lines and other crystallized minerals which sparkle in the bosom of the primitive rocks declare a common birth.*

True it is, that creative power would call the rocks into being, without any arranging process in their parts, but no analogy countenances the truth of such a supposition, and neither moral nor physical reasons oblige us to admit so improbable a supposition.

Who has contemplated the stupendous garnets of Fahlun—the equally gigantic quartz and felspar crystals of the Alps—the more delicate emeralds of Brazil and Ethiopia—the variously colored tourmalines of Chesterfield, and Goshen, Mass., and of Paris in Maine—the fluor and calcareous spars of Derbyshire and Cumberland—the idocrases of Vesuvius, and the rubies and sapphires of Ceylon and other regions of India, the bubbles of air included with water and other fluids in quartz—thc fibres of amianthus—the crystals of titanium—the filaments of native copper and silver shut up in the same mineral—the successive crystallizations of galena—sulphate of barytes—calcareous spar—quartz and fluor spar, often included in the same group—the splendid amethystine and other geodes—little grottoes lined with polished and beautiful geometrical figures—who has seen all these things—the ornaments of our cabinets, and has doubted that they were as truly the results of crystallization, as any of the products of art, which are formed in our laboratories?

Crystallization is indeed not exclusively the attribute of primitive regions; but in such regions it is eminently conspicuons, and if we find crystals in the productions of every geological age, we are thus furnished with proof, that these agencies continued to operate, although with less frequency and energy, through all succeeding periods, and that they have not ceased even in our own times,† for mineral crystals are, every moment forming around us.

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* Prof. Hitchcock, in his geology of Massachusetts, considers the simultaneous and mixed crystallization of the different minerals in granite, as affording decisive proof of its igneous origin, since, as he avers, aqueous solutions of different substances crystallize, always successively, and never in promiscuous confusion.

† I have obtained crystals of calcareous spar—of sulphate of barytes and of sulphate of lime and some of them repeatedly as accidental results in chemical processes: I have seen even quartz crystals form rapidly under my eye, and others have cited them as slowly produced with regularity and beauty, from the fluoric solution of silex. Crystals of pyroxene—specular iron, titanium and other minerals have been produced by volcanic and furnace heat; more than forty species of minerals have been observed in the slags of furnaces, and white pyroxene has been produced by the action of fire upon the constituents of this mineral, and after fusion, it has re-crystallized, in the same form.—*Am. Jour. Vol.* 10. *p.* 190.