

- I. *A Relation of a New Island, which was raised up from the Bottom of the Sea, on the 23d of May 1707. in the Bay of Santorini, in the Archipelago. Written by Father Goree (a Jesuit) an Eye-witness.*

AMONG the Prodigies of Nature, and the most surprizing things which She has at any time produc'd, we may, in my Opinion, very justly reckon an Island which rose up from the Bottom of the Sea, about 4 Years ago, in the Bay which makes the Harbour of the Isle of *Santorini* in the *Archipelago*; especially if we consider the Situation, Manner, and all the other Circumstances of the Formation of this New Island. For what can be more surprizing, than to see Fire, not only break out of the Bowels of the Earth, but also to make itself a Passage through the Waters of the Sea, without being extinguish'd? Or what can be more extraordinary, or foreign to our common Notions of things, than to see the Bottom of the Sea rise up into a Mountain above the Water, and to become so firm an Island, as to be able to resist the violence of the greatest Storms? I know very well, that Subterraneous Fires, when pent in a narrow Passage, are able to raise up a Mass of Earth as large as an Island: But that this should be done in so regular and exact a manner, that the Water of the Sea cannot any ways penetrate to, and extinguish them; that the Fire itself, after having made so many Vent-holes and Passages, should notwithstanding retain a force sufficient to raise up so great a Mass; and in fine, after the Fire is extinct, that this great Mass should not fall or sink down again thro' its own weight,

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but still remain of the same Height that the Fire had raised it; This is what to me seems more surprizing than any thing that has been related of Mount *Gibel*, *Vesuvius*, or any other *Volcano*.

Yet this is not the first time that these Prodigies in Nature have been seen at *Santorini*: For, if it be not true, that this Island itself, which was anciently call'd *Thera*, was in like manner raised out of the Sea (as *Pliny* assures us it was,) it is at least most certain, that three other small Islands (two of which lye within the Bay of *Santorini*, and the third a little without it) have been formed and raised up above the Sea by Subterraneous Fires.

The first of these Islands, which was anciently call'd *Hiera*, because it was (as is thought) dedicated to *Pluto*, is now named *Megali Kammeni*, that is to say, the Great Burnt Island. *Justin* (l. 30. c. 4) speaking of the first War of the Romans with the *Macedonians*, and of the two Months Truce which *Philip* King of *Macedon*, and Father of *Perfes*, then demanded, and which he obtain'd, according to *Salianus*, the 4th Year of the 145th Olympiad, and the 196th Year before the Birth of our Lord, tells us, that this Island rose up from the Bottom of the Sea this very Year after an Earthquake. His Words are these. *Eodem anno inter Insulas Theramenem & Therasiam, medio utriusque ripæ & maris spatio, terræ motus fuit; in quo, cum admiratione navigantium, repente ex profundo cum calidis aquis insula emerfit.*

It became half as big again, in the Year of our Lord 726, by the joyning of another Island to it; which, according to the Relation of *Theophanes*, a Greek Author, cited by *Baronius*, rose also out of the Sea, and raised itself exactly to the same height as the Island *Hiera*, and united so well to it, that at this time there remains no other mark of its joyning, than only a Cleft or Fissure, which reaches from one end of the Island to the

the other, and in several Places is not half a Foot broad.

The same thing happened a second time in the Year 1457. as appears by a *Latin* Inscription upon a Marble at *Santorini*: But with this difference, that the Subterraneous Fire, after having raised to the height of 5 or 6 Foot above the Water a vast quantity of Rocks, which formed a space about a Mile in Circumference, opened a Passage for the Sea-Water to enter, by which it was extinguish'd; and the middle of that space remain'd so low, that the Sea flowing into it by a Subterraneous Canal, made there a small Lake, which continues to this Day.

As to the second Island, which is a little without the Bay, and is call'd in *Greek* *Aspronisi*, or the *White Island*, because the Earth, with which it is covered, is white like Lime; *Pliny*, who lived in the time of the Emperor *Vespasian*, says, that it rose out of the Sea, and appeared in his time.

The third Island, which is the least, and is called by the *Greeks* *Mikri Kammeni*, or the *Lesser Burnt Island*, was formed in the Year 1573. according to the relation of several Old People, who learned it of their Ancestors: And it is between this little Island and the Great *Kammeni*, that on the 23d of *May* (New Stile) in the Year 1707. at break of Day, the New Island, of which I am now going to speak, was first discovered.

Five Days before it appeared, *viz.* on the 18th of *May*, between one and two of the Clock in the Afternoon, there was at *Santorini* an Earthquake, which was not violent, and continued but a Moment: And in the Night between the 22d and 23d, there was also another, which was yet less sensible than the former.

