

Index

Sciences in the nineteenth century often had boundaries different from modern sciences with the same name; there was, for example, a substantial overlap between hydrography and oceanography, and, rather than seek to draw uncertain distinctions, I have placed entries for both under the joint heading “oceanography and hydrography.” Similarly, anthropology and ethnology are grouped together under the former heading. Scientific entries are for the most part grouped under major arctic sciences, such as geomagnetism, zoology, and meteorology. Expeditions are listed either under their commanding officer or their ship. Individuals are listed by name, not by title. In some instances, cross-references are given, for example, “Melville, Lord, *see* Dundas, Robert Saunders.” I have followed the spelling of British names given in the *Dictionary of National Biography* (e.g., McClure, McCormick).

- Abbes, H., 403–4
 Admiralty, British, *see* Royal Navy
Admiralty Manual: astronomy, 145–8; botany, 185–6; ethnology, 186–8; geography, 167–9; geology, 170–5; geomagnetism, 148–61; hydrography, 164–6; meteorology, 162–4; mineralogy, 175–6; organization of, 145; origins of, 144–5; tides, 166–7; zoology, 183–5
 Agassiz, Louis, 132, 173, 251
 Airy, George B., 146–8
 Alaska, 8, 42, 118, 178–9, 354–5; purchase of, 244, 341, 355; Stefansson-Anderson expedition, 384
 alcohol, 350, 352
 Ambronn, Leopold, 328
 America, Russian, *see* Alaska
 American Association for the Advancement of Science, 246
 American Museum of Natural History, 381–2, 385, 387, 389, 391, 417
 Amund Rignes Island, 364
 Amundsen, Roald, 13, 363, 373, 393
 Anderson, Mae Belle, 422
 Anderson, Rudolph Martin: and Canadian Arctic Expedition (CAE) preparations, 393–4, 396; CAE results, 416–22; CAE southern party, 392–3, 400, 408–17; CAE zoology, 415; and Stefansson, criticism of, 402–4, 408, 420, 422; Stefansson-Anderson expedition, 381–7; zoology, 383–4
 Antarctic, 141, 156, 198, 312
 Anthropological Institute, 275
 Anthropological Society, 257
 anthropology, 184, 262, 265, 275, 310, 374, 425; and archeology, 220, 229; Boas, 334–7, 374, 380; on Canadian Arctic Expedition, 397–8, 408–14, 421; Prichard, 186–8; *see also* Ethnological Society; Inuit; Jenness, Diamond; race; Stefansson, Vilhjalmur
 Arago, François, 163
 Arctic: circumpolar, 8; definitions of, 7; *see also* meteorology and climate
 Arctic, Canadian: physiography, 12; *see also* arctic archipelago, Canadian
 arctic archipelago, Canadian, 7, 12, 135, 307, 323; geology of, 14–15, 368–71, 374–5; sovereignty, 8, 263, 340–1, 374, 376, 390–2; transfer to Canada, 322–3

- arctic continent, new, 245, 379–80, 388–9, 406, 417–18; and continental shelf, 380, 406–7; new land, 390–2, 398, 407; *see also* Crocker Land
- Arctic Council, 203, 239, 339
- Arctic Ocean: continent in, *see* arctic continent, new; life in, 255; open polar sea, 35, 220, 245, 258, 273, 290; paleocrystic sea, 290
- arctic patrol, Canadian, 376 n162; eastern arctic patrol, 427
- Armstrong, Alexander, 275–6
- Artillery, Royal *see* Royal Artillery
- Association of German Naturalists and Physicists, 314
- astronomy, 221, 251–2, 266, 316, 321, 331; in *Admiralty Manual*, 145–8; sextant, Gambey, 251; transit, Würdemann, 251
- Audubon, John James, 134–5
- aurora borealis, 107–8, 125, 139, 326–7, 331, 339; in *Admiralty Manual*, 163; and electricity, atmospheric, 50, 107, 230, 267; and geomagnetism, 50, 105, 149, 163, 267, 319
- Austin, Horatio Thomas, 210
- Australia, 360 n95
- Austro-Hungarian expeditions, 260, 264, 312; *see also* Weyprecht, Karl
- Axel Heiberg Island, 364, 369, 379
- Babbage, Charles, 142–3
- Bache, Alexander Dallas, 222, 246–7
- Back, George, 96, 198, 239; 1833–5 expedition, 138–40; 1836–7 expedition, 140, 155; Franklin's 1819–22 expedition, 104–7; Franklin's 1825–7 expedition, 124–5
- Bacon, Francis, 25–6
- Baffin, William, 23
- Baffin Island, 21, 253, 263, 309, 315, 327, 374–5
- Baird, Spencer Fullerton, 251, 322, 345–6, 349–50, 353, 355
- Banks, Joseph, 31–5, 36, 39–41, 43, 63–5, 104, 340
- Banks Island, 72, 406–7
- Barlow, Peter, 81–3, 91
- Barnston, George, 343, 346, 349, 351
- Barrow, John: and North Pole, 84, 202; and NW Passage search, 41–3, 79, 103, 198; patronage by, 47, 63
- Barrow, John jr., 239
- Barrow, Point, 215, 315
- Bartlett, Robert, 400–1
- bear, polar, 217
- Beaufort, Francis, 37, 80–1, 84, 154–5, 202, 239
- Beaufort Sea, 12–13, 379; *see also* arctic continent, new; Canadian Arctic Expedition
- Becker, Christopher, 146
- Beechey, Frederick William, 164; and Arctic Council, 239; on *Blossom*, 112, 124, 179, 208; sketches, 68, 166
- Beechey Island, 210, 230
- Bell, Robert, 356–61, 371–2
- Beringia, 15
- Bernard Harbour, 409, 414
- Bernier, Joseph-Elzéar, 376 n162
- Bessels, Emil, 251–3, 307
- Beuchat, Henri, 397, 409
- biology, marine, *see* oceanography and zoology
- Boas, Franz, 187, 334–7
- Bonaparte, Lucien, 134
- Booth, Felix, 86
- Boothia Peninsula, 86, 193, 197, 224
- Borden, Robert, 390–2, 407, 422
- Borden Island, 407
- botany, 73–4, 83, 109, 113–6, 119–36 *passim*, 185–6, 321–2; on British Arctic Expedition 1875–6, 272–3, 289–90; on Canadian Arctic Expedition, 415, 421–2; on Franklin searches, 204, 208, 211, 220–1, 228, 230; and Hudson's Bay Company, 343; lichens, 109, 272; mosses, 114, 127, 272, 321–2; paleobotany, 83–4, 272–3, 295, 300–2; on Sverdrup expedition, 365–7; *see also* phytogeography
- Bradford, William, 260
- Bremen Association for the German North Polar Passage, 312–13
- Briggs, Henry, 23
- British Arctic Expedition 1875–6, 253, 276–8, 295–6, 305–6; and Feilden and Joseph Hooker, 297–301; geology, 283–6; geomagnetism, 278–83; instructions for, 264–8; natural history, 286–90; and scurvy, 290–4, 363–4; paleobotany, 296–7; zoology, 303–5
- British Association for the Advancement of Science, 156, 168, 198–9, 239
- British Museum (Natural History), 340, 343
- Brock, Reginald, 390, 393, 405
- Brock Island, 407
- Brown, Robert (botanist), 73–4, 113, 185
- Brown, Robert (of Campster), 260, 270
- Bruce, W. S., 395
- Bryan, R. W. D., 251
- Bryson, Alexander, 188
- Buddington, Sidney, 252
- Bumpus, Herman C., 381–2, 385, 387
- Byam Martin Island, 213
- Bylot, Robert, 23

