The typography is very good, both the choice of type face, weight and size of letters. The names show up well against the background symbols and the use of colour means that the nomenclature does not detract from, or intrude into, the general impression of the map. In some areas the contour numbers are somewhat sparse and extra ones would cut down the search time. Whilst realizing that it is standard cartographic practice to position a contour number with the bottom of the number on the lower side, it does mean that far too many numbers on the map are completely upside down and this is an added reason for increasing their density.

The dot symbol for the spot elevations might be improved if it were slightly larger thus making it more readily distinguishable from the "scree" and "rock" symbols. The use of red for the stations and huts is good. It is a pity though that it was felt necessary to adhere strictly to the network of grid squares in regular units so that the Bow Hut location has to break into the map margin. The thicker line used for the 100 m contour is clearly discernible on the blue and beige but, oddly enough, not obvious on the black contours. A greater varia-

tion of line thickness between the black contours would improve this.

The accompanying booklet is excellent and with its pictures and sketch-maps greatly adds to the value of the map for specialists in other fields and non-academics. There are so many references in the booklet that its value would be enhanced if the grid references to the points on the map were given so that their locations could be accurately determined. Not all map users will find it easy to pick out the "young cirque" referred to at the bottom of p. 10 for example. Again the reviewer has not been able to find, either on the area map in the booklet or on the main map, the name "Viewpoint". Is it "Lookout" on the area map? Nor does the name "Mistaya" occur anywhere except on the area map as "Mistaya Mountain". It would be much clearer if the main map, or sketch-maps, showed all places mentioned, or alternatively, only places named are mentioned in the booklet.

The only omission to the reviewer's mind is that the main map would be of greater use to the layman if the trails were plotted on it. The booklet is written in some detail, giving a comprehensive survey of the area, and must "whet the appetite" of many users. If their interest leads them to explore the area, or indeed if specialists other than glaciologists, wish to

visit the area then the positions of the trails would be of great value.

The real test of this map, however, is whether or not it fulfils its function. If, as one believes, that function is to illustrate the glaciological phenomena and geomorphological detail of the area of the Peyto Glacier, then it succeeds admirably. The cartographic team is to be congratulated on the production and it is hoped that they will be allowed to complete other tasks and put the experience they have gained whilst producing the Peyto Glacier map to further use.

S. HEWITT

CLIFFORD EMBLETON and CUCHLAINE A. M. KING. Periglacial geomorphology. [Glacial and periglacial geomorphology. Second edition. Vol. 2.] London, Edward Arnold, 1975. [x], 203 p. £8.95 (cloth), £4.50 (paper).

Periglacial geomorphology is an extensively rewritten section of the book Glacial and periglacial geomorphology published by Embleton and King in 1968. The original book length of 608 p. has been increased by 22% to 776 p. Glacial and periglacial geomorphology found a place on many students' and researchers' shelves when first published. It was the only book to cover (in the English language) the periglacial environment; whereas, the processes and landform side of glacial geomorphology served as a major supplement to and updating of Flint's 1957 text. The book was thus timely and served a real need.

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In the last nine years there has been a considerable increase in textbooks dealing with one or other of these environments: A. L. Washburn produced his *Periglacial processes and environments* in 1973, and there have been other less substantial publications. The question that has to be answered then is how extensive are the revisions and how do they compare with recent competitors? I do not claim to have thoroughly read all chapters, but I have skimmed through many that are of direct interest.

Periglacial geomorphology consists of seven chapters. It is not as exhaustive as Washburn's Periglacial processes and environments but does cover most of the major topics. The chapter headings are: (1) "The periglacial environment: an introductory survey"; (2) "Frozen ground phenomena"; (3) "Patterned ground"; (4) "Periglacial mass movements and slope deposits"; (5) "The action of snow"; (6) "Cryoplanation, tors, blockfields and blockstreams"; and (7) "Periglacial wind action". In reading and comparing chapters in the Embleton and King volume against those in Washburn's book, I came to the conclusion that these books are not so much competing against each other in the textbook market as they serve as essential complementary reading. Thus the treatment of nivation and periglacial wind action is significantly more detailed in the Embleton and King chapters, but Washburn's treatment of frost action and mass wasting is very exhaustive (and indeed occupies about two-thirds of his book).

Periglacial geomorphology stands the test of recent publications better than its companion Glacial geomorphology. The heyday of research and publication on periglacial geomorphology was in the 1950's and 1960's, and there now appears to be a lull in major research activities. Thus this volume by Embleton and King offers the reader a broad comprehensive survey of the literature that is up to date. It is certainly a book worth purchasing.

J. T. Andrews