It is natural to imagine, that it was then, that the New Island first began to move and raise itself from the Bottom of the Sea: Yet, if we consider, that these two
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Earthquakes were not violent, and lasted but a Moment, and that the Bottom of the Sea was in this Place from 80 to 100 Fathom deep, it seems difficult to believe, that in 5 Days time, it could rise to this Height. What inclines me to think the contrary, is, that the Height it is at present above the Surface of the Sea, and which it did not arrive to in less than 3 Years time, is much less than that from the Bottom of the Sea to the Surface of the Water, as I shall show hereafter. Add to this, that a long time before these Earthquakes, the Fishermen perceived an ill Smell every time they passed by that place; which shows that the Island had then begun to move: Notwithstanding it is very certain, that there have not been any other Earthquakes at *Santorini*, than those, which, 14 or 15 Years ago, continued for several Days, and were very violent. Howsoever it was, some Seamen discover'd this Island early in the Morning; but not being able to distinguish what it was, they imagined it to be some Vessel that had suffered Shipwreck, and was driven thither by the Sea. In hopes of making an Advantage to themselves by it, they went immediately to it; but as soon as they found that it was a New Island, they grew afraid, and returning as hastily back again, spread the report over the whole Island; which was the more readily credited, because all the Inhabitants knew, and several of them had themselves seen, what happened in the Year 1650. There was then a New Island, like to the present, which, between the Islands of *Santorini*, *Nio*, and *Andro*, rose up by means of Subterraneous Fires, which caused several violent Earthquakes, accompanied with a roaring Noise under ground, Sulphureous Exhalations, an insupportable Stench, and a black Smoak, which rose out of the Sea with Flames to the height of 10 or 12 Cubits. The Sea was then so tossed backwards and forwards by the terrible Shocks of the Earth, that it overflowed and

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destroyed 30000 Perches of Land in *Santorini*; and the Air was so infected with Exhalations which came from the Fire, that 25 Persons, and a great many Beasts, were stifled. At last, when this Island had not above 8 or 10 Fathom of Water to rise, so as to appear above the Surface of the Sea, the force of the Subterraneous Fire was so violent, as to open a Passage before its time, by which the Water of the Sea entring in like a Torrent, extinguished the Fire, and this Mass of Earth and Stones did not rise any higher. Let us now return to our new Phenomenon.

How great soever the Fright of the Inhabitants of *Santorini* was, at the first sight of this New Island, yet a few Days after, not seeing any appearance either of Fire or Smoak, some of them, more bold than the rest, took a resolution to go and view the Situation of it: Which they did accordingly; and not imagining any Danger, went on Shore upon it. As they had no other design, but to satisfy their Curiosity, they passed from one Rock to another, upon which they met with several very remarkable Curiosities; among which we may reckon a sort of White Stone, which cuts like Bread, and resembles it so well in form, colour, and consistence, that were it not for its taste any one would take it for real Bread. But what pleased them more, was a great number of fresh Oysters which they found sticking to the Rocks; which being very scarce in that Country, by reason of the depth of the Sea, they got as many of them as they could.

While they were busy about this, they perceived the Island move and shake under their Feet. This was sufficient to make them leave it immediately, and to return back faster than they came. In short, the rising of the Island was visible to the Eye, and it encreased not only in Height, but also in Length and Breadth. Tho' it was already between 15 and 20 Foot high above the Sea, it
could

could not yet be seen from the Mountain *Merovigli*, or the Castle of *Scaro*, which stands upon the Shore, by reason the Lesser *Kammeni*, above mentioned, lay between, and hinder'd the sight: But at 15 Days end, they began to see it from *Merovigli*, and in a few Days after, from the Castle of *Scaro* situated upon another Mountain, which, tho' it be very high, in respect to the Sea, yet it is much lower than that of *Merovigli*, to which it joyns. From whence we may judge how much this New Island grew in Height in a few Days.

As the motion, by which this Island increased every Day in Height, was sometimes equal, and at other times unequal, in respect to all the Parts of so great a Mass; so it did not always rise equally on every side. It often happened, that while it grew in Height and Length on one side, it sunk down and decreased on the other. I one Day saw a Rock rise out of the Sea, at 40 or 50 Paces distant from the Island, which I continued to observe for 4 Days together; at the end of which time it sunk again into the Sea, and did not appear any more: But this was different from what happened to some others; which having disappeared, at this did, they re-appeared again some time after.

The Lesser *Kammeni*, which lies very near, was often shaken with the Motion which raised this New Island. From a small Cleft, which we observed upon the top of this little Island, sometimes Stones would break loose; which rolling down its sides into the Sea, would raise, as it were, a Cloud of Dust, which some People took to be Smoak, but in reality it was not so.

At this time, the Sea, which is contained within the Gulf or Bay of *Santorini*, several times changed its Colour: At first it appeared Green, afterwards Redish, and sometime after of a Yellowish Colour; with a Stink, which spreading itself over great part of *Santorini*, made us imagine that this Colour proceeded from

nothing else but the Sulphur with which the Sea was covered.