- Campbell, Robert, 353
- Canada: arctic expeditions mounted by, 359, 390–2; an arctic nation, 6–7, 12, 243–4, 323, 382; confederation, 244; *see also* arctic archipelago, Canadian; Geological Survey of Canada; Hudson's Bay Company, lands transferred to Canada; Naval Service, Dept. of; sovereignty
- Canadian Arctic Expedition 1913–16/18: *Karluk*, 400–5, 420; northern party, 399–408, 416, 420; origins of, 389–93; preparations, 393–400; results, 416–21; southern party, 408–16; *see also* Anderson, Rudolph Martin; anthropology; arctic continent, new; Jenness, Diamond; oceanography; Stefansson, Vilhjalmur; zoology
- Carnegie Institution, 381, 397
- Carpenter, William, 262
- Carpmael, Charles, 323
- Challenger* expedition, 261
- Chancellor, Richard, 20
- Chipman, Kenneth, 398, 405, 409, 415, 421
- Christie, Samuel Hunter, 81, 149–52
- chronometers, 24, 33, 146–7; *see also* longitude
- cinematography, 398, 415–6
- Civil War, American, 241, 247
- clamm, Ross's deep-sea, 51–2
- Clarke, Lawrence, 347, 350–3
- climate, *see* meteorology
- coal, 5, 119, 375
- Colan, Thomas, 290
- colonialism in science, 2
- colonization, polar, 310, 316
- compass, *see* geomagnetism, compasses
- continent, new, *see* arctic continent, new
- continental shelf, *see* arctic continent, new
- Cook, James, 31–4
- Coppermine River, 100–1, 104–5, 204, 385, 414
- Coronation Gulf, 409, 413, 415
- Cox, John, 398, 409, 421
- Crimean War, 241
- Crocker Land, 379, 389, 417–8
- Croker Mountains, 61, 70
- Crozier, Francis, 200
- Cruikshank, George, 56
- cryoalgae, 56
- Cumberland Sound, 327, 334–6
- Dalhousie, Lady, *see* Ramsay, Christian
- Dallas, Alexander Grant, 352, 354
- Darwin, Charles, 144, 170–5, 177, 183, 234–7, 255–6, 334
- Davis, John, 21
- Davy, Humphry, 50, 55
- Dawson, George Mercer, 361, 371–2
- Dawson, Henry, 324, 326
- Dawson, J. W., 302, 343, 345
- De la Beche, W. H., 173, 175
- Desbarats, G. J., 392, 398, 405
- Devon Island, 368
- Disraeli, Benjamin, 263–5
- dogs, 246, 283; *see also* sledging
- Dolphin and Union Strait, 386, 409, 415
- Dominion Meteorological Bureau, 382, 393
- Douglas, David, 115–16, 129–30, 136, 343
- drawings, 58, 68, 80, 104, 183–4
- Drexler, Constantine, 245, 350–1
- Drummond, Thomas, 114–16, 118–19, 125–9, 136
- Dundas, Robert Saunders, 41, 79
- earth, ellipticity of, *see* geodesy
- eastern arctic patrol, *see* arctic patrol, Canadian
- Eberbing, Joe, 248, 252
- Edgeworth, William, 38–9
- Edinburgh, *see* Royal Scottish Museum; Wernerian Society of Edinburgh
- Edwards, John, 75–6
- electricity, atmospheric, 55, 267
- electrometer, Kelvin's, 267
- Elison, Joseph, 322
- Ellesmere Island: botany of, 365–7; and British Arctic Expedition, 278–91, 294–5, 300–2; geology of, 368–71, 374–5; and Hayes's expedition, 246; musk-oxen, 422–3; sovereignty, 427
- environmental issues, 426–7
- Eskimos, *see* Inuit
- Etheridge, Robert, 298
- Ethnological Society, 256
- ethnology, *see* anthropology
- Evans, Frederick, 264, 299, 316
- exploration, conflict with science, 250–1, 257–8; in International Polar Year, 308–9, 312–13, 315; on Canadian Arctic Expedition, 398–400, 405–6, 419
- Feilden, Henry Wemyss: biography, 269; and British Arctic Expedition (BAE), geology of, 271, 274, 283–6; BAE natural history, 286–9, 303–4, 320, 340; BAE paleobotany, 295, 300–2; BAE results and dealings with Joseph Hooker, 297–301; and Schei, Per, 370–1
- Fisher, George, 75, 80
- Fitton, William, 117
- Fitzjames, James, 199–201
- Flinders, Matthew, 44, 73, 82
- Forbes, Edward, 174, 211, 237, 242, 305

