The knowledge which we possess of the quantity of this increase, and of all the numerical relations of the law of in-

may be expressed at Paris by 1·3482, in Mexico by 1·3155, in San Carlos del Rio Negro by 1·0480, and in Lima by 1·0773. When I developed this law of the variable intensity of terrestrial magnetic force, and supported it by the numerical value of observations instituted in 104 different places, in a Memoir read before the Paris Institute on the 26th Frimaire, An. XIII. (of which the mathematical portion was contributed by M. Biot), the facts were regarded as altogether new. It was only after the reading of the paper, as Biot expressly states (Lamétherie, *Journal de Physique*, t. lix., p. 446, note 2), and as I have repeated in *the Relation Historique*, t. i., p. 262, note 1, that M. de Rossel communicated to Biot his oscillation experiments made six years earlier (between 1791 and 1794) in Van Diemen's Land, in Java, and in Amboyna. These experiments gave evidence of the same law of decreasing force in the Indian Archipelago. It must, I think, be supposed, that this excellent man, when he wrote his work, was not aware of the regularity of the augmentation and diminution of the intensity, as before the reading of my paper he never mentioned this (certainly not unimportant) physical law to any of our mutual friends, La Place, Delambre, Prony, or Biot. It was not till 1808, four years after my return from America, that the observations made by M. de Rossel were published in the *Voyage de l'Entrecasteaux*, t. ii., p. 287, 291, 321, 480, and 644. Up to the present day it is still usual, in all the tables of magnetic intensity which have been published in Germany (Hansteen, *Magnet. der Erde*, 1819, s. 71; Gauss, *Beob. des Magnet. Vereins*, 1838, s. 36–39; Erman, *Physikal. Beob.*, 1841, s. 529–579), in England (Sabine, *Report on Magnet. Intensity*, 1838, p. 43–62; *Contributions to Terrestrial Magnetism*, 1843), and in France (Becquerel, *Traité de Electr. et de Magnét.*, t. vii., p. 354–367), to reduce the oscillations observed in any part of the Earth to the standard of force which I found on the magnetic equator in Northern Peru, so that, according to the unit thus arbitrarily assumed, the intensity of the magnetic force at Paris is put down as 1·348. The observations made by Lamanon in the unfortunate expedition of La Perouse, during the stay at Teneriffe (1785), and on the voyage to Macao (1787), are still older than those of Admiral Rossel. They were sent to the Academy of Sciences, and it is known that they were in the possession of Condorcet in the July of 1787 (Becquerel, t. vii., p. 320); but, notwithstanding the most careful search, they are not now to be found. From a copy of a very important letter of Lamanon, now in the possession of Captain Duperrey, which was addressed to the then perpetual secretary of the Academy of Sciences, but was omitted in the narrative of the *Voyage de La Perouse*, it is stated "that the attractive force of the magnet is less in the tropics than when we approach the poles, and that the magnetic intensity deduced from the number of oscillations of the needle of the inclination-compass varies and increases with the latitude." If the Academicians, while they continued to expect the return of the unfortunate La Perouse, had felt themselves justified, in the course of 1787, in publishing a truth which had been independently discovered by no less than three different travelers, the theory of terrestrial magnetism would have been extended by the knowledge of a new class of observations, dating eighteen years earlier than they now do. This simple statement of facts may probably justify the observations contained in the third volume of my *Relation Historique* (p