At the head of Dead Man's Bay is a hill of gneiss, a crystalline rock that through the agency of great pressure has taken on a sort of stratified character. Cartwright's Point and Cedar Island are composed chiefly of this kind of rock. This is representative of a large class of crystalline schists and gneisses which probably encircle nearly the whole globe. Much controversy has been waged in the past as to the origin of this class of rocks. We are sure of the origin of the other two classes, the igneous and the sedimentary, for we see them in process of formation to-day, but of this one we are not sure. The consensus of opinion is that it was originally an igneous or a sedimentary rock and has been brought to its present much altered condition by the forces of nature, heat, aqueous solutions and pressure, the last being the chief agent in producing the banded structure. This class is therefore designated by the term metamorphic.

In contact with the gneiss at the head of Dead Man's Bay is a boss of red granite composed chiefly of the minerals quartz, feldspar and hornblende. The quarrying operations that have been carried on enable one to get a splendid view of the jointing of this igneous rock. Along many of the joint planes are found small deposits of such minerals as magnetita, pyrite, tourmaline and fluorite, which were probably deposited from solution and which therefore represent the incipient stages in the formation of mineral veins.

What is the time relation of these three rocks found in Barriefield? Have the sedimentaries been laid down on the other two, or has one or both of the others been intrusive in the sedimentaries, and which is the older, the granite or the gneiss? Fortunately, exposures are found which enable us to answer these questions.

An examination of the gneiss reveals the fact that since it acquired its gneissoid structure it has been contorted and broken, and the cracks formed are filled with a lighter colored granitic rock similar in character to the neighboring boss of granite. These small dykes thus formed frequently enclose angular fragments of the gneiss and some of them can be traced to their connection with the larger mass of granite. The natural conclusion is that the granite was intruded in a magmatic condition into the gneiss, the force of intrusion fracturing the latter and causing cracks into which a portion of the magma flowed and solidified. The relation of the stratified rocks to these can be determined by an examination of the contacts. These are best seen along the shore of Dead Man's Bay. The lowest layer of the limestone, the basal conglomerate, is seen to include large fragments of gneiss or of granite similar to the rock on which it lies. The granite and the gneiss must therefore be older than the limestone and the latter was deposited on the former; moreover, a long interval of time must have elapsed between the granite intrusion and the deposition of sediment for the granite inclusions are pebbles and bolders nicely rounded by long continued wave action.

Other interesting phenomena might be described such as glaciation and Pre-Cambrian weathered surfaces, but the more striking features of one section of our museum have been set forth. No number of cabinet specimens