

CHAP. XIII. — and the most striking objects are the rolled masses or boulders. Some islands, entirely composed of limestone, were strewed over with these fragments, often very large, of gneiss, granite, and quartz, although no hills composed of them were within some hundred miles.

CONCLUDING REMARKS.

Facts and
inferences.

THE observations made in Cherie Island, Jan Mayen's Island, Spitzbergen, Old Greenland, and the various lands explored by Captains Ross and Parry, supply the following facts and inferences :—

1. That those miserable and almost uninhabited regions abound in primitive and transition rocks ; and that although secondary rocks occupy considerable tracts, still, as far as is known at present, their extent is more limited than that of the older formations ; that the alluvial deposits are not extensive ; that modern volcanic rocks occur only in Jan Mayen's Island ; and that the only traces of tertiary strata were found in the sandstones, clays, and limestones, connected with the new trap-rocks in Baffin's Bay.

Former con-
tinuity.

2. That the primitive and transition rocks of Neptunian origin, now forming islands of various magnitudes, were in all probability at one time connected together, and formed a more continuous mass of land than at present ; and that on these formations were deposited the secondary limestones, sandstones, gypsum, and coal, and upon these again the tertiary rocks, and the still newer *shell-clay* of Spitzbergen : That these various kinds of primary, transition, secondary, and tertiary rocks, and alluvial clays, were raised above the level of the sea at different times through volcanic agency.

Land broken
up.

3. That in the course of time the land was broken up—either suddenly or by degrees, or partly by violent action, and partly by the long-continued agency of the atmosphere and the ocean—into its present insular form ; and that, consequently, the secondary and ter-