The Smoak appeared first upon the 16th of *July* : At which time, from a place in the Sea, where (they assured me) they could never before find any Bottom, and which was above 60 Paces distant from the New Island (which they then called the White Island) there rose up a Ridge of Black Stones, which the *Greeks*, by reason of their hardness, call *Sideropetres*, or Iron-Stones, which formed another Island, named by the Inhabitants the Black Island; and which was afterwards not only the Center of the whole Island, but also of the Fire, and Smoak, and great Noise, that was heard some time after.

The Smoak, which issued out of this Ridge of Stones, or Black Island, was very thick and white, as if it had proceeded from 5 or 6 Lime-Kilns joyned together; and being carried by a North Wind towards the Castle of *Acrotiri*, it went into the Houses of the Inhabitants, but without causing any great annoyance, because it had no very ill Smell. Four Days after the Smoak had thus appeared, they saw in the Night time Fire issuing out from the same place.

It was then, that the Inhabitants of *Santorini*, and especially those of the Castle of *Scaro*, began to be in good earnest afraid. They considered that their Castle was situated upon a Promontory, that was very narrow, and near to the Black Island; and that the time drew near, in which they must expect it either to be blown up into the Air, or overturn'd by some Shock of the Earth. They had continually before their Eyes Fire and Smoak; and this dismal Spectacle made them apprehend, that there might be several Mines of Vitriol and Sulphur in the Island of *Santorini*, which would soon take Fire; and that therefore the safest way for them was to abandon the Country, and retire to some other Island. And indeed some took this resolution; and

and there was no other way left to satisfy the rest, but by telling them, that if they would retire further into the Country, they would be safe there; and that if the Castle was in Danger, yet they must necessarily see the Lesser *Kammeni* first entirely destroyed, not only because it lay between the Castle and the Black Island, but also because it was much nearer to it than to the Castle.

The *Turks*, who were then at *Santorini*, collecting the Tribute which this Island pays yearly to the *Grand Signior*, were not less afraid than the other People: Being amazed to see Fire break out of the Sea where it was so deep, they intreated the Christians to pray to God, and especially to make their young Children cry *Kirie Eleison*; because, as they said, the Children not having offended God, they could more easily appease his Anger than older Persons. The Fire, however, was then but very little, being not above the breadth of the Mouth of a Furnace, and did not appear in the Day time, but only in the Night, from Sun setting to Sun rising; and was so far from spreading the whole length of the Ridge of Stones above-mention'd, that it possess'd but one small part of it, which was always afterwards the common Passage for the Smoak and Fire, which I shall speak of hereafter.

As for the first Island, or White Island, we did not see there either Fire or Smoak; yet it continued to grow bigger; but the Black Island increased much faster. We saw every Day great Rocks rise up on every side of it, which made it sometimes longer, and at other times broader; and by the Height of them we could very nearly judge how many Foot it rose up every Day or Night: Sometimes these Rocks joyned to the Island, and at other times they were at a distance from it; so that in less than a Month, there were four little Black Islands, which in a few Days after, united together, and made but one Island.

As the Smoak encreased very much, and there was no Wind stirring, it rose up to the middle Region of the Air, so as to be seen (as several credible Persons assured me) at *Candia*, *Naxos*, and other Islands; and in the Night time it appear'd of a Flame to 15 or 20 Foot high. The Sea was at that time covered with a Matter or Froath, which in some places was reddish, and in others yellowish; from whence there proceeded so great a Stench over the whole Island of *Santorini*, that for fear of being infected, several Persons were obliged to burn Incense, and others to make Fires upon the tops of their Houses, to disperse it and to purify the Air. By good luck it did not continue above a Day and half; for a strong South-West Wind arose, which, together with the Motion of the Sea, did indeed disperse this froathy Matter, but occasioned otherways a great damage to the best part of the Island of *Santorini*. At that time they were in great hopes of having shortly a very plentiful Vintage; when this Wind carried all the Smoak on upon their Vineyards, which burnt them up in such a manner, that the Grapes (which were not yet ripe) turned in one Nights time like dried Raisons, so that they were forced afterwards to throw them away, because of their sowerness; which was a great Grievance to most of the Inhabitants, the greatest part of whose Revenue consists in Wines.

The first who brought this sorrowful News was a poor honest Man, who fail'd not early every Morning to visit his small Vineyard, and was not a little rejoyc'd to see it so well stor'd with plenty of good Fruit: He went as usual, not dreading this unlook'd for Calamity; and finding it all thus unexpectedly blasted, was struck with such sudden Astonishment, that he wandered about a long time like one out of his Senses, looking for his Vineyard in the Vineyard itself; but coming to himself, at length returned home, proclaiming

ing his misfortune in such a Tone, and with such Expressions of Grief and Amazement, as rais'd at once both Pity and Laughter.

