

*singular instances.* And the history of magnetism affords a beautiful comment on his remark on instances of this sort. "Nor should our inquiries," he observes, "into their nature be broken off, till the properties and qualities found in such things as may be esteemed wonders in nature are reduced and comprehended under some certain law; so that all irregularity or singularity may be found to depend upon some common form, and the wonder only rest in the exact differences, degrees, or extraordinary concurrence, and not in the species itself." The discovery of the magnetism of nickel, which, though inferior to that of iron, is still considerable; that of cobalt, yet feebler, and that of titanium, which is only barely perceptible, have effectually broken down the imaginary limit between iron and the other materials of the world, and established the existence of that general law of continuity which it is one chief business of philosophy to trace throughout nature. The more recent discoveries of M. Arago (mentioned in 160.) have completed this generalization, by showing that there is no substance but which, under proper circumstances, is capable of exhibiting unequivocal signs of the magnetic virtue. And to obliterate all traces of that line of separation which was once so broad, we are now enabled, by the great discovery of Oersted, to communicate at and during pleasure to a coiled wire of any metal indifferently all the properties of a magnet;—its attraction, repulsion, and polarity; and *that* even in a more intense degree than was previously thought to be possible in the best natural magnets. In short, in this case, and in this case only, perhaps, in science, have we arrived at that point which Bacon seems to have understood by the discovery of "forms." "The *form* of any nature," says he, "is such, that where *it* is, the given nature must infallibly be. The form, therefore, is perpetually present when that nature is present; ascertains it universally, and accompanies it every where. Again, this form is such, that when removed, the given nature infallibly vanishes. Lastly, a true form is such as can deduce a