

tains, and stands on a hill, Glisa and Natria, the former of which is at a quarter of an hour's distance from Brigue, and the latter at half an hour's, are situated almost on a plain. Glisa suffered more than Brigue. Lastly, Brigue never had in any year more violent winds than in 1755; and we are continually infested by the south wind.

These are the facts, which I have hitherto remarked with care: if any thing remarkable shall occur hereafter, I will not fail to write them to you.

Brigue, 27 Feb. 1756.

CIII. *Extract of a Letter of Mons. la Condamine, F. R. S. to Dr. Maty, F. R. S. translated from the French.*

Rome, 11 March, 1756.

Read May 6, 1756. **T**HE Abbé Barthelemi, who is here, has been at Naples. In the manner of going on with the manuscripts there, it will require above a century to open and pass them all. However it is done with great dexterity. But there is only one person employed in it. The Canonico Mazzocchi, who copies them, is very capable of that task. An academy of Antiquaries is just founded at Naples, for explaining all the antiquities dug up at Herculaneum; but according to their method of discussing things in their assemblies, they will not explain two dozen antiquities in a year. They will alter their method, and find, that such kinds of works, and perhaps all others, are not to be done by

by a company. The Abbé Barthelemi has read very well a page, except a few words, which he had not time to study. The account of the manuscript on music is true.

The measures of the Abbé de la Caille, and those of Father Maire and Father Boscovich, whose book must now be in the hands of the Royal Society, do not agree with the elliptical curve of the meridian, or with the circularity of the parallels. And the earthquakes felt on the same day on all the coasts of Europe, and in Africa and America, at Ancona, Morocco, Boston, and in the Baltic, may contribute to convince those, who shall doubt of it, that the earth has immense cavities, and that it is very heterogeneous, or rather of a very unequal density. Consequently its figure is a little irregular; or, if the curvature be such, as the laws of statics seem to require in the hypothesis of homogeneity, that figure must be altered by changes happening in the internal parts of the mass. It was at first supposed to be spherical, and the orbits of the planets were considered as circular. It was afterwards found, that they were elliptical, and the earth an ellipsoid. Every step made in the study of natural philosophy has discovered some apparent irregularity, according to our manner of conception. The refractions, the aberration of light, the nutation of the axis of the earth, have all been reduced to a calculation. Afterwards was found out the irregularity of the refractions upon small eminences, which perplex astronomers. The heterogeneity of our globe will puzzle the mathematicians; and earthquakes will perhaps do so more than all the rest. I have probably observed to you before, that

I am convinced, that Italy was a chain of volcanos, of which we know only some of the links. I have found lavas exactly like that of Vesuvius in the whole way from Florence to Naples, and in places, where there was not any suspicion of volcanos. All the lakes of Italy, which I have seen hitherto, exhibit traces, not to say evidences, of this.

I begin to think, that the whole earth is perhaps in the same case with its surface, and was thrown into the utmost disorder at some period of time, of which no remembrance has been preserved. Lazzaro Moro, a Venetian, has gone much farther than I do: all the mountains, isles, and continents arose, according to him, from the bottom of the sea, by means of subterraneous fires. I never heard of his opinion till after I had formed my own conjecture, or rather verified the fact in part of the Apennine, which I have passed through. I have had time only to run over the titles of his chapters.

CIV. *Observations upon the Currents of the Sea, at the Antilles of America: By Dr. Peyssonnel, F. R. S.*

Read May 6, 1756. **T**HE coasts of these American islands are subject to counter-tides, or extraordinary currents, which render it very dangerous to chaloupes and other small craft to land; whilst, at the same time, the boats and ships in the roads are scarce ever sensible of them, and seldom incommoded by