

Cross as a man unconnected with any scientific body, who had actually made no less than twenty-four minerals and even crystalline quartz. The audience regarded him with astonishment, and their feelings were wrought up to a high pitch when they heard himself relate his experiments and their results. He owned to having made crystals of quartz and arragonite, carbonate of lime, lead, and copper, sulphurets of lead, iron, copper, silver, and antimony, besides more than one hundred other artificial minerals. He considered it possible to make even the diamond, and expressed his belief that every kind of mineral could yet be formed by the ingenuity of man.

The crystal producing operations were the subject of nearly unmixed admiration, and for some months Mr. Cross stood on the pinnacle of fame as a great and original discoverer in science. People spoke of his making crystals, without either seeing that he in reality only arranged the conditions under which nature did the work, or imagining that such creative effort as they attributed to him involved any impiety. It was by and by announced, and unauthoritatively, that while Mr. Cross was experimenting with some highly caustic solutions out of contact with atmospheric air, there had appeared, as if gradually growing from specks, between the poles of the voltaic circuit, certain insects of the *acar*us tribe. The truth was this: Mr. Cross had contrived a little apparatus for the deposition of crystals of silica in a lump of stone, through the agency of a voltaic trough. After the lapse of a fortnight he observed a few small, whitish specks on the surface of the electrified stone. On the eighteenth day these specks had expanded, and from the surface of each seven or eight filaments were thrown out, but without exciting any surprise on the part of the observer, for embryo minerals exhibited similar phases in their passage to the crystallized state. Soon, however, the swelling specks assumed the aspect of insects standing erect on the bristles which formed their tails, and on the 28th day Mr. Cross distinctly saw them move their legs. Imagine the surprise of an experimenter who had come looking for a simple mineral but had found—life! There could be no mistake about the matter. The creatures were no mocking in-