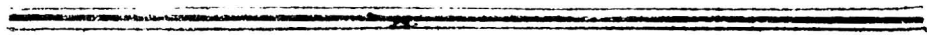


FOSSILIA HANTONIENSIA.



HAMPSHIRE FOSSILS.

FOSSILIA HANTONIENSIA

COLLECTA,

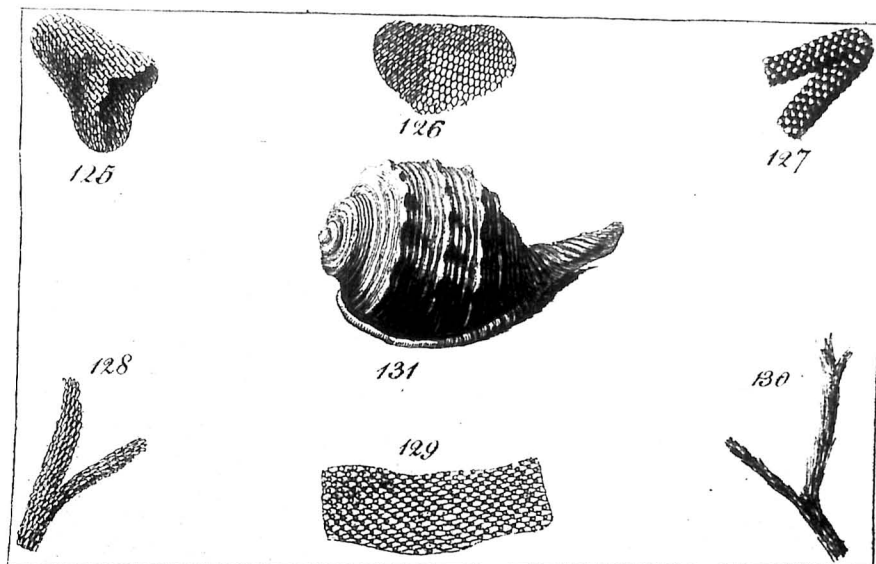
ET IN MUSÆO BRITANNICO

DEPOSITA,

A

GUSTAVO BRANDER

R. S. & S. A. S. Mus. Brit. Cur.



LONDINI. 1766.

P R E F A C E.

FOSSILIA testacea, quæ Tabulis frequentibus ad Naturam fideliter exarata sistuntur, e Clivibus Comitatus Hantoniensis Littora Oceani Atlantici cingentibus, inter *Christ Church* et *Lymington*, speciatim vero in Campis prope pagum *Hordwell*, qui inter dicta loca medius est, effossa fuere. Stratum est terræ ex Glarea et Arena mixtum, 14 vel 15 pedes profundum, sub quo, in Argilla vel Marga carulescente terram perpendiculariter ad lineam superficiæ Maris parallelam usque (quo ulterius non certo constat) penetrante, corpora hæc minime mutata, colore excepto, formamque naturalem optime servantia, impacta et recondita occurrunt. Rupes dictæ multis in locis altitudinem 100 pedum et ultra attingunt.

Stratum illud Argillaceum versus plagam Septentrionalem Comitatus, transversim sylvam *New Forest* longe extenditur, id quod quotidianâ experientiâ, margam in his locis effodientium, vel domuum et habitationum fundamenta struentium, evincitur, quippe quorum operâ Fossilia, cum reliquis in hoc opere memoratis corporibus quam sæpissime luci traduntur: unde docemur non solummodo Testacea sed Pisces etiam et Quadrupedia in generali quadam Globi hujus Terraquei

THE Fossil Shells of which the following Plates are exact Draughts, were collected in the County of Hampshire, out of the Cliffs by the Sea Coast, between *Christ Church* and *Lymington*, but more especially about the Cliffs by the Village of *Hordwell*, which is nearly the midway betwixt the two former places; they are found in their natural State, excepting their loss of colour, and exceedingly well preserved, below a stratum of Gravel and Sand about 14 or 15 feet thick, in a blueish kind of Clay or Marle quite down to the level of the sea, how much deeper is not known; the height of these Cliffs are, in many places, above 100 feet.

This stratum of Clay runs a great way into the Country in a Northerly direction, quite across the New Forest, as may be perceived when Sinkings are made in the Earth for Buildings, or Pits for the digging of Marle, where Fossil Shells, on such Occasions, frequently occur, together with those other Bodies here mentioned, by which it appears, that along with the Testaceous Tribe, Fish and Quadrupeds became involved in the general confusion; the shores under these Cliffs abound with large Nodules

Terraquei confusione comprehensa & involuta fuisse. Littora ipsa, ad basin rupium, magnis Nodulis Mineræ Ferreæ, & Lapidibus Siliceis, quorum magna pars, testacea fossilia vel eorum saltem impressiones & Escharas infra describendas, in se includit, abundanter scatent.