Nor was this the only effect occasion'd by this thick Smoak ; for it is farther remarkable, that Silver and Copper were changed black by it : And tho' some People, who were forced to pass thro' the Smoak in going to their Houses, assured me, that it had no very ill smell with it ; yet several of them were, that and the next Day after, troubled with great pains of their Head. At this time the White Island, which (as I have said before) seem'd to be above the Lesser *Kammeni*, and could be seen from the first Floor of the Houses in the Castle of *Scaro*, sunk down so low, that it could not be seen from the second.

Hitherto the Sea had not been observed to boil up, or any Noise heard upon the Black Island : But upon the 31st of *July*, the Sea was seen to emit Smoak at two several Places ; one of which was about 30, and the other above 60 Paces distant from the Island. In these two places, both of which were perfectly round, the Water of the Sea looked like Oyl, and seem'd to rise up and bubble : Which is continued to do for more than a Month ; in which time there were a great many Fishes found dead on the Shore, occasioned by their happening to have been too near these two Places.

The Night following there was heard a dull hollow Noise, much like that of several Cannons shot off at a distance : And at the same time there was seen to rise out of the midst of the Funnel Flames of Fire, which darted very high into the Air, and disappeared immediately. Next Day there was heard several Returns of the same Noise, which was followed by a Smoak, not white, as usual, but blackish ; and which, notwithstanding a very fresh North Wind, rose up in a Moment, to a prodigious Height, in form of a Column, and in the
Night

Night time would, in all probability, have appeared, as if it were all on Fire.

August the 7th, the Noise alter'd ; and from being dull, as before, it became very loud, and resembled the Noise which is made when several great Stones are thrown all together into a very deep Well : And I really believe that this Great Noise was occasioned by several large pieces of Rocks, which after having been raised up with the Island by the violence of the Fire, broke of by reason of their weight, and fell back again into the Subterranean Caverns. What confirms me in this thought is, that I saw then the Ends of this Island in so great a Motion, that after having appear'd for some Days, they then disappear'd, and afterwards re-appear'd again a-new. Howsoever it was, this Noise after having continued so for near a Month, was followed by another much louder and more extraordinary : It so nearly resembled Thunder, that when it did really Thunder, as it happen'd to do 3 or 4 times, there was very little difference between the one and the other.

As the Passage, which the Fire had made itself by its violence thro' so many Rocks, was not, in all probability, in a strait Line, and was in some places narrower, and in others larger and more free ; so it is probable, that the Fire, or rather the Sulphureous and burning Exhalations, caused this great Noise, by turning from side to side in these winding Caverns, and endeavouring to get a Passage out, which was difficult for them to find : Which was the cause that the Noise of this Subterraneous Thunder was sometimes not so loud, and a little while after grew more violent, and sometimes was so stunning, that People talking together could scarce hear one another speak ; and that the Black Island, which was already very high, seemed to crack on every side ; and in short, that the inclosed Fire, after several Windings and Turnings, having collecting a sufficient force,

was

was able to break out with a Noise equal to that of several Cannons discharged at once:

August 21. the Smoak deminished considerably, as also the Fire: There did not appear any in the Night; but the next Day both returned with greater force than at any time before. The Smoak was reddish and very thick, and the Fire so great, that the Water of the Sea smoak'd and bubbled up all round the Black Island. I had in the Night the Curiosity to view with a Telescope the great Fire that appeared upon the Mountain of this Island, and I number'd 60 Openings or Funnels, which threw out all of them a very bright Fire, and were divided from one another by Rocks. In all probability there were others, and perhaps as many, on the other side of the Mountain, which I could not see. Next Morning I observed that the Island had been very much raised in the Night; that a Range of Rocks about 50 Foot long was rose out of the Water, which made the Island broader than it was before; and that the Sea was almost covered over with the reddish froathy Matter, above-mentioned. This Matter, or Froth, appeared upon the Sea every time that the Island increased considerably; and occasioned a stink, much like that of the Sink of a Ship: Which we may imagine to arise from a slimy Earth mixed with Sulphur, which being raised up with the Rocks, and coming to be washed off by the Waves, was loosened and diluted by the Water, and so so sent up to the Surface the Salts with which it was loaded.

The Fire had hitherto appeared but only in one place, upon the Top of the Black Island; but on the 5th of *September* it made itself another Passage, and appeared at the End of that Island, on the side next *Terasia*, which is another Island which some Authors say was formerly joynd to that of *Santorini*, and was separated from it by an Earthquake. The Fire did not continue at this

