

Manso valley Dr. Reiche observed how the vegetation changes its character with the increasing dryness towards the east. The epiphytic vegetation abundantly developed in the gloomy damp forests of foliage trees in the lower valley disappears, and forms protected by special adaptations against loss by exhalation (*Lippia*, etc.) take its place. A characteristic form is the prickly cushion of *Mulinum*, which covers large tracts, and spreads from the open Patagonian plateau over the passes of the watershed into the upper valleys. Both the Valle Nuevo and the upper Rio Manso valley present charming and very varied landscapes. The pampa-like fields of grass are broken by small woods of *Libocedrus Chilensis*, generally mingled with *Fagus Dombeyi*, *Lippia*, and pretty clumps of *Maitén*; sometimes one marches for miles over steppes of tall coiron grass (*Festuca*), or wades through swampy meadows (*ñadis*), where *Cyperaceæ* form the chief part of the vegetation.

The fauna of these higher valleys is undoubtedly richer than that of the primeval forests of Chiloë. The spoor of the Andine stag or *Huemule* (*Cervus chilensis*) was frequently met with, and was found as far up as the region of the stunted *Rauí* bush and of eternal snow; pumas also and foxes are numerous. In the heart of the cordillera lives a large herd of wild bulls and cows, which apparently have for tens of years inhabited the mountain forests, totally cut off from Chilian or Argentine *potreros*. Here and there appear slight traces of an earlier settlement of the Rio Manso valley; now, however, the old Indian population has disappeared, and colonists from the Argentine side have only recently penetrated into this remote corner of the cordillera.

It is very desirable that the valley of the Rio Puelo, or, still better, that of the Rio Manso, should be studied with a view to the establishment of a line of communication with the lands on the Chubut or other neighbouring Argentine colonies, as has lately been done in the case of the pass of Pérez Rosales. Our expeditions have demonstrated that the upper Manso valley, as well as the wide pasture lands of the Valle Nuevo, are excellently adapted for agricultural colonies. A road running from the coast of the Boca de Reloncavi through the lower Puelo valley, over the hills skirting the Rio Manso and through the upper valley of this river, would have to cross only one ridge, with an elevation ranging from 4900 to 5250 feet, and would involve no insuperable difficulties of construction either on the ascent or descent. Its continuation through the upper Manso valley, and over the ranges of the watershed, would then be easily accomplished.

At the present time there remain in the Patagonian cordilleras a long series of hydrographical questions still awaiting solution. The farther the explorer advances southwards the more he meets with puzzling problems. But the unveiling of this wild lonely mountain region is hampered by very great difficulties; only now and then does an adequately equipped expedition succeed in laying down a cross section through the whole breadth of the cordillera, while we are still far from a thorough conception of its orographical configuration, based on an exact geological and topographical survey.