

It need scarcely be emphasized that in view of the disproportion between the great extent of the areas represented and the comparatively small number of observed elevations, this contouring can only be roughly approximate. In areas practically flat to the eye, such as the Taklamakān desert and the Lop depression, where the available data are altogether inadequate, no contouring has been attempted. Where mountainous ground could be surveyed only from a considerable distance and its features only roughly sketched, contours have been shown in broken lines.

## SECTION II.—REPRESENTATION OF PHYSICAL DETAILS

The use of approximate contours has apart from other advantages facilitated the rough distinction of those portions of high mountain ranges which bear perpetual snow. They have been shown by contours in a greenish-grey tint instead of brown used elsewhere. In the selection of the contour above which the slopes of mountains have been treated as 'snowy', I was guided solely by the observations recorded at the time on the plane-table and in descriptive notes or photographs. Help from the last two sources was not available in the case of areas which I had not personally visited. Considering that observations were ordinarily possible only at one time of the year, not necessarily the most suitable for the purpose, and that in many cases they were made only on one side of a particular range, the estimated level of the snow-line can represent only a rude approximation. This level varies greatly in the different ranges, sometimes even within the limits of a single map sheet. In the *Notes* of Chapter IV, the varying levels adopted for the snow-line have been indicated for facility of reference.

In this connection I may refer also to the difficulty of distinguishing permanent snow-beds from glaciers where ranges were surveyed only from a distance or without personal supervision on my part. Cases of the latter kind, where I have reason to doubt whether the glaciers shown by the surveyors on their plane-tables were more than snow-beds, have been specially indicated in the *Notes* of Chapter IV. The indication of glaciers by form-lines in blue contours conforms to that in modern topographical maps of the Survey of India.

In accordance with the practice introduced by the Survey of India in its topographical maps since 1908, permanent water-forms, *i. e.* those portions of rivers, streams and lakes which generally contain water, together with their lettering, have been shown in blue. This distinction had not been observed in the surveys of the first and second journeys preceding that change. For making this distinction in the new maps in respect of areas surveyed before 1913 it was necessary to fall back upon my personal records and knowledge of the ground or the recollection of R. B. Lāl Singh. The task was, however, rendered easier by the uniformity of physical conditions prevailing within each of the main regions and by the fact that considerable portions of previously surveyed ground were passed through again on the third journey, though on different routes.

In the case of large beds containing rivers or carrying at times considerable floods I have thought it useful to introduce some minor distinctions. Those portions of a river in which the bed is completely filled for the greater part of the year, have been shown with blue stipple over the whole space between the banks. In the case of portions where the water channel, sometimes very narrow, ordinarily occupies only a part of the bed, the blue stipple has been confined to a strip of varying width. Finally those river-beds which, except at times of great floods, do not contain a continuous water channel, yet in which water can always be found either in pools and springs or as subsoil drainage, have been shown white with both banks in blue.<sup>1</sup> It is

<sup>1</sup> For illustration of these distinctions, see *e. g.* Sheets Nos. 13, 14.