- Forster, Johann Reinhold, 34, 177
 Fort Conger, 318–20
 Fort Rae, 315, 324–7, 348 n43, 353
 Fort Yukon, 348, 352
 Foster, Henry, 80, 142
 Fox, Robert Were, 4, 152–6
 Foxe, Luke, 23
Fram, 362–4, 379, 389
 Franklin, Jane, 203, 209–10, 218–19, 225, 228, 251
 Franklin, John, 78, 129–30, 136, 140–1, 218; 1819–22 expedition, 103–10; 1825–7 expedition, 110–25, 343; last expedition, 1845–, 198–202; fate, discovery of, 224–5, 230–1; and Fox, Robert Were, 4, 154–5; and geomagnetism, 4, 161, 199–201, 215–16; on North Pole expedition (1818), 44; Royal Society of London, election to Council, 143; *see also* Franklin search expeditions
 Franklin search expeditions: and the Arctic Council, 239; Austin, 210; Belcher, 216; cost, financial, 218–19; Hall, 248–51; Inglefield, 211; Kane, 219–23; Kellett, 208; Maguire, 215; McClintock, 212–13, 228–31; McClure, 213–15; Osborn, 217–18; Penny, 210–11; Rae, 224–5; Richardson and Rae, 1847–9 expedition, 203–7; Ross, James, 208; Ross, John, 202–3, 208–10; *see also* Franklin, Jane; botany; geology; Haughton, Samuel; natural history; phytogeography; Sutherland, Peter Cormack
 Fritz, Herman, 326
 Frobisher, Martin, 21, 248
 Frobisher Bay, 21, 248
 fur trade, *see* Hudson's Bay Company
 Gauss, Carl Friedrich, 9, 148, 150, 156
 Gellibrand, Henry, 30
 geodesy: earth, ellipticity of, measurement by seconds pendulum, 35, 54, 75, 80, 83, 246, 252; *see also* Sabine, Edward
 geography: and Canadian Arctic Expedition, 393, 398, 409, 415, 421; and Franklin search expeditions, 207; a science, 3–4, 27, 60, 143, 167–9, 265, 312, 338–9; *see also* exploration, conflict with science
 Geological Society of London, 117, 256
 Geological Survey of Canada, 172–3, 323, 342, 344, 356–61, 371–6; and Canadian Arctic Expedition, 390, 392–3, 398, 400
 geology, 117, 139, 426; in *Admiralty Manual*, 170–6; and British Arctic Expedition, 269–71; and Canadian Arctic Expedition, 392–3, 415, 421; Cape Rawson Beds, 284; fossil mammals, 208; and Franklin's 1819–22 expedition, 105, 109; Franklin's 1825–7 expedition, 120–1, 125; Franklin search expeditions, 211–15, 223, 229–30, 232–4; and *Neptune* 1903–4 expedition, 372–5; and Northwest Passage expeditions, 83, 92, 192; and Sverdrup expedition, 368–71; utility of, 5, 358–60, 372, 375; *see also* arctic archipelago, Canadian; Fitton, William; Geological Survey of Canada; Jameson, Robert; Lyell, Charles; mineralogy; Murchison, Roderick Impey
 geomagnetism, 28, 48, 119–20, 125, 198–201, 247, 307; and British Arctic Expedition 1875–6, 278–82, 292; and Canadian Arctic Expedition, 393; and Carnegie Institution, 381–2; circle, Barrow, 222, 267, 281–2; circle, Fox, 152–6, 159–60, 201, 267, 282, 292; compasses, 81–2; compasses, azimuth, 49, 108, 195, 267; compasses, effects of rock on, 92; compasses, effects of ship's iron on, 70, 82–3, 161, 201; compasses in high latitudes, 65, 70, 103; declinometer, 150, 206, 215, 221; dip, 28, 48, 125, 149–50, 158, 193, 282; dip circle, Casella, 331; dip circle, Nairne and Blunt, 35; and Franklin's 1819–22 expedition, 105, 107–8; and Franklin's last expedition, 4, 198–201, 216; and Franklin search expeditions, 215, 221–2; German leadership in, 157; Gilbert, William, 23, 25; inductor, earth, Edelman, 331; instruments, Smithsonian's, 249; intensity, 50, 81, 151–2, 282; and International Polar Year, 317–19, 321, 324–6, 331–3; international studies, 9, 148, 199, 307; isodynamic lines, 149–58; observatories, arctic, 197, 215, 230, 278–81, 318, 331; observatories, colonial, 156–8, 199; observatory, Dublin, 156, 340; observatories, Gauss's model for, 150, 156, 200–1; pole(s), magnetic, 65, 70, 149, 158, 231, 324, 326, 373; pole, magnetic dip, discovery of, 91, 158; *magnetische Verein*, 148; and, Parry 65–6; term days, 160, 222, 307, 333; variation, 23, 28, 30, 48–9, 120, 149, 193; variation, secular, 29–30, 81; *see also* Fox, Robert Were; Lefroy, John Henry; Sabine, Edward
 geophysics, 313; earth temperatures, 325; *see also* geomagnetism
 German expeditions, 260; *see also* International Polar Year
 Giese, W., 328
 Gilbert, William, 23, 25, 48

