tensity affecting the whole Earth, is especially due, since 1819, to the unwearied activity of Edward Sabine, who, after having observed the oscillations of the same needles at the American north pole, in Greenland, at Spitzbergen, and on the coasts of Guinea and Brazil, has continued to collect and arrange all the facts capable of explaining the direction of the isodynamic lines. I have myself given the first sketch of an isodynamic system in zones for a small part of South America. These lines are not parallel to lines of equal inclination (isoclinic lines), and the intensity of the force is not at its minimum at the magnetic equator, as has been supposed, nor is it even equal at all parts of it. If we compare Erman's observations in the southern part of the Atlantic Ocean, where a faint zone (0·706) extends from Angola over the island of St. Helena to the Brazilian coast, with the most recent investigations of the celebrated navigator James Clark Ross, we shall find that on the surface of our planet the force increases almost in the relation of 1 : 3 toward the magnetic south pole, where Victoria Land extends from Cape Crozier toward the volcano Erebus, which has been raised to an elevation of 12,600 feet above the ice.* If the intensity near the magnetic south pole

615): "The observations on the variation of terrestrial magnetism, to which I have devoted myself for thirty-two years, by means of instruments which admit of comparison with one another, in America, Europe, and Asia, embrace an area extending over 188 degrees of longitude, from the frontier of Chinese Dzoungarie to the west of the South Sea bathing the coasts of Mexico and Peru, and reaching from 60° north lat. to 12° south lat. I regard the discovery of the law of the decrement of magnetic force from the pole to the equator as the most important result of my American voyage." Although not absolutely certain, it is very probable that Condorcet read Lamanon's letter of July, 1787, at a meeting of the Paris Academy of Sciences; and such a simple reading I regard as a sufficient act of publication. (*Annuaire du Bureau des Longitudes*, 1842, p. 463.) The first recognition of the law belongs, therefore, beyond all question, to the companion of La Perouse; but, long disregarded or forgotten, the knowledge of the law that the intensity of the magnetic force of the Earth varied with the latitude, did not, I conceive, acquire an existence in science until the publication of my observations from 1798 to 1804. The object and the length of this note will not be indifferent to those who are familiar with the recent history of magnetism, and the doubts that have been started in connection with it, and who, from their own experience, are aware that we are apt to attach some value to that which has cost us the uninterrupted labor of five years, under the pressure of a tropical climate, and of perilous mountain expeditions.

* From the observations hitherto collected, it appears that the maximum of intensity for the whole surface of the Earth is 2·052, and the minimum 0.706. Both phenomena occur in the southern hemisphere; the former in 73° 47′ S. lat., and 169° 30′ E. long. from Paris, near