

- vi. Lakes resulting from the irregular distribution of the drift: (1) those lying in boulder clay; (2) those resting on morainic deposits; (3) those situated partly on drift and partly on solid rock; (4) kettle-holes caused by the accumulation of fluvio-glacial sand and gravel round isolated masses of ice during retreat.
- vii. Lakes occupying rock-basins, which may be thus classified: (1) plateau rock-basins, (2) valley rock-basins, (3) corrie rock-basins, (4) those lying along shatter belts due to faults.

By far the largest number of Scottish lakes is included under the last two groups of the above table. There is little room for controversy regarding the origin of the various lakes in Scotland, except those lying in true rock-basins. We will now proceed to consider the probable origin of the latter series in the light of the evidence which has already been presented regarding the geological structure, the topography, and the glaciation of the country, with the aid of the fresh data obtained by the Lake Survey.

#### PLATEAU ROCK-BASINS

The plateau basins are extremely abundant in the coastal belt occupied by the Lewisian gneiss on the western seaboard of Sutherland and Ross, and also in the Outer Hebrides, where the rocks are remarkably bare of drift. They may, however, occur at any elevation. Contrasted with the valley rock-basins they are comparatively small and shallow. Their distribution is very irregular, and altogether independent of drainage. The soundings show that their floors are uneven, and that in some cases, as in the Outer Hebrides, four or five separate basins occur in one lake.

To account for them by differential movement would not only necessitate a special subsidence in each case, but several irregular movements for each lake containing several distinct basins. It is no doubt true, as described in the section relating to geological structure, that the Lewisian rocks are traversed by shear planes and disruption lines which modified the structures of these rocks in pre-Torridonian time; but such movements cannot possibly account for these shallow, irregular depressions. This theory seems to us so improbable as to be quite untenable.

On the other hand, evidence has been adduced in the section dealing with glaciation to show that this coastal belt was crossed by an ice-sheet that filled the Minch and overtopped the Outer Hebrides, whose thickness could not have been less than several thousand feet. Throughout the Lewisian Gneiss plateau there are clear proofs of the moulding of the surface features by glacial action, and of the differential erosion of the rocks by ice. The lake soundings show that weak structures have there undergone the greatest modification, which may be reasonably attributed to the action of this agent. In