- glaciers, glaciology, *see* ice
 Gorbachev, Mikhail, 427
 Gordon, Andrew, 359–60
 Graham, James, 136
 Gray, David, 426
 Great Britain, Admiralty, *see* Royal Navy
 Great Britain, Parliament, 44, 98; *see also* sovereignty
 Great War 1914–18, 416
 Greely, Adolphus Washington, 253, 316–22, 365, 368, 389, 422
 Greenland, 40–1, 237, 252, 259–62, 284, 300–2, 362–7
Greenland Manual, 265–6, 305
 Gresham College, 23
 Grinnell, Henry, 219–20, 246
- Hall, Charles Francis, 248–52
 Halley, Edmond, 29–31, 47, 149
 Hansteen, Christian, 149
 Hardisty, William, 349
 Harris, R. A., 379, 388–9
 Harrison, Edward, 30–1
 Harrison, John, 33
 Hart, H. Chichester, 269, 289–90, 295, 365–7
 Haughton, Samuel, 213, 232–4, 266, 371
 Hayes, Isaac Israel, 220, 222, 245–7
 Hearne, Samuel, 99–103
 Heer, Oswald, 301–2
 Hendrik, Hans, 252
 Henry, Joseph, 232, 249–52, 309; and Hudson's Bay Company, 346–52, 354–5; and Smithsonian, Institution, 344–5
 Henry, William, 158–60
 Herschel, John F., 64, 143, 148, 157, 162, 164, 186, 208
 Herschel, William, 64, 339
 Herschel Island, 383, 385
 Hind, Henry Youle, 243
 Hind, William, 243
 Hood, Robert, 104, 107–8
 Hooke, Robert, 27, 47
 Hooker, Joseph Dalton, 143, 184, 225, 228, 262, 272–3, 340; "Distribution of Arctic Plants," 236–8; and Feilden, 297–300; and paleobotany of British Arctic Expedition 1875–6, 301–2; and phytogeography, 175, 235–6, 255–62, 366
 Hooker, William, 78, 83, 133, 340; and *Admiralty Manual*, 185–6; and botany of Franklin expedition 1825–7, 113–16; and botany of Franklin search expeditions, 204, 211, 228; *Flora Boreali-Americana*, 113–15, 129–30, 135–6
 Hoppner, Henry Parkins, 68, 80
 horizon, artificial, 146
- Howgate, H. W., 253, 308; Howgate expedition, 309–10, 316
 Hudson, Henry, 22
 Hudson Bay, 22, 98–9, 110, 159–60, 241, 356–61, 372–4; railway, 358–9, 375
 Hudson's Bay Company, 98, 191, 242, 341; and exploration, arctic, 99; Dease and Simpson, 192–3; and Franklin's 1819–22 expedition, 103–4, 108; and Franklin's 1825–7 expedition, 117, 342–3; fur trade, 4, 241, 346–7; lands transferred to Canada, 244, 341; and Lefroy's magnetic survey, 159–60, 192; and meteorology, 242, 342, 344, 348, 382; and natural history, 178, 192, 242, 342–4, 345–55; and the Northwest Passage, 193; Rae, John, 193–7; and Royal Navy, 42–3, 190–1; and Royal Society of London, 190–1; and Smithsonian Institution, 344–55; and sovereignty, arctic, 98, 101
 Hudson Strait, 357, 360, 373–4, 376
 Humboldt, Alexander von, 9, 47, 163, 185
 Huxley, Thomas Henry, 143, 183
 hydrography, *see* oceanography and hydrography
- ice, 174, 283–4, 358–60, 383; drift of, 362–3, 389, 400–2, 407; glaciers, 173, 247, 251; glaciology, 313, 426; sea ice, 12–14, 34, 40–1, 65, 72, 232
 ice ages, 15–18, 233–4
 icebreakers, 6, 142, 428
 Ikkukkuak, 414
 Imperial Academy of Sciences, St. Petersburg, 257
 imperialism, 2
 Imperial Polar Commission, Berlin, 313
 Indians, 100–2, 109
 instruments, scientific: on Canadian Arctic Expedition, 393–7, 400 n99; on Cook's 2nd expedition, 33; at Fort Rae in International Polar Year, 324–5; on Franklin's 1825–7 expedition, 117; on Franklin's 1845– expedition, 200; and Hall, 251–2; and Hayes, 246–7; on Phipps's expedition, 35; on John Ross's 1818 expedition, 45; and Parry under Ross in 1818, 66; on Parry's 1821–3 expedition, 76; *see also specific instruments and sciences*
- International Arctic Science Committee, 426
 International Geophysical Year, 426
 internationalism in science, 8–9, 36, 80, 307–8, 310, 312; *see also* International Meteorological Congress; International Polar Year; International Polar Congress; sciences, circumpolar