End but a few Days, during which it decreased at the place whence it used commonly to issue out. And here we were very agreeably surpriz'd, in seeing the Fire 3 several times dart out from this place with out any Noise, and rise up in the Air like a large Rocket. The following Days there was much the same Spectacle; for the Subterraneous Thunder, after having made a great Noise, broke out from time to time with a Clap as loud as that of a Cannon, (which the Inhabitants were then so far from being afraid of, that they took pleasure in viewing it) and was accompanied with a very beautiful and large Fire, which shooting up in an instant to a great Height, fell again on the Island, and illuminated it almost all over. I cannot better represent the Figure that the Fire made in the Air, than by comparing it to a certain Artificial Fire-work I have seen in *France*, and is there called the *Gerbe*: But with this difference notwithstanding, that this Fire, of which I am speaking, rose much higher and was much larger, but not so distinct as that of the *Gerbe*. The Pleasure, however, that they had, in viewing these Natural Fires, which so nearly resembled Artificial ones, was not a little disturbed by a *Phenomenon* which the Inhabitants believed to be an ill Omen to them; for immediately after the Fire was darted out, as I have said, in the manner of a Rocket, there appeared in the Air a Blaze, in the form of a long fiery Sword, which continued sometime, without moving, over the Castle of *Scaro*, and afterwards disappeared.

At that time also, the White Island and the Black Island, having increased in length, in proportion as they rose in Height, united together; and the End of the Black island, towards the South-East, began not to increase any more, either in Height or Length, while the End toward the West increased very sensibly to the Sight: Which makes me imagine, that the Mine of Sulphur being at this place, and the Fire not finding any Passage out here,
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had force to raise up this part and not the other ; for in the middle of the Island it always found Openings to issue out at, together with the Smoak. It had then 4 Passages there, which were so near one another, that one could not well distinguish them asunder, but by the Smoak: I do not mean that Smoak which commonly issued out and was continual, but that which rose up at some certain times with a great force ; for this Smoak came forth sometimes from one Passage, and sometimes from another, and oftentimes out of all four together ; sometimes with a great Noise, and at other times without any Noise at all, tho' then also it issued out with the same impetuosity.

Out of these Passages also there came a whistling Noise, like that of an Organ Pipe ; which, by the variety of Sound it made, pleased the Inhabitants as often as the Subterraneous Thunder ceased.

One would think, that the Noise of this Thunder should not then be so loud, by reason of the several Passages of which I have spoken ; yet, notwithstanding, it was not at any time so great and so frequent as it was then, and as it was above six Months after. It was then, as I said, like the Report of a Cannon : And there did not pass a Day or a Night, but we heard 5 or 6, sometimes 10 or 12 of 'em ; and at the same time several great burning Stones were thrown into the Air ; some of which falling one Day upon the Great *Kammeni*, set fire to some Thickets of Bushes upon that little Island ; and others being cast a great way into the Sea, had certainly destroyed a small Vessel that passed by at above a Miles distance, if it had gone by never so little later. These Claps were always attended with this Smoak I have mentioned, which was very different from that which issued out continually from the Gulf of Fire almost in the middle of the Island ; for this was much thicker and blacker, and rose in an instant much higher,

and was not dispersed 'till some time after, and then fell in Ashes upon the Country, or into the Sea; some of which the Wind sometimes carried as far as *Anacnphi*, an Island about 25 Miles distant from the Bay of *Santorini*.

Some Persons had the Curiosity to gather some of these Ashes, (which were of a Colour between black and white) and put them into the Fire, imagining they would burn like Gun-powder, which they very much resembled; but they produced no other effect, than only making a small hissing Noise.

September the 18th, two Hours after Midnight, there was an Earthquake at *Santorini*; with which they were the more surprized, because they least suspected it, the Subterraneous Fires having had so free a Passage for so long a time. It did not do any damage; and had no other effect than to enlarge very much the Island, and to remove for some Days the Fire and Smoak into other Places, through new Passages which it made, and to increase very considerably both of em. And in truth, I never saw so much Fire, or heard such terrible Claps, as after this Earthquake. By the violence of these Claps, Houses were shaken at above 3 Miles distance; and out of the midst of a great Smoak, which rose up and appeared like a Mountain, one might see and hear great pieces of Rocks fall down into the Sea and upon the Island, which were thrown out with the same Violence and Noise as a Bullet out of the Mouth of a Cannon.

The Lesser *Kammeni* was several times quite covered over with great Stones cover'd with burning Sulphur; several of which rolling afterwards from the top of this little Island into the Sea, made a very bright Light and pleasant appearance in the Night. I thought at first, that the Fire had passed under ground from the New Island to this; because they are not very far asunder:

