NOTICES 169

Jewish violence before the War, the precarious status of the Jewish communities in 1939, the railway routes to the death centres, the location of resistance groups, the pogroms, the death marches, the escape routes, and many other themes. Most maps include the numbers of dead in each area. As well as maps, the book contains a scholarly historical account of the process of destruction, many photographs (most of them taken by the triumphant German Nazis), and a substantial bibliography. Map-by-map and photo-by-photo the reader is brought graphically face-to-face with mass death—in the uniqueness of the Holocaust, in which an entire people, the Jews, were marked out for complete destruction. Gilbert maps even minor aspects of the Holocaust, such as Switzerland's turning back thousands of Jewish refugees in August of 1942 and the names of dozens of children under four deported to Auschwitz on 17 August 1942. It is all here in the starkness of detailed maps, photographs, and the accompanying text to inform us of the historical geography of the major event of the twentieth century.

Gerald Tulchinsky Oueen's University

**Harriet Brooks: Pioneer Nuclear Scientist.** MARELENE F. and GEOFFREY W. RAYNER-CANHAM. Montreal: McGill-Queen's University Press, 1992. 168 p. ISBN 0-7735-0881-3.

Research in the physical sciences became established in Canada during the two decades preceding World War I. The leading university in this venture was McGill, thanks largely to the generosity of its patron, William Macdonald, who donated the funds to build, equip, and begin operating the Physics and Engineering Building. A first sign of excellence was the contribution made by the faculty and graduate students of McGill University at the 1897 meeting of the British Association for the Advancement of Science, surprising the international assembly at the week-long event in Toronto. The next milestone was the Nobel Prize awarded to Ernest Rutherford in 1908 for his research while at McGill.

Among those who helped to achieve such recognition was Harriet Brooks, one of a remarkable group of graduate students there. Brooks was an undergraduate at McGill before she began research in 1898 under the newly-appointed Rutherford. In 1901 a fellowship enabled her to spend a year at Bryn Mawr for further study; and in the next year she was at the Cavendish Laboratory at Cambridge on Rutherford's recommendation. Then, a year as tutor in McGill was followed by a position on faculty at Barnard College, Columbia University. That vocation was cut short after Brooks announced her engagement; even though she broke it off before submitting her resignation, she was left no alternative because she had signalled an inclination to marry, thus rejecting dedication to her work. Some months spent at the Curie Institute in Paris preceded her marriage to Frank Pitcher in 1907.

That, in brief, was the life of Brooks as a scientist. The authors ask why she has been overlooked, but their answers fail to refute the judgement of contemporaries that the great promise shown by the young Harriet Brooks was cut short by a career as society matron and horticultural enthusiast. While they have made good use of secondary material to describe the hurdles in the path of women in science,

the authors have ignored the other half of the story, namely the situation that encouraged Brooks to start on this path. Here, the secondary material is lacking. Only a short stay at the McGill Archives, however, would have yielded a rich harvest from the University's annual reports and relevant fonds, including the Physical Society; these sources would have provided an introduction to the origins of McGill's scientific research and the remarkable men—for example, H.M. Tory, H.T. Barnes (who succeeded Rutherford), and F.H. Pitcher (Harriet's future husband)—who were the pioneers. The authors seem to have confined their use of these records to correspondence with archivists, a procedure that from experience I would not recommend.

Mario Creet Formerly of Queen's University Archives