- International Meteorological Congress, 314
 International Polar Congress, 314–15, 317
 International Polar Year, 307–37 *passim*;
 American expeditions, 314–22, 386–96;
 British expedition, 315, 322–7; British
 inaction, 315; Canadian involvement,
 323–4; German expeditions, 327–34;
 origins, of 9, 310–15
 Inuit, 56, 72, 77, 187, 197, 253, 328; Arctic,
 knowledge of, 4, 86–7, 248, 422; “Blond
 Eskimos,” 386–8; “Central Eskimo,”
 335–6; Copper Eskimos, 101, 413–14,
 419; Coronation Gulf Eskimos, 387, 416;
 diet of, 86–7, 223; explorers, assistance
 to, 78, 87–8, 91, 223, 252, 414; and
 Franklin, reports of his fate, 224–31;
 Frobisher, meeting, with, 21; geographi-
 cal knowledge of, 77, 88; Inuit Circumpo-
 lar Conference, 427; language (Inuktitut),
 77, 88; language, Western Eskimo, 409–
 13; living with, 248–9, 380, 383, 384–5,
 413–14; Siberia, migrations from, 19;
 and sovereignty, 423, 427–8; *see also* Ab-
 bes, H.; anthropology; Boas, Franz; Jen-
 ness, Diamond; Stefansson, Vilhjalmur
 Isachsen, Gunerius Ingvald, 364
 Israel, Edward, 318–19, 321
- James, Thomas, 23
 James Bay, 350, 357, 361
 Jameson, Robert, 40, 78, 83–4, 110, 120,
 135, 170
Jeannette, 362, 379
 Jenness, Diamond, 398, 409–15, 413 n132,
 421–3
 Johansen, Fritz, 394–5, 397, 405, 415, 421
 Jones, Thomas Rupert, 266
- Kane, Elisha Kent, 219–24, 345
Karluk, *see* Canadian Arctic Expedition
 Kater, Henry, 49, 54–5, 64, 67
 Kellett, Henry, 208
 Kelvin, Lord, *see* Thomson, William
 Kendall, Ernest, 118, 121, 125
 Kennicott, Robert, 245, 347–9, 352–5
 Kew Gardens, *see* Royal Botanic Gardens,
 Kew
 King, Richard, 138–9
 Kingua Fiord, 315, 327–31
 Kirby, William, 73, 130, 135
 Koldewey, Karl, 260
 Kotzebue, Otto von, 42, 117–18, 208
 Kumlien, Ludwig, 310
- Lady Franklin Bay, 315–22
 Lancaster Sound, 61, 68, 74
 Lefroy, John Henry, 155, 158–61, 194–5
- Leach, W. E., 56–8
 Leffingwell, Ernest de Koven, 380
 LeRoy, O. E., 393, 406
 Linnean Society, 254–6
 Lloyd, Humphrey, 148, 156–8, 201
 Lockhart, James, 352
 Lockwood, James Booth, 319–20, 322
 Lockyer, Norman, 267–8
 Logan, William, 342, 356
 logs, patent, 54–5
 longitude: astronomical measurement of,
 23, 146, 221; chronometers and, 24, 53–
 4, 76, 146–8; by lunar distances, 24 n19,
 76, 147–8, 206; and lunar eclipses, 24–
 5; at sea, 24, 29, 30, 33; *see also* Harri-
 son, Edward; Harrison, John
 Lougheed Island, 407
 Low, Albert Peter, 361, 372–6
 Lowry, Mrs., 67
 Lucas, Francis, sounding machine, 395, 397,
 401–2
 Lütke, Feodor Petrovich, 257
 Lyell, Charles, 234–5, 256, 305; *Principles*
 of Geology, 170, 172–3, 234, 256
 Lyon, George Francis, 75, 77
 Lyons, Israel, 34
- McClintock, Francis L., 212–13, 228–32,
 242, 370
 McClure, Robert J. LeM., 213–14
 Macdonald, John A., 323, 359–60
 McGill College, 343, 345
 Mackenzie, Alexander, 119
 Mackenzie River, 112, 121, 160, 204, 348,
 381–2
 Mackenzie River district, 346, 349
 McKinlay, William Laird, 393
 McLachlan, Robert, 304
 McLean, William, 354
 MacLeay, William Sharpe, 132
 MacMillan, Donald Baxter, 418
 Macoun, James, 421
 Macoun, John, 373
 McVicar, Robert, 342–3
 magnetism, *see* geomagnetism
 Maguire, Rochfort, 215
 Mamen, Bjarne, 393
Manhattan, 428
 Marine and Fisheries, Department of,
 Canada, 359
 Markham, Albert Hastings, 291–5
 Markham, Clements Robert, 262–3, 265,
 270, 275, 295–6, 315
 Maskelyne, N., 147
 Matonabee, 100
 Maury, Matthew Fontaine, 243
 medicine, 188; *see also* Indians; scurvy