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But I soon found my mistake, and that this Fire proceeded only from these Stones sulphur'd over ; for the Sulphur, with which they were crusted over, being consumed, they were all extinguish'd in half a quarter of an Hours time, except some few which remained alight above half an Hour. One Day, when the Lesser *Kamm-meni* was all on Fire, after one of these furious Claps, and the Air was so too, thro' the frequent Flashes of Fire that appeared in the Clouds, we saw, by a surprising Accident, three Flashes come out of the places where the Fire was, which one could not distinguish from real Lightning, but that they were formed lower, and were at the two Ends of the Island. By the violence of one of these Claps, part of the top of the New Island was carried off into the Sea, and several Stones were thrown to above two Miles distance : And, as if the Mine had been exhausted by this great Clap, three or four Days passed without any Noise, and almost without any Fire or Smoak. They thought then, that they should have seen an end of it : But the Fire kindled again, and the Island became more terrible than before. I was then at a Village 6 Miles distant ; where we heard so distinctly (notwithstanding it lay under a Mountain) the Blast of the Mine, that the Inhabitants were so frighted at such an extraordinary Clap, that I was forced to put 'em in heart, and they run immediately to Church to say their Prayers, and recommend themselves to God. At my return to the Castle of *Scaro*, I found the People much more alarmed than they were in the Village ; and was informed immediately, that the Castle had suffered so violent a Shake, that the Doors of the Houses, and the Windows that were shut, were opened by the force and violence of the Clap.

February the 10th 1708. at half an Hour after Eight of the Clock in the Morning, there was another Earthquake

quake at *Santorini*; and some Persons assured me, that there was another the Night before, but not so sensible as this. If we may judge by what is past, our *Volcano* is so far from drawing shortly to an end, that it gets new force by other Veins of Sulphur which take Fire at a greater distance. We have Instances of this in the Fire and Flames which rise so frequently into the Air, and fall again over the whole Island, making in the Night time as fine a Spectacle as was ever seen in Artificial Fire-Works. Besides this, several great Rocks, joyning to the Island, which before were even with the Water, have been raised much higher; and the Noise, Smoak, and boyling of the Sea, increase so much, that tho' the Inhabitants of *Santorini* have been so long accustomed to see all these things, yet they could not help being more afraid than before. And certainly not without reason; for the Subterraneous Noise was more violent than ever, and continued several Days together without any Intermiſſion; and in the space of a quarter of an Hour the Mine discharged itself 5 or 6 times; the Noise of which, with the great quantity of Stones it threw into the Air, the Shocks it gave the Houses, and the Fire which appeared in open Day (which was never seen before) very much surpasses all that I have before spoken of it.

The 15th of *April* was remarkable above all other Days, for the great number and violence of the Claps; by one of which, near 100 great Stones were mounted up all at once into the Air, and fell again at above two Miles distance in the Sea. Tho' I was then about three Miles off from the New Island, I observed one, of a surprising greatness, which did not rise so high as the rest, but was driven farther, in a strait Line, like a Cannon Ball. This happened to be *Easter-Day* (which was upon *April* the 4th, Old Stile, which is used at *Santorini*) and this Circumstance contributed not a little to confirm

confirm several ignorant *Greeks* in the ridiculous Opinion they had, that this New Island was one of the Mouths of Hell; so that they did not scruple to say, that the Devils, not being able to bear that Day, as being jealous of the Glory of the Resurrection of our Lord, had made all the Efforts that Day that was possible: And their Bishop himself was so infatuated with this Opinion, as well as the rest, that he spoke to me very seriously about it, and asked me my Thoughts of it: But notwithstanding whatsoever I could say to undeceive him, I found that he persisted in his Opinion, and would not be perswaded otherwise.

From the 15th of *April* to the 23d of *May*, which was a Year from the Birth of this New Island, what I have described above, continued the same; and I did not observe any thing more in particular, unless it were that the Island increased in Height and not in Length; and that one furious Clap beat down at once all the top of it; which by means of the Ashes and Stones of all sizes that fell upon it Day and Night, was not only repaired, but made much higher than it was before. All particulars began to abate afterwards: The Smoak decreased; the subterraneous Noise was not so violent; and the Claps, tho' they were very frequent, were not however so loud, by reason that the funnels, which gave a Passage to the Fire and Smoak, were then much larger than they were before.

Hitherto I had not been to see this Island, but at a distance; for fear the same should happen to me, as to *Pliny*, when he went to see Mount *Vesuvius*; and least I should be suffocated, as he was, with the Flames, or over-whelm'd with the Stones which this New Island threw out on every side. But seeing that there was then no danger, I went in company with the Reverend *Francis Crispo*, the *Latin* Bishop of *Santorini*; who, as well as myself, had not seen it before but a distance,
and

