

type-B red auroras is debatable. Perhaps the last named expressions will continue to be useful in describing reddening effects connected with great and small heights respectively.

There is little doubt, however, that this very beautifully produced work will be an indispensable reference book for all engaged in auroral physics and that the terminology it introduces will become widely used in the literature.

A. VALLANCE JONES

MAN AND THE CONQUEST OF THE POLES. By PAUL-EMILE VICTOR, Translated by Scott Sullivan. *New York: Simon and Schuster. 1963. 9¼ x 6¼ inches. 320 pages, 32 plates, endpaper maps. \$6.95 (in U.S.A.).*

Paul-Emile Victor has made his mark as an explorer and as a scientist both in the Arctic and Antarctic. As leader of the *Expéditions Polaires Françaises* he has organized and led ventures to both polar regions that have resulted in the accumulation of a mass of data on these parts of the world. The work of the E.P.F. illustrates the new era of polar exploration — the careful, painstaking, often monotonous accumulation of many types of information.

In this book M. Victor shows his appreciation and understanding of the feats of all those polar explorers in whose footsteps, literally and metaphorically, he has trod. Because M. Victor knows the polar regions as few others do, he is able to describe the travels and adventures of previous explorers in a meaningful way. Too often the explorers of the Arctic and Antarctic have been portrayed as feebly fumbling their way north or south into the unknown, ill-equipped both physically and mentally. M. Victor, with sympathy and insight, shows how well equipped many of the expeditions were for their day. He pays a great deal of attention to the influence of scientific and technological improvements on the course of polar exploration, and there is a lot of detail on sledges, rations, and that sort of thing.

M. Victor has packed a great deal

of information into comparatively few pages. The constant moving from north to south, and the piling up of detail may leave the reader a little breathless at times; but the book is well written and well translated, except for an occasional lapse or two. The photographs are not the usual shots of the cold lands, and the book has an excellent index.

Such a book, by an acknowledged polar expert should deserve unqualified praise from any reviewer. On the surface, it would seem to fill a real need — an easily read, comparatively short, authoritative, account of all polar exploration that would obviate the need to resort to the original sources for every detail. Anyone interested in polar exploration who has had occasion to use P. D. Baird's excellent summary accounts of "Expeditions to the Arctic", originally published in *Beaver* in 1949, and recently reprinted, realizes the value of having an accurate account of each northern venture set out in such a way that its main features can be readily seen. Despite M. Victor's book, and others, there is still no good, accurate, and up-to-date account of exploration and discovery in the polar regions between two covers. M. Victor's book errs in relatively minor matters, but this is enough to spoil the book for the specialist.

Two examples will illustrate this. On page 188 M. Victor states that a member of the 1930 expedition that landed on Bear Island discovered Salomon Andrée's corpse in the bottom of the boat. On page 244, describing conditions on the ice after the *Italia* had smashed down on the pack, the writer misspells Pomella, and states that he had a fractured skull, without mentioning that he was dead. He also adds an extra "g" to Biagi's name. The work abounds in such small errors.

This good book will not lead the general reader very far astray, but it is not likely to be highly valued or much used by the specialist. And even the general reader needs the references to other works set out more adequately than has been done here.

JIM LOTZ