- Meighen Island, 407
 Melville, Lord, *see* Dundas, Robert Saunders
 Melville Island, 70–2, 77, 213, 422
 Meteorological Service of Canada, 323, 382
 meteorology: in *Admiralty Manual*, 162–4; on Canadian Arctic Expedition, 393, 408; and climate, arctic, 15; electricity, atmospheric, 230; on Franklin's 1825–7 expedition, 125; and International Polar Year, 313, 317, 321, 323–5, 331–3; and Kane, 224; on Parry's 1819–20 expedition, 71; and Scoresby, 40, 43; self-registering apparatus, 333; tides, atmospheric, 80–1, 163–4; *see also* Dominion Meteorological Bureau; Hudson's Bay Company; Meteorological Service of Canada; paraselenae; parhelia
 meteors: meteoric dust, 266; meteoric iron, 274
 Meyer, Frederick, 251
 microscope, 183, 204
 Middleton, Christopher, 98–9
 Mikkelsen, Ejnar, 380
 mineralogy, 67, 73, 109, 175–6, 274; *see also* geology
 Mitchell, Thomas, 301 n138
 Monaco, Prince of, 393–4, 397
 Moss, Edward Lawton, 271, 293, 301–2
 Murchison, Roderick Impey: and Franklin's 1825–7 expedition, 117, 119, 121; and Franklin searches, geology of, 211, 215, 225, 231; and geography in BAAS, 168; lobbies for arctic exploration, 254, 256, 258–9; and Royal Geographical Society, 211, 256
 Murray, James, 395, 398, 402
 Murray, John, 395
 musk-oxen, 100–2, 278, 288, 303, 422–3, 426
 Nansen, Fridtjof, 362–3, 389
 Napoleonic Wars, 36–7
 Nares, George Strong, 261, 265, 278, 286, 293–4, 295–8; *see also* British Arctic Expedition
 National Academy of Sciences, U.S.A., 250
 natural history, 142–4; in *Admiralty Manual*, 169–70; on British Arctic Expedition, 269–73, 286–90, 297–300; on Canadian sponsored expeditions, 360; and Cook, 32–3; on Franklin's 1819–22 expedition, 103–5, 109–10; on Franklin's 1825–7 expedition, 119, 124, 126–7; on Franklin search expeditions, 208, 211, 215–17; and Geological Survey of Canada, 356; on Greely expedition, 316, 318–22; and Hearne, 101–2; and Hudson's Bay Company, 118, 342–3, 345–55; on Northwest Passage expeditions, 55–8, 73–4, 78–9, 88; and Phipps, 35; and Rae, 195–6; and Smithsonian Institution, 344–55; winter observations, 71, 180–1, 229–30, 426; *see also* bear, polar; botany; musk-oxen; ornithology; phytogeography; whales; zoogeography; zoology
 Natural History Society of Montreal, 192, 342
Nautical Almanack, 36, 147–8
 Naval Service, Department of (Canada), 392–3
 navigation, techniques of, 22, 23, 202, 203 n19, 121; *see also* geomagnetism, compasses; longitude, latitude
 Navy, Royal, *see* Royal Navy
Neptune, 359, 361, 372–4
 Netherlands, 307–8
 Neumayer, Georg von, 310–12, 314, 327
 neutrality of science, *see* internationalism in science
 Newcomb, Simon, 251
 Noice, Harold, 419
 Nordenskiöld, A. E., 260, 266, 273–4, 308, 362
 Northeast Passage, 21, 308, 362, 428
 North Pole: act of parliament 1745, 98; act of parliament 1818, 44; and Hall, 252; and Nares, 296; and Parry and Barrow, 202; and Peary, 378; and Phipps, 34; useless for science, 257, 309, 373
 North Water, the, 14
 North West Company, 4, 104, 116–17
 Northwest Passage: act of parliament 1745, 98; act of parliament 1818, 44; Amundsen's transit of, 363 n108; definition of, 5 and n20; evidence for, 50; and Franklin's 1845– expedition, 200–1; and Frobisher, 21; ice in the, 6, 12–3, 39; and Ross, John, 45; routes, 12–3; search for, 4, 6, 41–2, 74–5, 79, 98, 124, 140, 258; sovereignty and navigation, 428; uselessness of, 94; *see also* Parry's 1819–20 expedition; Parry's 1821–3 expedition; Franklin's 1825–7 expedition
 Northwest Territories, 158–60, 347–55, 417; *see also* Hudson's Bay Company; Fort Rae
 Northwest Territories Act, 427
 Norton, Moses, 99
 Norway, *see* sovereignty; Sverdrup, Otto
 oceanography and hydrography, 26–8, 426; in *Admiralty Manual*, 164–7; in

oceanography and hydrography, (*cont.*)