and had the same Curiosity as myself to view it and take all the Dimensions of it. And as our design was to go ashore upon it, if possible, we went directly to it; to do which, we were obliged to pass over a Place, where the Sea smok'd very much, but did not bubble. We were no sooner come to this Place, but we perceived a Heat strike upon our Faces; which was nothing else but the Fumes of the Sulphur, in the midst of which we were at that time. One of the Persons that were with us, who was naturally more timorous than the rest, being surpriz'd at this Heat, and not knowing the cause of it, asked from whence it proceeded. The Seamen bid him and us put our Hands into the Water; which we did, and found it so very hot, that having taken them out again immediately, the Bishop bid them make what haste they could away; saying pleasantly, that *that Place was too hot to tarry there long*. What surprized and griev'd me at the same time, was, that we were then 500 Paces off from the New Island, and that I had not time to sound the Depth of this Place. From hence we went directly over to that part of the Island, where it had encreas'd in Length, and where there was more Danger; for seeing that the Smoak was very thick, which showed that there was a great Fire all thereabout, we did not think it safe to go any nearer, and so satisfy'd our selves with viewing only the space that was between this New Island and the *Lesser Kammeni*; which I found to be broader than I imagined, and judg'd that a Galley might pass thro' the narrowest place of it. After this, we went on Shore upon the *Great Kammeni*, that we might from thence view nearer, and without any Danger, the whole Burning Island, and especially that side of it which we could scarce see from the Castle of *Scaro*. From hence it was, that after having well examined all Particulars, we judg'd this New Island to be about

200 foot in Height, 5 Miles in Circumference, and a Mile over at its broadest part. As to the Form of it, it is oblong, and resembles in some measure the Figure of a Dragon; as may be seen by the Design of it, which I took from this place.

After having tarried sometime upon the *Great Kammeni* (where) we had the pleasure to see often, not far off, a great many Stones thrown violently out of the Gulf of Fire, and fall down again with a terrible Noise upon the Island) we took a Resolution to coast it round, and to go to the other end of it, not doubting but that we might get on Shore there, because that part of the Island had not increased for several Months, and there did not appear any Fire or Smoak there: We were within a hundred Paces of it, when putting my Hand into the Water, I perceived that it was warm, and that the further we went the hotter it grew. At this Instant the Mine discharged itself; and the Wind drove upon us the thick Smoak, which broke out with such violence every time the Mine took Fire: And a Shower of Ashes and little Stones, not larger than common Hail-Stones, falling upon us, we were forced against our will to quit our design of going on Shore upon the Island at this Place. This Shower of Stones and Ashes being over, we retired a little by reason of the great heat of the Water; and letting down our Plummet, we had at this place 95 Fathom of Water, without finding the Bottom, our Line not being long enough. Viewing afterwards the space that was at this end between the Island and the *Lesser Kammeni*, we found in several places that it was narrower at this side than at the other; and that if the New Island should continue to grow bigger, several Rocks, which were already half above Water, and rose up nearer to the *Lesser Kammeni*, would in time shut up the Passage and joyn both the Islands together, so as to make a little Port between 'em, which would be very commo-

dious for the Stopping of *Santorini*. In returning afterwards to the Castle of *Stano*, we passed by the little Port of the *Lesser Kammeni*; and (by reason of its nearness) could scarce believe what they there told us, viz. That they could not hear there any of the Noise that this New Island made: Which we found to be true and that the Height of this little Island was the cause of it.

During all the rest of the time that I tarried at *Santorini*, to the 15th of *August* 1708. (at which time I came away) the Smoak, Fire, Noise, &c. continued much the same as I have now described 'em; that is to say, they were always pretty moderate.

This is all that I can say of this *Phenomenon*; all the Circumstances of which I have related so much the more faithfully, because I was the only Person at *Santorini* who kept a Journal of what happened every Day; and of which I had given you an Account sooner, but that, in order to make it more complete, I waited a long time in vain, in hopes to have seen and given you an Account of the End of it! From my leaving *Santorini*, to this present the 6th of *July* 1711. I have received several Letters, and have seen and spoken with several Persons who have come from thence within these few Days, and they all tell me, that the New Island grows still in Length on that side next *Terasa*: That it is now about 6 Miles in compass: That as to the Fire and Noise under ground, they were more moderate than before; which makes the Inhabitants of the Island hope, that they shall shortly see an end of it.

As for my part, when I consider, that the Passages which give vent to the Fire, are very large, and almost in the middle of the Island; and that there is no appearance that the Fire will ever make a Passage at the Bottom of the Sea, so as to let the Water in to extinguish it; I am of Opinion, that it may yet last longer

