The Old Crater of the Soufriere mountain in the Island of St Vincent, from the E. edge – taken soon after the great eruption on the 1st May 1812. This Crater is nearly Circular; its diameter about 6000 feet (nearly a Mile & quarter) the depth to the surface of the water is supposed from 6 to 700 feet.

Great Baddow Essex 23rd August 1815

Sir

When I had the pleasure of seeing you, you asked me if I could furnish you with any details respecting the eruption of the Volcano in the Island of St. Vincent in the year 1812 of which I was a near witness. — I have since procured from a friend some letters written while the circumstances where fresh in my memory, from which I shall select such facts as may be interesting to you, requesting your indulgence towards the style in which they may be described, and the prolixity to which they may be extended.

The Volcano (commonly called the Soufriere) is the northern-most of a range of Hills running the whole length of the Island: it was separated from the rest by two Rivers which had their sources at its foot; — The Crater situated on the top of this mountain resembled in form the descriptions given of those of Mount Etna, but was much larger than any of those of the Sicilian Volcano; being at least four miles in circumference. The edges of the Crater were pretty regular and from the edge the descent was very steep to the bottom; in the centre of this vast bason was a conical Hill, of the form of a truncated Cone which was generally smoking, from different crevices of which, Sulpher, Ammonia and other Volcanic Salts were constantly sublimed. The sides of the Mountain were clothed with beautiful woods; the

inside of the Crater was likewise (except where it was perpendicular) covered with luxuriant vegetation, the Conical Hill itself was nearly covered with shrubs; and to complete the beauty of the whole there were two basins of clear Water which nearly surrounded the Cone. — The whole appearance of the Crater with its Cone bore some resemblance in form and proportion, to a large punch bowl, with a small tea cup placed, mouth downward in its bottom. — The ascent to the Crater, and the descent to the Cone and lakes was attended with considerable fatigue, but was nevertheless frequently performed. — This Volcano had long been considered quite harmless; their was indeed a vague tradition among the native Indians of an eruption within the memory of some of their oldest people, and a written account of a Ship which was passing the Island, near a Century before, having her Decks covered with ashes — but these were generally disbelieved and the Volcano considered to be quite extinguished. — Since the month of November (1811) however frequent Earthquakes had been felt in the Island, particularly in the vicinity of the Soufriere. A party who visited the Crater early in 1812 found the figure of the Cone somewhat altered, the Water in one of the lakes, (both of which had formerly been quite sweet) unfit for drinking, and a large stream of boiling Water issuing from one side of the Crater. — On monday the 27th April it was again visited by a party, and on the evening of the same day the first eruption of smoke and ashes happened. — so little was it dreaded, however that another party visited it on Wednesday when it was found to be in a dreadful state of agitation, and the party descended on Thursday morning, the very day of the great eruption. Between Monday and Thursday the Earth —

quakes became more frequent and at last were almost continual. — On Thursday afternoon the first serious eruption took place; it consisted of a shower of small stones . . . succeeded by a shower of sand. — A dreadful peal of Volcanic thunder preceded it, — this shower continued some minutes and then ceased; a second explosion soon announced a fresh shower, the weight and duration of which exceeded the first: — this was again succeeded by a shower of sand, and, in this way, the explosions and showers were continued till about 2 o'clock of the morning of the 1st of May, when the eruption was at its height. — The stones which now fell were found to be hot; some were quite red, and could be distinguished thró' a darkness which was quite impenetrable except when enlightened by these or by the Volcanic lighting. — Many buildings were set on fire by these hot stones, which were thrown to an incredible distance. — — On three River Estate which is about seven Miles in a direct line from the Crater, several thatched Houses were burnt, and on the same Estate I found pieces of Volcanic Rocks weighing from 8 to 10 ℔s. — About three in the morning the eruption abated; two streams of lava poured from the Crater, and assumed the beds of the two Rivers already mentioned drying them up in their course; about Six the showers of large stones ceased altogether and was succeeded by nearly two hours incessant fall of sand and pumice. — the sun was completely obscured, nor was it daylight till 10 o'clock tho' the sun rose at 6. — When objects were rendered visible the eye was struck with a view too horrible to describe. — the whole of the North end of the Island was completely devastated; the Old Canes broken to pieces and the young ones buried; the pastures covered to a great