- Bulldog*, 242–3; on Canadian Arctic Expedition, 393, 406; in *Challenger*, 261–2; dredging, 70, 184, 271–2, 277–8, 287, 401–2, 415; in *Fram*, 363; and International Polar Year, 313; and Ross, John, 50–2; sea, temperature of, 40, 50, 165; soundings, 28–9, 51–2, 70, 165, 242–3, 256, 278, 406, 418; soundings on Canadian Arctic Expedition, 193–7, 401–2, 406–7, 417; tides, 88, 166–7, 224, 231, 266, 360, 379, 388; *see also* zoology, biology, marine; zoology, invertebrates, marine
- oil, 1
- O'Neill, John, 397–8, 415, 421
- ornithology, 109–10, 130–1, 179–81, 195–6, 322, 425; auk, little, 287; gull, ivory, 56; gull, Ross's, 78 n134; gull, Sabine's, 56; jaegers, 133; knot, 287–9, 318, 322, 367, oology, 350–1, 353; sandpiper, peccatorial, 383–4; swan, trumpeter, 352
- Osborn, Henry Fairfield, 391
- Osborn, Sherard, 217–18, 275, 379
- Ovifak, 274
- ozone, 426
- Owen, Richard, 93–4, 183–4
- paleobotany, *see* botany
- Paramore*, *see* Halley, Edmond
- paraselenae, 71
- parhelial, 71, 163
- Parr, Alfred A. Chase, 267, 293
- Parry, William Edward, 63–5, 113–14, 199, 202, 239; 1819–20 expedition, 67–74; 1821–3 expedition, 74–8; 1824–5 expedition, 79–83; on John Ross's 1818 expedition, 44, 61, 63–7
- Pavy, Octave, 318–22
- Peary, Robert E., 363–4, 378–9, 389, 392, 422
- Pennant, Thomas, *Arctic Zoology*, 66, 102
- Penny, William, 210–11, 241
- permafrost, 325
- Petermann, August, 251, 295, 310
- Petersen, J. C. C., 229, 283
- Phipps, Constantine, 22, 31, 34–5
- photography, 204, 228, 247, 252, 260–1, 301 n138, 316, 415–16; *see also* cinematography
- phytogeography: and British Arctic Expedition, 262, 272, 290; and Brown, 73; and Darwin, 175–7, 234–6; and Hooker, Joseph, 235–8, 340; and Humboldt, 185; and Linnean Society, 255–6; and Simmons, 365–7; Willdenow, 221
- Polar Sea*, 428
- polynyas, 14; *see also* the North Water
- Preble, E. A., 382
- Prichard, James Cowles, 186–8
- Prince Regent Inlet, 80, 83
- professionalization (of science), 250, 256
- Pullen, H. W., 290
- Putnam, Frederick Ward, 378, 380
- race, 186–7, 334–6
- Rae, John, 193–8, 276, 358; Franklin searches, 203–9, 224–5, 231
- Radcliffe, Henry, 246
- Ramsay, Christian, 114
- Rawlinson, Henry, 261, 264
- refraction, atmospheric, 52–3
- Rennell, James, 39, 65
- Richardson, John, 78, 110–11; and Arctic Council, 232; and botany of Parry's second expedition, 78–9; *Fauna Boreali Americana*, 93, 109–10, 129–36, 179–81; flora of North America, plans for, 113–16; and *Flora Boreali Americana*, 135–6; and fossil mammals, 208; and Franklin, 141; with Franklin 1819–22, 104–5, 108–10; and Franklin 1825–7, plans for expedition, 110–11, 342–3; with Franklin 1825–7, 121–6; Franklin searches, 161, 203–7, 344; and geology, 117, 125; on the natural history of North America, 126–36; naturalists, teacher of, 144; and zoology of Back's 1833–5 expedition, 139; on the zoology of North America, report to BAAS, 176–83
- Richter (Berlin), 399
- Rink, Hinrich Johannes, 260, 333 n86
- Rocky Mountains, 119, 127–8, 177–8
- Ross, Bernard Rogan, 346–7, 349–50
- Ross, James Clark, 84–5; Antarctic, voyage to the, 140–1, 144, 156, 198; and Arctic Council, 203, 239; and Fox circle, 155–6; and Franklin's 1845– expedition, 199; Franklin search, 203, 208; and geomagnetism, 148, 198; King William Island, discovery of, 88; on Parry's 1821–3 expedition, 76; pole, dip, discovery of, 91; on John Ross's 1818 expedition, 44; and zoology of Parry's 1821–3 expedition, 83
- Ross, John, 44–5, 65, 67–8, 84–5, 138–9; 1818 expedition, 44–61; 1829–33 expedition, 85–96; Franklin search, 202–3, 209–10
- Royal Artillery, 324, 340; Woolwich, 143, 159, 201, 215
- Royal Botanic Gardens, Kew, 228, 331, 340
- Royal Geographical Society: arctic committee, 261, 265, 275; exploration, lobbying for, 124, 140, 167–8, 254, 261, 339; and the Franklin search, 211