than

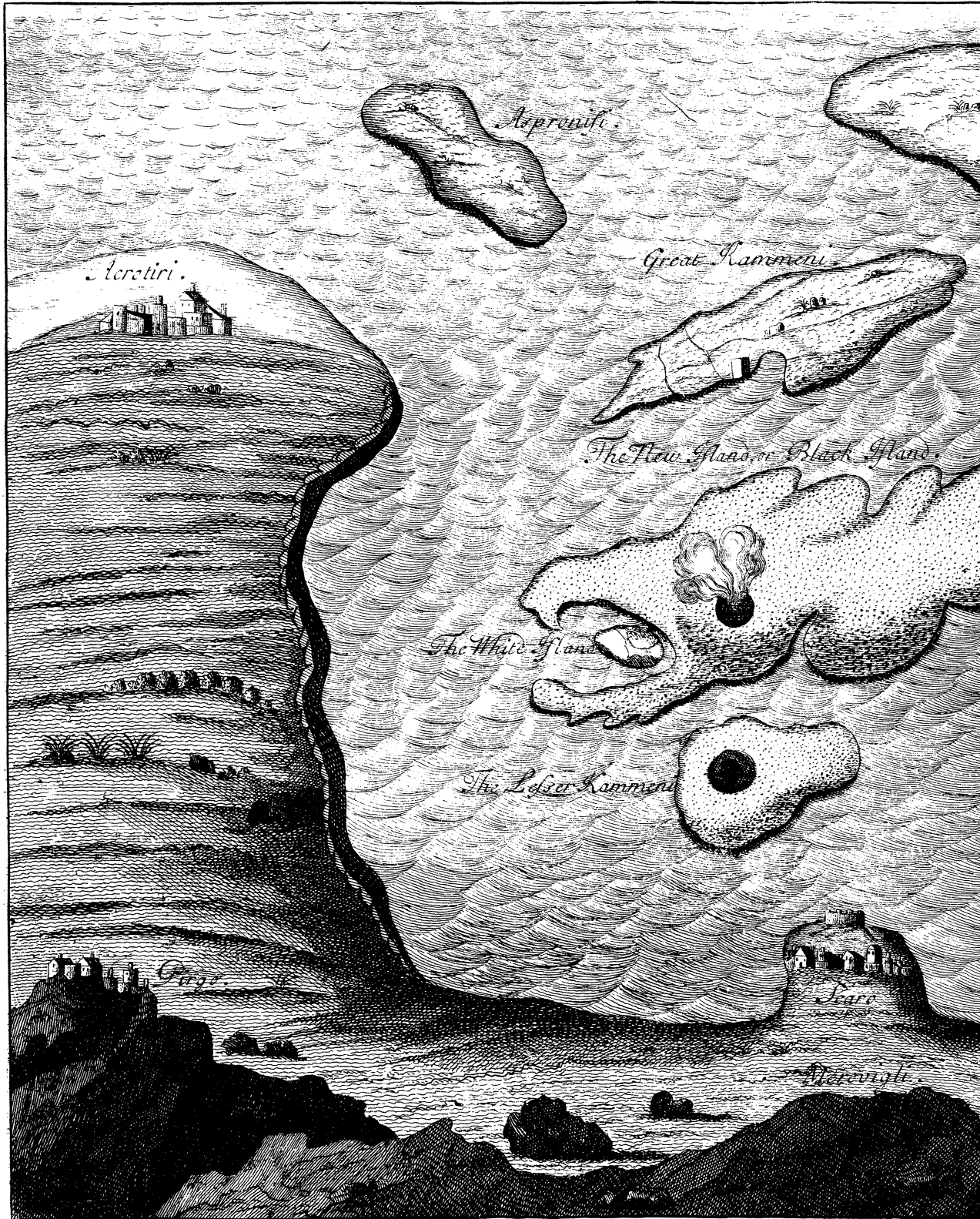
than they imagine and that this *Phenomenon* will not have an end, 'till the Mine of Sulphur is entirely consumed.

II. An Account of divers Rare Plants, lately observed in several Curious Gardens about London, and particularly the Company of Apothecaries Physick Garden at Chelsey. By Mr. James Petiver, F. R. S.

S E C T. I. Rare English Plants

Polypody of the Wall. *Polypodium murale*. pinnulis ferratis. *Polypodium alterum* C. B. in *Matthioli* pag: 887. Fig. *Polypodium Quercinum* Gerard. p. 974. Fig. *Polypodium* 2, *Tabern. Histor.* 478. Fig. *Polypodium* 2. *Filicula Ejusd.* Icon. 799. Fig. 1. *Tabernæmontanus's* Figure, which *Caspar Bauhine* upon *Matthioli*; and Gerard have copy'd, seems to resemble this Plant in its somewhat waved Wings, and tip. But the *Polypodium minus* *Dodon.* *Pemptad.* 464. *Polypodium Quercinum* *Jonston.* 1132. *Polypodium* 2 *Matthioli Lugd. Histor.* 1230. which *Caspar Bauhine* makes to be the same with this, viz. *Polypodium minus* C. B. pin. 2. 359. is not like it, but a less and slenderer sort of the Common. Dr *John Salvadore*, a very Curious Botanist, sent this lately from *Barcelona* by the Name of *Polypodium majus ferrato folio Barrliet.* *Icon. Instit. Rei Herb. Tourn.* 540. I gathered this Plant 8 May 24. A. D. 1709. on the Walls of ^{Place} *Windsor Castle*, in the Apartment of the Reverend Dr. *Manningham*, then *Dean* of that Place, and now Bishop of *Chichester*, whose Son, a very Nice Botanist, first ob-

N. B.



Acrotiri.

Aspronisi.

Great Rammenu.

The Flow Gland or Black Gland.

The White Gland.

The Lesser Rammenu.

Cape.

Siaro.

Maravigli.

