

## PART III.

## SLEDGE JOURNEY WEATHER RECORDS.

## INTRODUCTORY REMARKS.

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In the case of every sledge journey one member of each party was detailed to keep a daily register of the meteorological conditions encountered. As frequently, several parties were in the field at once, spaced at considerable distances apart, a comparison of the weather conditions recorded, taken in conjunction with the Winter-Quarter data, supplies a really valuable insight into the regional weather conditions and assists in evaluating the true significance of the records of the base stations. Hence the sledge journey registers of the more important journeys are here reproduced for comparative analysis.

The data herewith submitted includes that of three sledge journeys from "The Grottoes," Queen Mary Land, and of seven sledge journeys from Winter-Quarters, Cape Denison.

The barometer readings on sledge journeys were, of course, all aneroid readings. In some cases these are included for individual comparison. In some cases hypsometric determinations were made periodically as a check on the aneroid. The aneroid readings, however, were recorded chiefly as a means of ascertaining the height above sea-level of the successive locations occupied by the sledge parties. Thus on account of their limited usefulness, the aneroid readings have been omitted from those records connected with expeditions from the Cape Denison Station. They have been retained in the registers submitted from the Queen Mary Land Base, on account of the fact that sledge parties from that Western Base did not, as a rule, travel in really bad weather and consequently frequently spent considerable periods of time weather-bound in the one spot. At such fixed camps the barometric fluctuations have real meteorological significance.

In order to make full use of these sledge journey records, it is necessary to know not only the geographic locations of the observer on each occasion of entry, but, where the route has been other than on sea ice (at sea-level), the altitude above sea-level is also required. As a rule, in these tables neither the altitude nor the geographic position is mentioned. It is intended that the reader should make reference to the extended charts to accompany Vol. I of Series A of these reports, wherein detailed plots of the tracks of sledge parties will appear. In the meantime, the general directions of the chief sledge parties from the Cape Denison Base appear in Fig. 5 herewith; and the same information relative to expeditions in Queen Mary Land is given in Fig. 1 of this volume. Pending the appearance of Vol. I, Series A, further details are available in the maps which have appeared in the popular story of the Expedition's work.\*

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\* "The Home of the Blizzard" published in London in 2 vols. by W. Heinemann. Small edition published by Messrs. Hodder & Stoughton.

The hour of the day, appearing in these registers, refers to the Local Mean Time of the Base Station from which the parties respectively set out; Cape Denison in the one case and "The Grottoes" in the other. In most cases, as in my own register of the Far Eastern Sledge Journey, the loggings are allocated to the nearest half-hour. The temperature is usually stated to the nearest degree Fahrenheit and it is understood to be positive unless preceded by a negative sign. The velocity and direction of the wind is stated, and amplifying details in this regard appear from time to time as occasional entries under "Remarks," where the direction of sastrugi is often noted supplying valuable information as to the direction of the prevailing winds.

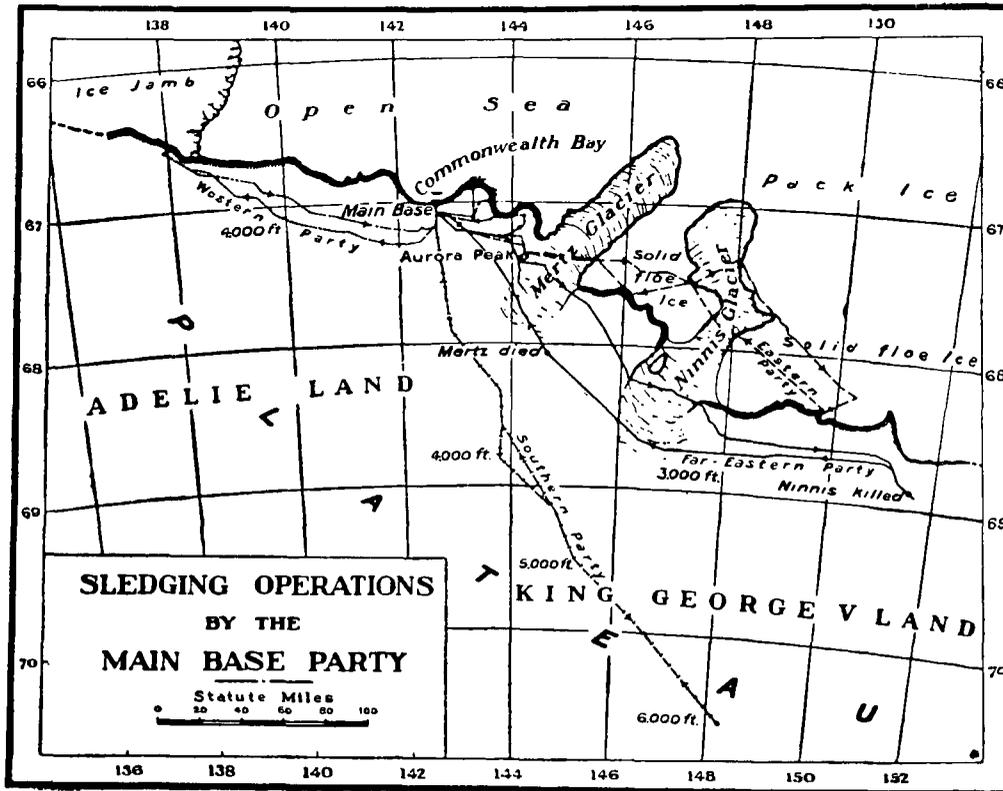


Fig. 5—Map indicating the tracks of the three principal sledge journeys from the Main Antarctic Base at Cape Denison.