall at the University of Chicago where the great Fridtjof Nansen recounted his recent Arctic experiences—his attempt to reach the geographical North Pole during the 1893–96 *Fram* expedition.

Shortly afterwards, Leffingwell interrupted his studies to serve the United States Navy as a seaman during the 1898 Spanish—American War. As a gunner on the battleship USS *Oregon*, he participated in the decisive naval victory at Santiago de Cuba.

We learn how Leffingwell began his Arctic journey at the age of 26 when he was employed as chief scientific officer on the chaotic 1901 Baldwin–Ziegler North Pole Expedition, but it was the northern coastal region of Alaska that would be the theatre of Leffingwell's greatest achievements between 1906 and 1914.

The coastline had originally been delineated by Sir John Franklin in 1826 during his second overland Arctic expedition. While Franklin had descended the Mackenzie River and "hastily traversed" the coast in two small boats, Leffingwell performed his geodesic survey with an almost obsessive zeal, repeatedly rechecking his measurements and achieving a level of accuracy that many today would find astonishing.

He also produced remarkably detailed geographical and geological maps of around 5000 square miles of the hinterland—a pristine wilderness to this day, it forms the core of the Arctic National Wildlife Refuge. His explanations of permafrost landforms and processes remain authoritative. Sometimes Leffingwell worked with fellow scientists such as Ejnar Mikkelsen, sometime with the company and assistance of local Inupiaq. At other times he travelled and worked in the most desolate and remote terrain with only his dogs for company.

The main body of the book deals with his Arctic career, and eloquently conveys the tremendous drive, dedication, discipline, and courage of Leffingwell the explorer-scientist. This left me wanting to know more about his personality; other than a few nuggets such as his devotion to his dogs and the fact that he could occasionally lose his temper, the account is largely blank in this regard. This void is filled however, in the account of his post-Arctic life, in particular by the extracts from the tender and gently humorous letters written to his future wife Anna.

While others sought glory or courted publicity in order to raise funds for their expeditions, Leffingwell was driven by a single-minded quest for scientific achievement. From a wealthy background, he financed his work largely from private family resources, and this, together with his focus on solely professional publication of his findings, conspired to keep him in the shadows compared with the more showy luminaries of the era.

I noticed one small mistake, presumably arising from a mistranscription of Leffingwell's journal. The author reports that, during the Baldwin-Ziegler expedition, Leffingwell read Sir George Back's account of his river journey to the Arctic sea but misidentifies the Canadian river in question as the Firth River in Yukon, when it must surely be the Fish River, now the Back River of the Northwest Territories and Nunavut.

The cover is an attractive composition with the subject standing in thoughtful pose, dressed in furs and cradling a shotgun. The *America*, the converted whaler that carried him on the Baldwin-Ziegler Expedition, forms the background, with a dog-sled team in between.

The book is well furnished with maps, but, as is very often the case, these can only serve as a taster, because of the constraints of the page size. Fortunately, large-scale images of Leffingwell's superb cartography can be easily found on the website of the United States Geological Survey, along with the full text of his master work, "The Canning River Region, Northern Alaska" (Professional Paper 109, 1919). I found that the pleasure of reading this book was enhanced by having the full-sized maps on the screen in front of me.

In summary, this is a well-written account of an interesting and significant figure of the era, which has been called the Heroic Age of Polar Exploration.

The name of Ernest de Koven Leffingwell deserves to be better known. Janet R. Collins's biography *On the Arctic Frontier* will go a long way towards achieving that end. This book should appeal to enthusiasts of early twentieth-century polar exploration and earth sciences, as well as to the more general audience who may be inspired by the achievements of a dedicated and resourceful individual.

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IN THE FOOTSTEPS OF ABRAHAM ULRIKAB. By FRANCE RIVET. Gatineau, Quebec: Polar Horizons, 2014. 278 p., maps, b&w illus., appendices, bib., index. Softbound. Cdn\$29.95.

Rivet's book provides a comprehensive summary of the tragic story of Abraham Ulrikab and his family, pulled together from a variety of archival sources and presented in a very accessible format. Her goal was not only to present the details of the story, but also to uncover new information regarding what happened afterwards, in the hope of assisting with repatriation efforts for Nunatsiavut, the Inuit territory of Labrador.

In the late 1800s, German exotic animal merchant and menagerie owner Carl Hagenbeck began to include humans in what he referred to as "ethnographic exhibitions." In 1877 he hired a Norwegian sailor, Johan Adrian Jacobson, to recruit Inuit from Greenland to participate in one of these exhibitions, and a family of six joined him on the voyage. They participated in a successful traveling exhibition that visited seven cities in Europe before returning home to Greenland in 1878. Following this success, Hagenbeck and Jacobson decided they needed to recruit more Inuit, only this time the Danish government refused to allow it based on the repercussions of the previous family's voyage. Other authors have speculated that the government felt the trip had negatively affected the family, by returning with