depth, and the provisions in the ground completely destroyed:— the accidents to Man and Cattle were numerous, but much less so than could be supposed: this is attributable in some measure to the total darkness that prevailed during the eruption, which prevented people attempting to leave their houses— on the Estate which I live on four unfortunate Slaves were killed:— they occupied a house near the banks of the River, and were killed by the Volcanic lightening which preceded and accompanied the stream of lava, their bodies were nearly reduced to ashes.— There is no doubt that the whole or nearly so of the buildings within the range of the hot stones would have been destroyed was it not for the showers of sand which preceded them, and lodging on the roofs prevented the fire from communicating; the roofs are generally pretty steep, and the stones rolled off.— An almost constant tremor of the earth prevailed during the eruption, and there were several and distinct severe earthquakes, one of which was fatal to a newly erected sugar work in the neighbourhood.— The effects of this eruption in the neighbourhood were dreadful, but the distance to which they extended were almost incredible:— the Island of Barbadoes was covered with Sand and ashes; as were the Decks of several Vessels far beyond it; particularly the Lane of Liverpool, which was no less than 250 Miles to the Eastward of it.— What renders this particularly wonderful, is that the ashes were carried to this distance in a direction precisely contrary to the East trade wind blowing the time.— At Barbadoes it was dark till near 12 o'clock at noon on the 1st May; so dense and extensive was the cloud of ashes interposed between the Sun and the Island.—

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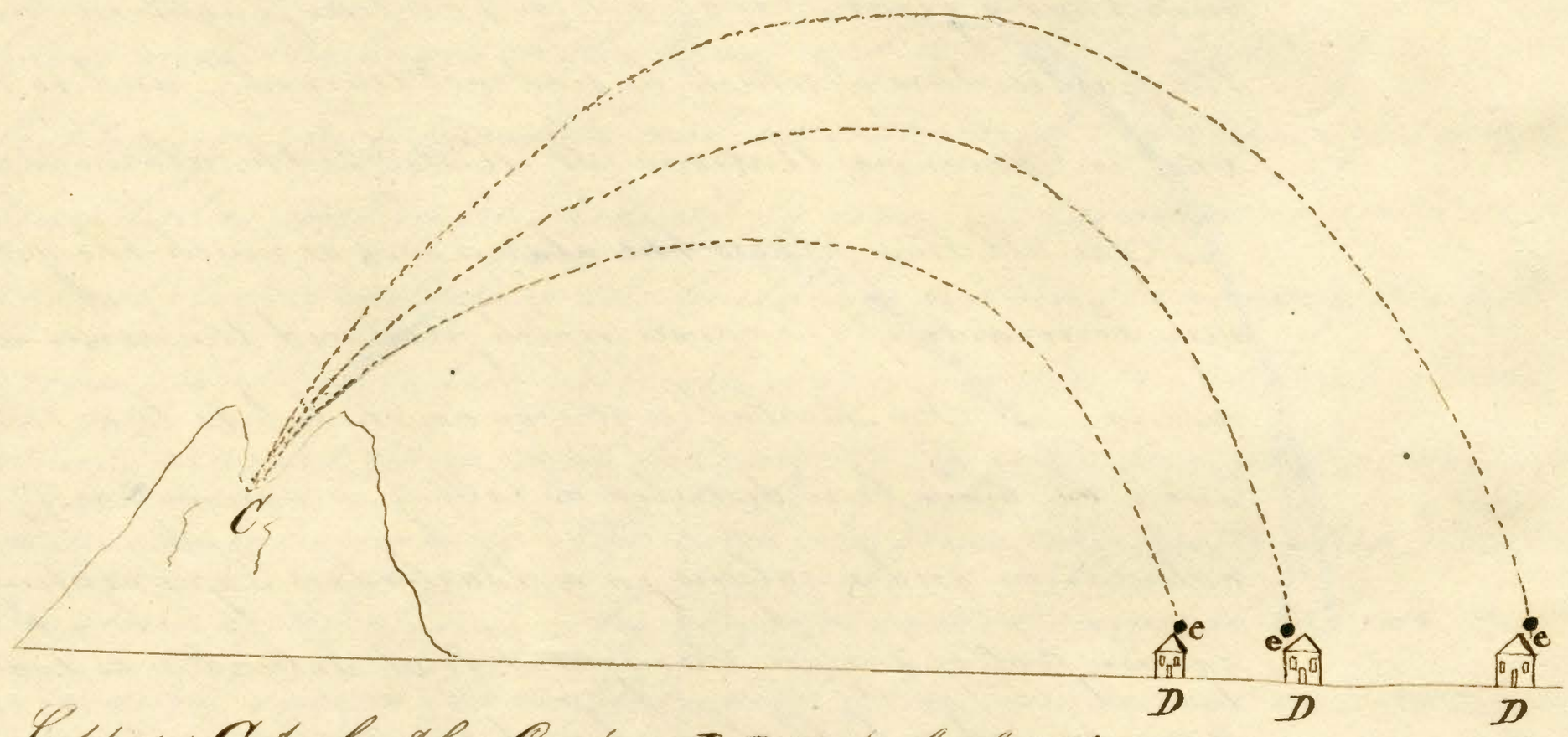
At Grenada the noise of the eruption was plainly heard and the light from the Crater very visible:— At Trinidad likewise they were greatly alarmed by the noise:— Still further south— viz.t on the Continent, the eruption was also heard:— At Tobago it was so loud that the Governor Sir Wm. Young, sent by express to the Admiral, informing him that a great Naval action had been fought in the neighbourhood, the particulars of which he had not learned:— and to the Westward viz.t in Dominica, Antigua, St. Kitts &c. the alarm was very great.— — In all these places the alarm was so much the greater from their very ignorance of the causes which produced the noises and other phenomena. — In Barbadoes it was concluded to be a Meteorous shower such as have been described as falling in various parts; there was a calculation and analysis in a Barbadoes Paper stating that every square foot of surface throughout that Island was loaded with eleven pounds and a half of sand, and that the quantity on One Acre contained upwards of 8000 lbs. of iron — it was also calculated in St. Vincent that the quantity of matter ejected from the Volcano far exceeded the bulk of the whole Island in which the Volcano is situated — this however was made upon what I conceive to be an erroneous position; that the same quantity had fallen through all the space to which it had extended as had fallen at the beginning and end of that space; this could hardly be the case, as there was more fell at Barbadoes than in many parts of St. Vincent.—