- Royal Navy: exploration, global, 75; and geomagnetism, 157; and Halley and science, 31, 33–4, 43; and Hudson's Bay Company, 42–3; Napoleonic Wars, 36; after Napoleonic Wars, 37; science, alliance with, 28; and science, importance of, 45–6, 68, 142, 144, 201, 265, 338–9; and science, subordination of, 136, 144, 250, 259, 268–9, 274–5, 296; *see also* Arctic Council
- Royal Scottish Museum, 340, 349
- Royal Society of London, 340; arctic committee, 241, 262; and Arctic Council, 239, 339; and British Arctic Expedition, 265, 269, 271, 298–9; and Cook's voyages, 31–3; exploration, lobbying for, 124, 254, 339; exploration, scientific, seventeenth-century, 26–9; and Franklin, 143; geographical science and naval officers, 3, 143, 338–9; geomagnetism 156, 199, 228; and Parry, 74–5; and Royal Geographical Society, 167, 339
- Russia, 42, 75, 79–80, 99, 111–12, 142; treaties with, 8, 118; *see also* Alaska
- Sabine, Edward, 46–7, 75; geodetic observations, 54, 71; and geomagnetism in *Admiralty Manual*, 148–61 *passim*; and geomagnetism on Franklin's 1845–expedition, 200–1, 215–16; and geomagnetism, instruments, 48; on geomagnetism, isodynamic lines, 148, 158; geomagnetism, observations, 66, 71; and geomagnetism, observatories, colonial, 157–8; and the *magnetische Verein*, 148; and Lefroy, 158; and natural history, 56, 73–4; and Parry's 1819–20 expedition, 67–8; and Parry's 1821–3 expedition, 75; on John Ross's 1818 expedition, 47–8; Ross, John, quarrels with 61, 84–5; and Royal Society of London, 142, 239, 258
- Sabine, Joseph, 113, 115
- Schei, Per, 364, 368–71
- Schliephake, W., 328
- sciences, circumpolar, 273, 313
- sciences, inventory, 144, 376
- Scoresby, William, 39–41, 42–4, 63, 82
- Scott, Robert, 324
- scurvy, 71, 78, 92, 275, 291–4, 296–7
- Seeman, Berthold, 208
- Selwyn, Alfred, 357
- Seymour, Edward Adolphus, 258–9
- Sifton, Clifford, 361
- Simmons, Herman G., 365–7
- Simpson, George: and Dease and Simpson, 192–3; and Franklin, 117; and Hudson's Bay Company and meteorology, 342; and Hudson's Bay Company and Smithsonian Institution, 344–5, 247–8, 350–2; and Lefroy, 159, 192; and Rae, 193–7
- Six, James, *see* thermometers
- sledging, 212–13, 223, 290–4
- Smithsonian Institution, 222, 243, 245–6, 249, 343–55
- Smith Sound, 220, 226, 246, 258, 262, 273
- Somerset, Duke of, *see* Seymour, Edward Adolphus
- Sonntag, August, 220–2, 246
- sounding machines, *see* Lucas, Francis; Thomson, William
- sovereignty: American territorial ambitions, 308; British and American, 226, 244; British and Russian, 42, 99; and the Canadian arctic, role of science concerning, 1; Canadian and American, 263, 428; Canadian, and economic resources, 375–6; Canadian, and Hudson's Bay Company lands, 244; Canadian, and Stefansson, 390–2, 399, 407, 416, 423; Danish, 427; Norwegian, 364, 371, 391; *see also* arctic archipelago; arctic patrol, Canadian; Inuit; *Neptune* spectroscopy, 267–8, 325
- Spitsbergen, 22, 35, 257, 260
- Stanley, Owen, 155
- steamships, 85–6
- Stefansson, Vilhjalmur: anthropology and, 378, 380, 382–4, 386–7, 409; and Canadian Arctic Expedition (CAE) northern party, 392, 399–408, 416; CAE origins, 389–93; CAE preparations, 393–400; CAE results, 418–19, 421–2; education, 378; *The Friendly Arctic*, 402–4, 422–3; Jenness, contrasted with, 413; on Mikkelson and Leffingwell expedition, 380; Stefansson–Anderson expedition 1908–12, 381–7; *see also* arctic continent, new; exploration, conflict with science; Inuit
- Stephenson, Henry Frederick, 277
- Stokes, George Gabriel, 267
- Storkerson, Storker T., 407
- Stupart, R. F., 382, 393
- Sutherland, Peter Cormack, 211
- Svalbard, *see* Spitsbergen
- Sverdrup, Otto, 8, 362–4
- Swainson, William, 130–5, 177
- Sweden, expeditions, 260; *see also* Norden-skiöld
- Taktu, 414
- Talbot, Fox, 204
- Taverner, Percy A., 196 n21, 425
- telegraph cable, North Atlantic, 242
- thermometers, 204; Casella, 292; Negretti and Zambra, 394; Six, 50–1, 70, 163; solar radiation, 163

Thomson, William: Kelvin sounding machine, 394, 401–2
 Thomson, Wyville, 261
 Tookoolitoo, 248
 topography, *see* geography
 tree line, 12, 234
 tundra, recent evolution of, 18
 Tyndall, John, 268
 Tyson, George, 309

United States: Arctic, political presence in, 243, 308; boundary debates with, 8, 190; and oceanography, 243; Russia, treaty with, 118; *see also* Civil War, American; arctic archipelago; International Polar Year; sovereignty; whalers

U.S. Army, 317
 U.S. Biological Survey, 417
 U.S. Coast Survey, 222, 246; Coast and Geodetic Survey, 379

Van Allen belts, 326
 Venus, transit of, 32, 99, 258–9, 312
 Victoria Island, 121, 386, 413–14
 Victoria Memorial Museum, 421

Wales, William, 45, 99–100
 Walker, David, 228, 230, 251
 war, *see* Civil War, American; Crimean War; Great War 1914–18; Napoleonic Wars
 Weber, Wilhelm, 148
 Werner, A. G., 83
 Wernerian Society of Edinburgh, 40

Weyprecht, Karl, 310–15, 337
 whales, 40, 70; *see also* whalers
 whalers, whale fisheries, 39, 43, 199, 210–12, 241, 358, 367; American, 124, 142, 225, 241, 309, 375, 383; Swedish, 375

Wheatstone, Charles, 225
 Whewell, William, 166–7, 225, 233
 Whymper, Edward, 259
 Wilczek, Hans von, 314
 Wild, H., 323, 331
 Wilkins, George, 398, 415–16
 Willdenow, Karl, 185
 Winter Harbour, 71–2
 Wollaston, William Hyde, 52
 Wollaston Land, *see* Victoria Island
 Wrangel Island, 402, 423

Yukon, the, 348, 353–4, 361, 417

zoogeography, 18, 175, 176–7, 255, 271
 Zoological Society of London, 183
 zoology, 176–84, 255–67, 271–3, 303–5, 310, 416–17, 419; anatomy, comparative, 181, 183, 184; bear, grizzly, 384; biology, marine, 242–3, 313, 394; caribou, 179; classification, 130–5, 181–2, 345; evolution, 255, 271; fishes, 135, 181–2, 184, 303–4; fox, arctic, 229, 303; insects, 130, 304; invertebrates, marine, 56–8, 93–4, 183–4, 211, 271–2, 319–20, 322, 415; population cycles, 18, 425; survival, strategies of, 18, 425; walrus, 367; weasels, 179; *see also* natural history; oceanography and hydrography