

V. *An Account of the Giants Causeway in Ireland, in a Letter to the President from the Rev. Richard Pococke, LL.D. Archdeacon of Dublin, and F.R.S.*

Dublin, 5 Jan. 1747-8.

Read Jan. 28. — IN my last Passage over to this Kingdom, I saw that very remarkable

Curiosity, commonly called the Giants Causeway: § The Sea-Cliffs are very high thereabouts, and what is called the Causeway is a low Head, extending from the Foot of the Cliffs into the Sea like a Mole. This Head does not appear at first so grand as it is represented in the Views engraved of it; but when one comes to walk upon it, and consider it more attentively, it appears to be a stupendous Production of Nature. The Head ends in two Points: I measured the more Western to the Distance of 360 Feet from the Cliff, and it appeared to me to extend about 60 Feet further; but this Part I could not measure, by reason that the Sea was then high; and I was told, that at low Tides it might be seen about 60 Feet yet further upon a Descent losing itself in the Sea. I also measur'd the more Eastern Point 540 Feet from the Cliff, and saw about as much more of it as of the other, when it winds about to the Eastward, and is also lost in the Water. One may walk upon this Head on the Tops of the Pillars to the Edge of the Water. These Pillars are of all angular Shapes from three Sides to eight. The Eastern Point, towards that End where it joins the Rocks, terminates it self for some Way in a perpendicular

§ This Causeway is before taken notice of in N^o. 199, 212, 235, and 241 of these *Transactions*.

perpendicular Cliff, formed by the upright Sides of the Pillars, some of which I measured, and found to be 33 Feet and 4 Inches in Height. They say there are in all 74 different Sorts of Figures among them. Each Pillar consists of several Joints or Stones lying one upon another, from 6 Inches to about a Foot in Thickness: Some of these Joints are in the middle so convex, as for those Prominences to be nearly Quarters of Spheres, round each of which is a Ledge, upon which the Stones above them have rested, every Stone being concave on the under Side, and fitting in the exactest manner upon that which lies next below it. The Pillars are from one to two Feet in Diameter, and consist most commonly of about 40 Joints, most of which separate very easily, tho' some others, which are more strongly indented into each other, cohere strongly enough to bear the being taken away in Pairs.

But the Causeway is not I think the most singular Part of this extraordinary Curiosity; the Appearance of the Cliffs themselves being yet to me more surprising; these and their several *Strata* I examined from the Rocks on the other Side of a little Bay, about half a Mile to the East of the Causeway. I thence observed, that there runs all the Way a *Stratum* from the Bottom of black Stone, to the Height, as well as I could conjecture, of about 60 Feet, divided perpendicularly at unequal Distances by Stripes of a reddish Stone, looking like Cement, and about 4 or 5 Inches in Thickness. Upon this there is another *Stratum* of the same black Stone divided from it by a *Stratum* 5 Inches thick of the red. Over this another *Stratum* of Stone ten Feet thick divided in the same manner; then a *Stratum* of the red Stone twenty Feet deep; and above that a *Stratum*
of

of upright Pillars. Above these Pillars lies another *Stratum* of black Stone 20 Feet high; and above this is again another *Stratum* of upright Pillars rising in some Places to the Top of the Cliffs, in others not so high, and in others again above it, where they are called the Chimneys.

This Face of the Cliffs reaches for two computed Miles East from the Causeway, that is about 3 measured *English* Miles, to the House of Mr. *John Stewart* two Miles West of *Balintoy*. The upper Pillars seem to end over the Causeway, and, if I mistake not, become shorter and shorter as one goes from it, lying between two Binds of Stone like Seams of Coal, and like those little Pillars found in *Derbyshire* §.

These Binds probably meet together all round, and inclose this extraordinary Work of Nature; and if so, the Pillars must be very short towards the Extremities.

I was led to this Conjecture by the following Observations: The lower *Stratum* of Pillars is that which goes by a Descent into the Sea, and which makes what is called the Giants Causeway; and where this Descent approaches the Sea, it seems probable that the Pillars become shorter and shorter, so as to end not much further off. Now the upper Bind of this *Stratum* may have been of so soft a Nature, as by degrees, in Process of Time, to have been washed away by the Sea. And in the Cliff over the Causeway I saw several Pillars lying along in a rude manner almost horizontally, which seemed to me to be some of the Pillars of the upper *Stratum* fallen down by the giving way of the Bind
which

§ The Doctor here refers to a Paper of Mr. *Emanuel Da Costa*, communicated May 14. 1747. but not yet printed.

which was under them, and over the lower ones that compose the Causeway. And here most probably the upper Pillars ended, as they are seen no farther in the Cliff. I saw the Tops of Pillars even with the Shore, both on the the East and West Sides of the Causeway, and some much lower than the Causeway itself; and it is probable that these are much shorter than those of the Causeway, which I measured above thirty Feet higher than the Tops of them.

When I was upon the Causeway, I saw in the Cliff, to the South-east, what they call the Organs, about a Quarter of a Mile off, and a third Part of the Way up the Cliff. They appeared small, and somewhat like a black *Stalactites*: They were not commonly known to be such Pillars as the others; but they are so, and belong to the lower *Stratum*. When with great Difficulty I climbed up the steep Hill to them, I found they were hexagonal, and larger Pillars than most of the others, being about 2 Feet in Diameter; and I measured 5 Sides of one of them, which were of 13, 15, 12, 21, and 16 Inches respectively. The Joints I could come at were about 9 Inches thick, and each Pillar, as well as I could count, consisted of between 40 or 50 of them: These Joynts are almost flat and plain, the Convexities on their upper Faces being so small as to be scarce discernible. I enquired whether any of these Pillars were found in the Quarries within Land, and the People there told me they were not; but since I left the Place, I have been assured by others, that there are some found two or three Miles from the Shore. I am, with the greatest Regard, Sir,

Your most obedient humble Servant,

Richard Pococke.