The manner in which the cloud of ashes was carried to the Eastward was very surprising; it must have been by a Current of Wind in the upper regions of the atmosphere contrary to the one

below — But a still more surprising circumstance is the falling of the Stones &c. in St. Vincent. The manner in which they fell can be better understood from a sketch, than from description alone;



Suppose C to be the Crater, **DDD** to be buildings situated at various distances and in different directions; and e, e, e, to be rocks projected from the Crater at the various curves indicated by the dotted lines: — it is evident that the roofs should have been most injured on the side nearest to the Volcano, and that the side furthest removed should have escaped: — the reverse however was almost invariably the case; and the sides nearest the Crater have suffered least: — this was particularly observable from the state of the window glasses — three panes were broken in one case for one in the other — The distance to which large fragments of rock and lava were thrown is almost incredible — Langley Park Estate is at least 4 Miles in a direct line from the edge of the Crater, — on this Estate were found many pieces

weighing 50 or 60 lbs. — One in particular (which was still hot when I discovered it) had been carried to the furthest extremity of the Estate — Another (at least 50 lbs.) has fallen into a tree, where it was supported by several large converging branches and had burnt a kind of bed for itself. — As soon after the eruption as the bed of lava and ashes in the vicinity was cool enough to walk upon, the Crater was visited by several and by myself among the rest — The beautiful scenery was no more: — the elegant Cone was gone and its place supplied by an immense lake of boiling Water, which extended on all sides to the Walls of the Crater: the walls steep before the late eruption were now much more so; and the descent to the lake in my opinion quite impracticable: — two large columns of smoke of a fleecy whiteness, rose rapidly and continually from the Crater, & a loud noise similar to that from a blast-furnace was continually heard — the trees in the Crater and for miles round are destroyed; in its immediate vicinity not a vestige of them remains — the Crater with these exceptions was little altered in shape or size it was evident that a New One must have been formed and accordingly on proceeding about $\frac{1}{3}$ round the Old One our view was struck at once with a sight of it — the new Crater not so large as the other, was far more horrid to appearance and its activity much greater — there was also water to be seen in the bottom but from the quantity of smoke emitted it was seldom that it could be seen — this new Crater is separated from the Old One by a narrow ridge which might perhaps be traversed by a person of strong nerves, tho the view of the new Crater from it is frightful — The streams of Lava (if it may be termed so) appear to have