Variæ de tempore & modo quibus hæc corpora heic deposita sunt, opiniones existant. Sunt qui sibi imaginantur, hoc tractu temporis indefiniti, fieri potuisse, idque mediantibus mutationibus & variationibus ipsarum Aquarum Maris, gradatim factis. Alii, tellurem multas, imo universales revolutiones seu everfiones subisse, contendunt, de quibus nullas habemus nec habere possumus ideas, præter, quæ hisce vestigiis nobis suggeruntur.

In genere, Diluvio, ut Caussæ universali, effectus hos deberi, creditur. Doctrina vero de Inundatione Aquarum, si vel universalis ea fuisset, non diutius, quam Sacræ Literæ docent, supra terram manentium, omnia terræ universæ contenta solvente & solida omnia, secundum D. Woodward, fluida reddente, ut sic exuviis Maris & Terræ in centra rupium durissimarum & silicum introitus concederetur, æque hypothetica est ac reliquæ quotquot hujus rei sunt conjecturæ: parum igitur abest, quin re bene perpensa facile credam, mysteria hæc numquam nobis reclusa futura. His ergo missis, paucas tantum generales addam observationes, quibus, illis qui minus in hisce rebus versati sunt, conclusiones formandi campus aperiat otiumque fiat.

Ex inquisitionibus & pervestigationibus, per omnes partes hujus Globi nobis cognitatas industriâ factis, phænomena hæcce universaliter (paucissimis locis exceptis) occurrunt: a cacumine enim altissimi a mare remotissimi montis, ad imam usque quam humana unquam penetraverit opera profunditatem terræ, & Conchilia, & Offa, & Vegetabilia

Nodules of Iron Ore and Pebbles or Flints, in many of which, when broken, are discovered Fossil Shells, or their Impressions, and the Escharæ here described.

Various are the Opinions concerning the Time, when and how these Bodies became deposited; some there are who conceive it might have been effected in an indefinite length of time by a gradual changing and shifting of the Sea; others again, that this Globe may have undergone many, even total Revolutions, of which we neither have or can have any idea, but from these traces.

The most common Cause assigned is that of the Deluge, but the Notion that an overflowing of the Waters, during the time mentioned in Scripture, although the universality of it should not be called in question, could have loosened the intire contents of the whole earth, according to Dr. Woodward, and have rendered all that was solid fluid, for the admission of the spoils both of the sea and land, into the centre of the hardest Rocks, nay even of Pebbles and Flints, is equally hypothetical with other Conjectures; so that upon the whole I am apt to think this affair will for ever remain a mystery: I shall therefore content myself with making only a few general Observations on the Subject, the better to enable such as are less conversant in these Matters, to judge for themselves.

These Phænomena, then, upon an inquisitive Search over as great a Part of the Globe as we have any knowledge of, except in a very few Instances, are found to be universal; for, from the Surface of the highest Mountains in the most inland Parts, down to the greatest Depth in the Earth ever penetrated, where openings have been made, are found Shells

Vegetabilia vel petrifac̄ta vel in ſtatu ſuo naturali præſervata, in Humo, Argilla, Arena, Marmore, Silice idque genus aliis impācta inveniuntur, terraque effoſſa deteguntur: tanta etiam eorum copia eſt, ut Teſtacea imprimis foſſilia quoad Species & Varietates numerum recentium, adæquum, quoad abundantiam longe ſuperent. Advenſa hæc foſſilia quoad maximum conditionalium partium incolas fuiſſe obſervatur, ut Elephantes, Crocodili, Lepardi, quorum Skeleta ſeu offa nuda hodie obſervantur & de quibus nullum dubium eſt: idem de pluribus Vegetabilibus valet: e Teſtaceis etiam, Ammonitæ, Belemnitæ, Stellæ Marinæ, Anomiæ aliæque addunt, quæ in genere dicendo, recentia nunc temporis non habentur, Abyſſi ſine dubio, aut Littoris Maris cujuſdam ignoti loca natalia non amplius deferentes incolæ; omnia tamen in hac noſtra Inſula maxima copia præſtant.

Conchiliorum, quæ hæc delineari curavimus, quorumque ſpecimina Originalia, unde figuræ deſumptæ ſunt, in *Collectione Branderiana* MUSEI BRITANNICI ſervantur, pauciſſima in noſtris littoribus vel in ulla alia parte Europæ habitare deprehenduntur; maximus eorum numerus Species comprehendit, quæ, comparatione cum recentibus inſtituta, prorsus non cognitæ ſunt.

