

strange that De Saussure should have provided us with a minute description of the rounded, hummocky terrains in the Alps, which he termed "roches moutonnées," and should even have observed the scratches upon these rocks, and yet have failed to associate such phenomena at lower Alpine levels with anything that he had observed in the higher altitudes. On the other hand, realising as we do to-day the extreme complexity of Alpine stratigraphy, it is readily comprehensible why in spite of the extraordinary number of his observations, De Saussure could not construct from them any definite chronological succession of the rock-strata in the Alps. He certainly differentiated the secondary Alpine rocks from the primitive crystalline masses in the central chain, and distinguished the deposits in the plain of Piedmont as Tertiary.

In his conceptions of the origin of granite, schists, and igneous dykes De Saussure followed Neptunistic doctrines. Finally, after much hesitation, he allowed that the sedimentary series had been deposited horizontally and only subsequently elevated and tilted, but he would not agree to the Volcanistic teaching that volcanic force had upheaved the rocks. Looking back on De Saussure's geological writings, it might seem that from their lack of broad generalisations they had failed to exert a direct influence upon the progress of Alpine geology. Yet their faithful observations have made them reliable books of reference for all Swiss geologists to the present day. De Saussure's love of truth and his passion for nature, combined with the extreme modesty of his attitude towards the science of the mountains, have made him an ideal personality in the annals of Alpine geology.

Endless in his energy, insatiable in his desire to accomplish, De Saussure, at the conclusion of his life's labours, writes that he has found nothing constant in the Alps except their infinite variety. With a feeling of sadness he admits the futility of all his efforts to wrest the eternal truths of nature from the majestic peaks of his native land. Then it was that he wrote his charming book of *Instructions to Young Geologists*. He impresses upon them above all to keep their minds free from bias in favour of one scientific opinion or another, to make it their chief aim to *observe* with the greatest deliberation and detail, to omit nothing as unimportant, and at the same time not to lose sight of the possible value of all facts in establishing the fundamental principles of the science.