proceeded from both Craters; it must have been ejected from the mouths, no other opening being visible.— it filled the various ravins and vallies surrounding the mountain, and ran at length into the two Rivers already mentioned, whose beds terminated most of the vallies; in its passage along the Vallies, it dried up the small streams supplying the main Rivers and at last the Rivers themselves were absorbed by the intense heat of the accumulated Mass, which poured into them from every quarter. On the Rabaca (the easternmost River) this body of lava ran to within a mile of the Sea drying up the Stream completely.— On Wallibow, the other River, it terminated about the same distance from the sea— the termination of it presented a frightful Wall, about 12 feet high; this was composed of immense blocks of lava mixed with smaller Ones and with Volcanic Sand: it was not a compact body like melted glass or metal, but a mixture of different substances— it had evidently however flowed in a stream as its abrupt termination proved— in many places it was upwards of 100 feet in depth as was ascertained from the banks of the River— a fall of 80 feet which had intersected the Rabaca was completely filled, as was a deep bason at its foot, and the whole appearance of the lava there presented an inclined plane of at least 120 feet deep.—

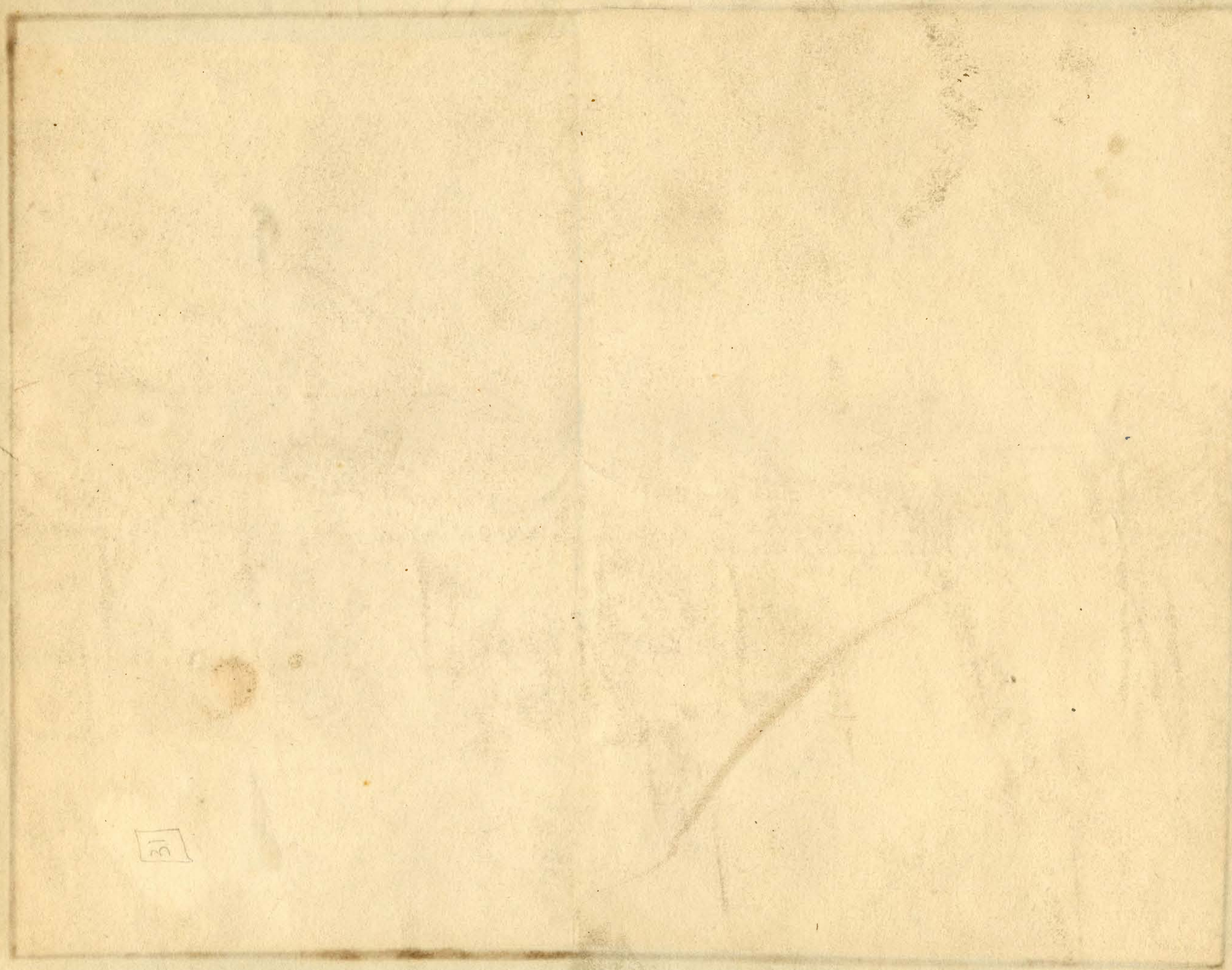
I have thus according to the request you honored me with endeavoured to give you some idea of this dreadful convulsion, and must again Sir, beg your indulgence towards its style and arrangement— I shall enclose some sketches (which will require the same indulgence) from which you may perhaps form an idea of the shape of the Craters— I took these a few weeks after the eruption— On

