

*Philipsburg Group.* — The Georgia slates are followed in regular order by at least 1,400 feet of light black slates, containing, now and then, large lenticular masses of limestone, often called in Vermont *Dove Marble* or *Eolian Limestone* of Hitchcock. In some places, as at St. Albans Bay, Smith Kiln, and Swanton, the lenticular masses are isolated, and form small domes or isolated hills in the middle of the slates; while at Highgate and Philipsburg, the slates, on the contrary, are almost lost in the middle of numerous very large lenticular masses of limestone closely packed together, with only a sort of network of slates enclosing them, and forming, as it were, a frame or border.

From the mouth of Rock Creek near Highgate Spring, as far as Bedford, that is, for a distance of ten miles, and two miles in width, from the lake shore to Four Corners on Moore's Corner, we have an accumulation of lenticular masses originating most probably from mineral springs charged with abundance of carbonate of lime, carbonate of magnesia, and oxide of iron. This locality presents a most interesting study to the geologist and zoölogist, and is, perhaps, with Point Lévis on this continent, and Bruska, Gross-Kuchel, near Prague, in Bohemia, one of the few favored spots for the study of that vexed question, so often talked of, yet so little understood, *the origin of species*. Yes, my dear M. Barande, we have here at Philipsburg that curious phenomenon which you were the first to discover in Bohemia sixteen years ago, and which you are at present engaged in defending against the attacks of the official geologists of the Austrian Geological Survey. We have what you will call *Colonies of the Second Fauna* enclosed in the strata containing the *Primordial Fauna*; and what I propose to call *Precursory Centres of Creation*; that is to say, centres in which the Creator has made to appear *forerunners* (*avant-coureurs*), species, or generic types, which obtain their full development only during the following great period. Hitherto the study of these lenticular masses near the boundary-line of Canada and the United States has been limited to the immediate vicinity of Philipsburg and Four Corners; future researches will no doubt disclose other localities both in Canada and Vermont. For the present, I have tried to give on the *abstract section* the part of the country between Philipsburg and Four Corners, in following the road to Frelighsburg or exploring the different paths which lead to Eaton's barn and Blanchard's farm. At Four Corners the