## CHAPTER XX

## RECAPITULATION AND CONCLUSION

A BRIEF summary of the principal conclusions to which an examination of the superficial features of Scotland leads may fitly conclude this volume. In any investigation of this kind, there are always two lines of research which must be kept quite distinct—the history of the rocks and that of the configuration which they present at the surface. Each hill and valley, each mountain and glen, has thus a twofold story. There is first the record of the formation of its component rocks, whether these have been laid down layer after layer as sand, gravel, or mud upon the bottom of a former sea, or piled up as shingle along an ancient beach, or drifted as ooze over the bed of a lake; whether formed of the decay of extinct forests, or from the gathered fragments of corals and shells; whether rolled along in the form of liquid lava, or thrown up in showers of volcanic dust and ashes. After we have tried to trace out the succession of events imperfectly chronicled in the rocks, there remains the story of those after changes, whereby the various accumulations that had been piled over each other, and had sunk down for thousands of feet, were fractured, folded, and once more upheaved above the level of the sea into the aboriginal