ascribed to the attraction of the poles.[12] "As the substances evolved in cases of electro-chemical decomposition may be made to appear against air,[13] which, according to common language, is not a conductor, nor is decomposed; or against water,[14] which is a conductor, and can be decomposed; as well as against the metal poles, which are excellent conductors, but undecomposable; there appears but little reason to consider this phenomenon generally as due to the attraction or attractive powers of the latter, when used in the ordinary way, since similar attractions can hardly be imagined in the former instances."

Faraday's opinion, and, indeed, the only way of expressing the results of his experiments, was, that the chemical elements, in obedience to the direction of the voltaic currents established in the decomposing substance, were evolved, or, as he prefers to say, *ejected* at its extremities.[15] He afterwards states that the influence which is present in the electric current may be described[16] as *an axis of power*, *having* [at each point] *contrary forces exactly equal in amount in contrary directions.*

Having arrived at this point, Faraday rightly wished to reject the term *poles*, and other words which could hardly be used without suggesting doctrines now proved to be erroneous. He considered, in the case of bodies electrically decomposed, or, as he termed them, *electrolytes*, the elements as travelling in two opposite directions; which, with reference to the direction of terrestrial magnetism, might be considered as naturally east and west; and he conceived elements as, in this way, arriving at the doors or outlets at which they finally made their separate appearance. The doors he called *electrodes*, and, separately, the *anode* and the *cathode*;[17] and the elements which thus travel he termed the *anïon* and the *catïon* (or *cathïon*).[18] By means of this nomenclature he was able to express his general results with much more distinctness and facility.

But this general view of the electrolytical process required to be pursued further, in order to explain the nature of the action. The identity of electrical and chemical forces, which had been hazarded as

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[12] *Researches*, Art. 497. [13] *Researches*, Arts. 465, 469.
[14] 495. [15] 493. [16] 517. [17] 663.
[18] The analogy of the Greek derivation requires *catïon;* but to make the relation to *cathode* obvious to the English reader, and to avoid a violation of the habits of English pronunciation, I should prefer *cathïon.*