slates, still dipping westward. At a place called "The Great Chain" they have a dip of about 60° to the west, and cross the stream with a strike about north and south, forming a series of falls and rapids. With these sandstones are associated chloritic and talcose slates, conformable with them. At this point, besides the two plants above named, I noticed, *Allium Schœnoprasum? Sisyrinchium anceps, Diervilla trifida, Aralia nudicaulis, Streptopus distortus, Linnæa borealis, Clintonia borealis, Iris verisicolor, Cornus Canadensis, Platanthera dilatata, Archangelica, Achillaea, Lactuca elongata, Thalictrum dioicum, Apocynum androsæmifolium, Oenothéra chrysantha, Stellaria,* and *Aspidium spinulosum.*

A few miles below the Great Chain, more laminated sandstones cross the stream, with a strike N. 40° W., with a nearly perpendicular dip, highly silicious, and filled with crystals of sulphuret of iron. They soon change their course, taking a strike N. 20° E., and are much folded and contorted. With these are associated ferruginous slates, and the whole have a reddish appearance from the oxidation of their contained iron. The stream is narrow, and passes rapidly between the rocky banks.

Still descending, beds of impure iron-stone and ochre, with micaceous iron, appear on either shore, being of a soft and crumbling character. Several of the cliffs exposed upon the shore are of a bright red color. They may be seen on the left bank to overlie nearly horizontal beds of ferruginous sandstone, with small conglomerate and pebble beds, these latter in turn resting upon granite. The rocks appear to be much rounded and water-worn, even at an elevation of ten or fifteen feet above the present level of the river. The reddish beds seem to lie in a great basin formed by the underlying granite, or rather the latter forms a series of anticlinal axes, the slate and sandstone beds reposing on their flanks.

The granite beds are divided into huge blocks by parallel vertical joints, and thus present upon their river face the appearance of a wall. Their surfaces are perfectly flat; and those which form the river bed, being polished by the wear of the current, look like a massive pavement. It is in passing over these pinkish granites, that the river is wearing out the curious channels of the Pabineau Falls.

The granites at the falls are distinctly jointed, the line of the