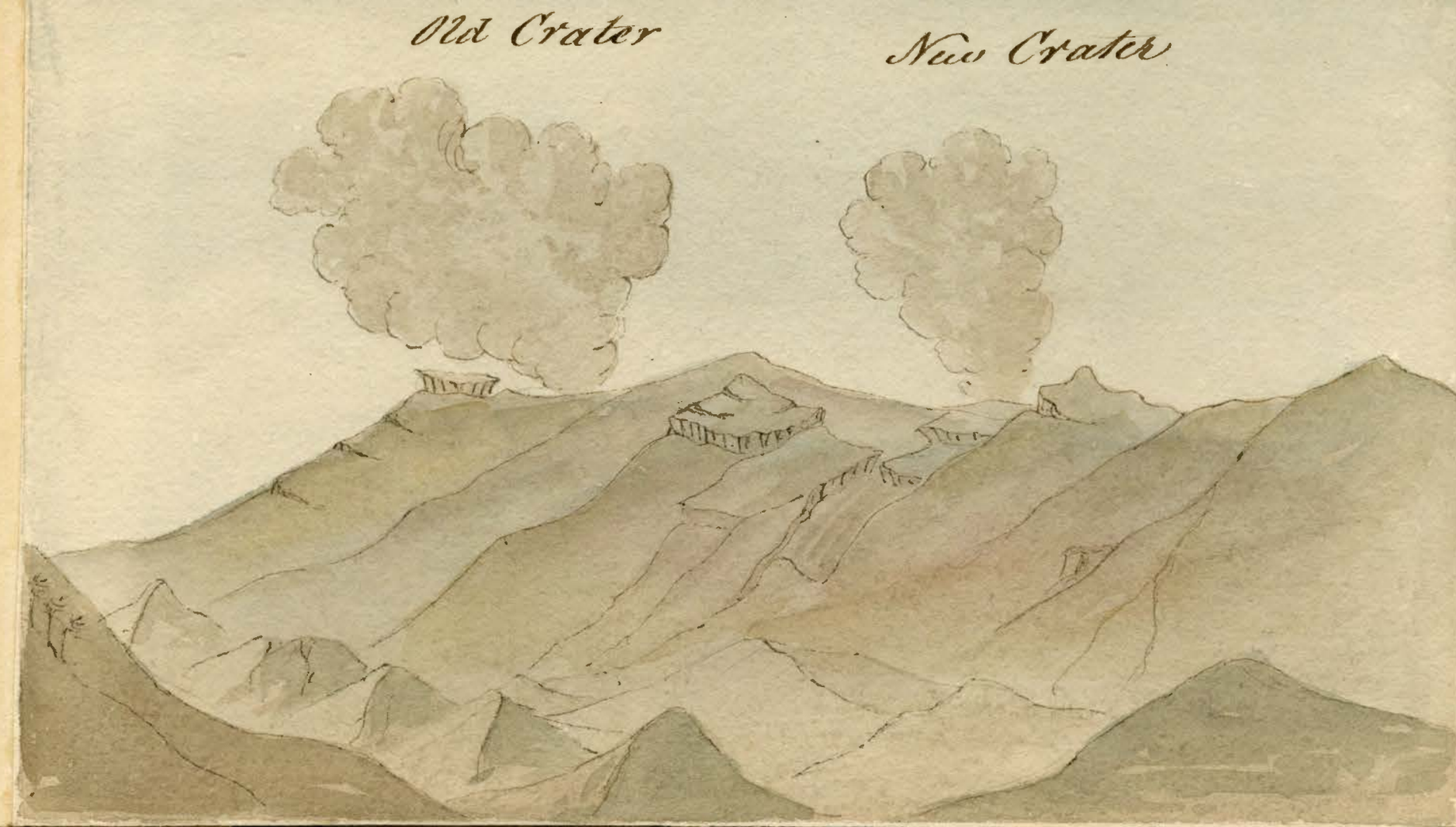
visiting

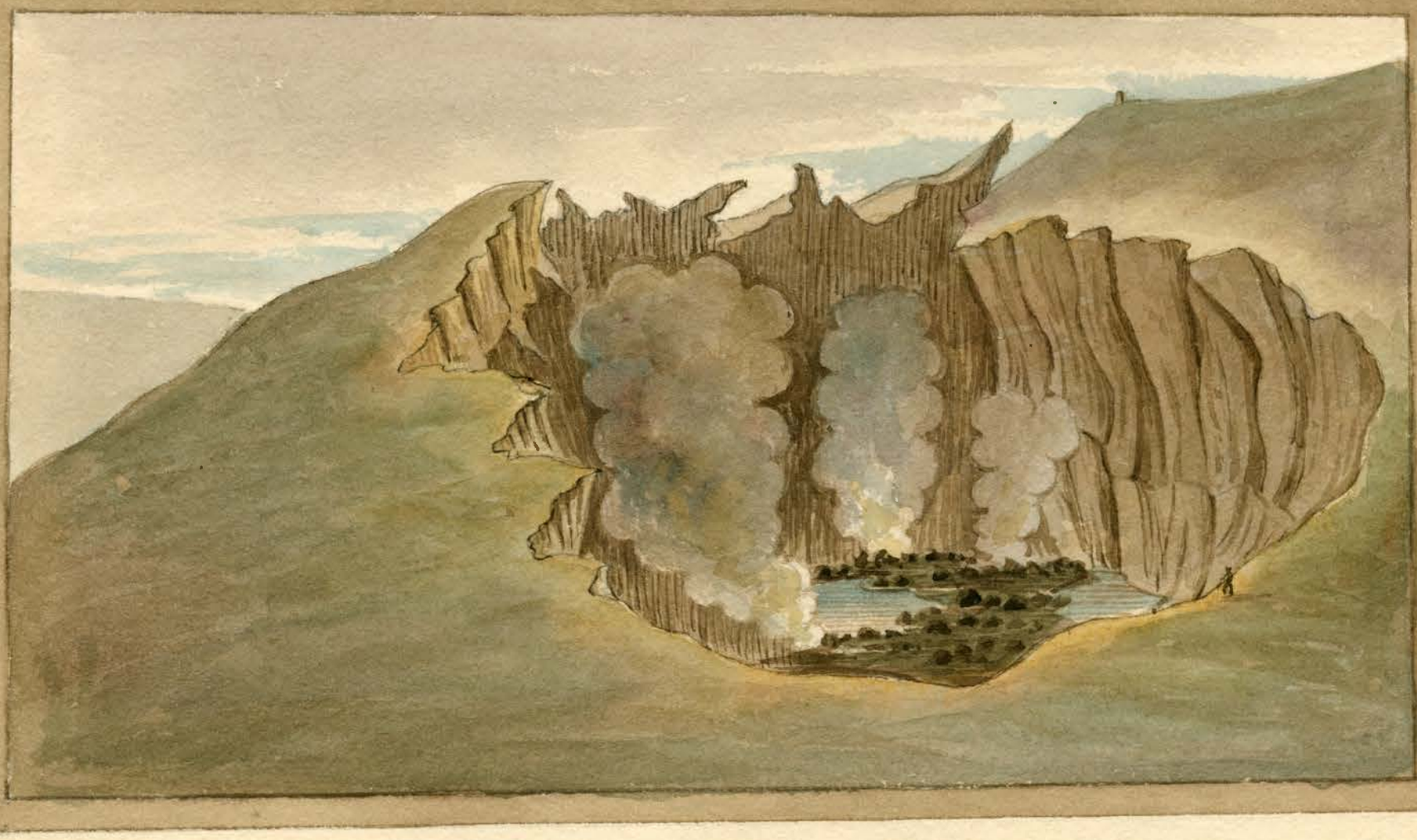
visiting them this year I found them little altered in shape, but much less active, and the New One by the falling in of its sides is not so deep as it was –

I have the honor to be &c

Pat Crichton







The New Crater of the Soufriere formed during the eruption of 1812, previous to which the Spot was a gently inclined plain, its form is irregular; greatest diameter about ½ mile; depth supposed to be about 400 feet.