tific' deception in the theory that 'all bodies are attracted or gravitate with a force according to the inverse ratio of the square of the distance,' and not of *like* substances being magnetically attracted according to their condition and position."

Does "R" mean to call Newton's law of universal gravitation a "scientific deception?" (and by the way, his statement of the law is very defective.) Now I don't believe that Newton's law is a deception of any kind, nor do I see how "R" infers such a conclusion from his previous remarks. The law was clearly demonstrated by the great Sir Isaac nearly two hundred years ago, and has been confirmed by the daily experience of all physicists ever since; and I don't feel like giving it up without some better proof of its inaccuracy than "R" gives in his "foregoing facts."

Again, what does he mean by the last clause of the paragraph : "and not of like substances being etc. ?" Does he mean this as a law to be substituted for Newton's law, because this is much superior and the other is defective and inadequate? Such would seem to be the case; but the thing is too absurd. Gravitation is . a force affecting all bodies, at all distances, at all times, and according to a known fixed law. Magnetism is another force quite distinct from Gravitation, affecting only a very few substances, iron, nickel, oxygen, etc., and its laws are not yet ascertained with certainty. "R" gives a statement that "like substances are magnetically attracted according to their condition and position," which contains no new truth, and which is no law at all. and is in every way vague and indefinite. This statement, made concerning one natural force, he would substitute for a definite demonstrated law of another totally distinct force. The whole thing is absurd. I cannot think that I have caught the meaning intended by "R" when he wrote the unfortunate paragraph; yet I can take no other meaning from it than I have taken: no doubt the paragraph was written carelessly. Perhaps the author will favor us with an explanation of the mysterious paragraph which seems to threaten the whole modern system of Astronomy, not to mention Molecular Physics, and the many other departments of knowledge, which are based upon that great delusion that "All bodies gravitate with a force proportionate directly as the mass. and inversely as the square of the distance." V.

Снатнам, Aug. 8, 1873.

ATOMAGNETISM versus GRAVITATION.

NEWTON'S so called "Law of Gravitation" was not an error so far as his knowledge could then reach, or as regards certain heavy substances falling towards the earth; but it is deceptive when considered as an elementary law affecting the nature of all bodies. It is thus calculated to mislead those who, in our day, with increased knowledge of nature and natural law, still believe in it.