Nil jam ſuperest, quam ut hæc loci etiam publicas grates agam Cel. & mihi amiciffimo D. SOLANDER, cui deſcriptiones ſcientificas & ſyſtematicas ſequentes me debere lubens gratuſque agnoſco. Illi, quem Curatores ipſi Muſæi inter ſuos nominarunt, cujuſque Induſtriæ & Eruditioni mandarunt, ut locupletatiſſimæ illius collectionis Catalogum, productiones naturales ſyſtematico ordine comprehenſurum, conſcribat: in quo opere etiam jam omni diligentia verſatur. Deſcriptionibus Latine conſcriptis

Shells, Bones and Vegetables, petrified, or preſerved in their natural State, in Earth, Sand, Clay, Marble, Flint, &c. and in ſuch abundance, that the teſtaceous Tribe eſpecially, are equal in Variety to the Number of thoſe found recent, and in Quantity infinitely exceed them. The greater part of theſe Fossil extraneous Subſtances that are known, are found to be Inhabitants of Southern Latitudes, as the Skeletons of Elephants, Crocodiles, Sharks, and almoſt all the Vegetables; and of the Teſtaceous Tribe are found the Ammonitæ, Belemnite, Stelle Marine, Anomiæ, &c. now in general not known in the recent State, Inhabitants, no doubt, of the great Deep, or of ſome unknown Seas or Shores; all of which are met with in great Plenty in this our Iſland.

Of the Shells here engraven, the Originals of which are in the Branderian Collection of the Britiſh Muſeum, but very few are known to be Natives of our own, or, indeed, any of the European Shores, but the far greater Part of them, upon a compariſon with the recent, are wholly unknown to us.

And now I think I have nothing more to do, than to acknowledge myſelf indebted for the ſcientific Deſcription of them to the learned and ingenious Dr. SOLANDER, one of the Officers of the Britiſh Muſeum, who is at this time employed by the Trustees to compoſe a Syſtematical Catalogue of the Natural Productions of that intire Collection; and to declare that I had willingly given an Engliſh Deſcription with the Latin, but that as the Subject had never yet been treated Scientifically in the Engliſh Tongue, I found of courſe too many

conscriptis translationem in Idiomate Anglico addere decreveram. Terminorum vero artis in nostram linguam redditionem nimis difficultatibus subjici, statim percepi; nec mirum, dum subjectum hoc, lingua vernacula numquam scientifice tractatum fuerit: nec multum interest, nam Studium Historiæ Naturalis rarissime, si unquam, ab aliis, quam qui Latinam Linguam callent, cultivatur: Si vero quidam sint, qui cognitione linguarum destituti, delectamento hujus studii abripiantur, eorum in gratiam præfamen hoc Anglice conscriptum præfixi, illisque Figuras has naturam accuratissimè imitantes, satisfacere posse spero.

Londini,
1766.

many Difficulties in the giving a literal Translation of the learned Terms; and as the Study of Natural History in general, is rarely attempted, but by such as are in some degree acquainted with the Latin, I thought this Preface in the Vulgar Tongue, and the Accuracy of the Drawings might be sufficiently satisfactory to those who are wanting in that particular.

London,
1766.

Gustavus Brander.

DESCRIPTIONES SPECIERUM.

Fig. 20.

BUCCINUM (*scabriculum*) testa ovato-oblonga scabra transversim rugosa, longitudinaliter striata, columella plicata, labro inæquali. *Linn. Syst. nat. p. 740. n. 412.*

TESTA crassiuscula, ovato-oblonga, reticulatim striata: *striis* longitudinalibus majoribus, unde rugosa.

SPIRA acutiuscula.

COLUMELLA quadriplicata.

Fig. 21.

CONUS (*scabriculus*) utrinque subconica striata: *striis* elevatis denticulatis.

TESTA vix uncialis, utrinque subconica; *Spira* enim magis elongata quam in plerisque ex congeneribus, undique striata est: *Striis* elevatis, acutis, denticulatis, alternis sæpe minoribus.

Fig. 22.

CONUS (*lineatus*) testa utrinque subconica obsolete striata: *striis* æqualibus lævibus, spira subnodulosa.

TESTA magnitudine articuli digiti minimi, utrinque conica, obsolete striata: *striis* lævibus æqualibus.

SPIRA acuta: *anfractibus* inferne nodulosis: nodulis æqualibus. Cylindrus seu Venter æqualis sensim attenuatis.

LABRUM læve.

COLUMELLA lævis.

Fig. 23.

Fig. 23.

VOLUTA (*perita*) testa cylindroide lævi, spira exquisita acuminata, margine unico.

Est media quasi inter *Volutam Ispidulam* Linn. Syst. nat. p. 730. n. 351. & *Volutam Corniculam* Linn. Syst. nat. p. 731. n. 362.

TESTA glabrata.

SPIRÆ Anfractus contigui ut vix discerni queant.

COLUMELLA basi striata, nec plicata ut in *Voluta Cornicula*.

Fig. 24.

CONUS (*dormitor*) testa utrinque conica striata: striis æqualibus elevatis; interstitiis leniissime crenulatis.

TESTA crassiuscula, transversim striata, utrinque conica, *Spira* autem ventre paulo brevior. Tota testa inter strias crenulata est.

ANFRACTUS spiræ contigui.

APERTURA linearis, antice parum angustata.

Fig. 25. 44.

MUREX (*priscus*) testa subturrita lævi, ventre basi striato.

TESTA subturrita, sublævis; *Anfractibus* Spiræ supra striis paucis obsolete notatis. *Venter* basi transversim striatus.

CAUDA brevis, conica, aperta.

Fig. 26.

Plate I.

