

An attempt towards a natural history of the fossils of England; : in a catalogue of the English fossils in the collection of J. Woodward, M.D. Containing a description and historical account of each; with observations and experiments, made in order to discover, as well the origin and nature of them, as their medicinal, mechanical, and other uses.

Contributors

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A
CATALOGUE
OF THE
Additional *English* Native Fossils,
IN THE
COLLECTION
OF

J. WOODWARD M. D.

TOME II.

LONDON MEDICAL
SOCIETY



LONDON,

Printed in the Year M.DCC.XXVIII.

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P R E F A C E.

IT was not without great difficulty that I got so much Time, from my Business, as to put the Bodies, set forth in this Catalogue, into any Method, and range them in the Classes specified in the next Page. Had I had Leisure and Time in my power, that had been done with greater Exactness than it is, or indeed was possible in so great a hurry as I ever am.

Many of these Bodies are very considerable, and some exhibit Phenomena really instructive, and of great signification. There are Remarks of some of these in the Descriptions which I have here drawn up. I had given many more, and been more full and particular in all, had my Affairs comported with that; but this they would not by any means: nor indeed permit me to give any Descriptions at all of several of the Bodies in this Catalogue.

But that is a Defect not difficult to be supply'd by any one who shall have Skill in those things. They are here placed in order, each with those of its own Kind or Tribe; and the Places where all were found, are carefully noted. The Bodies themselves being thus forthcoming, nothing more is needful than an accurate Inspection and Survey of every thing observable in each, for the finishing their Description. Nor is any thing more needful for perfecting the natural History of these Bodies, a Thing of high Importance, many of them being of great Worth, and Use, than the subjecting them to Experiments, and particularly of the Fire; to which end, I have reserved and set apart Duplicates of all the most considerable.

For several of the following Fossils I thankfully own myself obliged to Mr. Scobell; for others to Mr. Hicks; for others to Major Hanbury, Mr. Lewis, and some other curious and intelligent Gentlemen, likewise my Friends, who having Mines of their own, had great Opportunities of supplying me with Samples; which they all did with great Forwardness and Humanity, contributing thereby very liberally to the promoting and encrease of this excellent and useful Part of Natural History.

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EARTHS and EARTHY SUBSTANCES.

U M B R E S.

a. 1. **A** Light earthy Substance, seeming to be compos'd of rotten Wood, found in the Cliffs beyond *Limington, Hampshire.*

a. 2. Earth, of a dusky brown Colour, like *Umbre*; found in one of the Company's Mines in *Wales*, call'd *Caninog*. It lay in a Lead-Vein, at the Top, near the Surface.

Y E L L O W - O C H R E S.

a. 3. An Earth, very fine, yellow; only there are some few Specks of red in it. Found, as this sort commonly is, in the Fissure of an Iron-Mine, in the *Forest of Dean*, near the Ore.

a. 4. Yellow Earth; from *Estemtean*, one of the Company's Works, in *Wales*. This was found, hanging down in Form of a *stalactites*, from the Top of an antiently-work'd Lead-Vein there. There were more at the Top, and on the Sides of this Work.

a. 5. Brown Earth, seeming to have amongst it black Talc. *Estemtean*. Found in the same Place, and Manner, with the foregoing.

a. 6. A light, friable, ochrous Body; from a Coal-Work of *Billymill-Moore-Level*, in *Northumberland*. Form'd by Water flung forth from an Adit, on the Sides of the Water-Course, on the Surface. 'Tis found commonly incrustated on Sticks, Rushes, &c. in vast Quantities.

RED-OCCHRES.

a. 7. A red Earth, very fine; found in an Iron-Mine in the *Forest of Dean*. This sort is found generally near the Ore, in the inclining Fissures. The Workmen save it, and call it *Red-Ochre*.

a. 8. Another, of a deeper Colour; from the same Mine.

a. 9. Another; *Ibidem*.

BOLES, CLAYS, EARTHS.

a. 10. Clay, Ash-colour'd, Part of a Stratum, which lay above the Strata of Stone at *St. Agnes-Ball, Cornwall*.

a. 11. Another sort, white, very fine; found in the same Place.

a. 12. Another sort, reddish, and very fine; found still in the same Place: All the three sorts are very plentiful there.

a. 13. A fine white Clay; found, lying confusedly in a Sinus of a Rocky-Cliff, betwixt *Tenby* and *Milford, Wales*.

a. 14. *White Killas*, being the Side of a Vein, in *St. Agnes-Ball, Cornwall*. The Stratum is of a considerable Thickness: and, I think, the same on each Side of the Vein.

a. 15. A grey, unctuous, clayey Matter, seeming to have also Flakes of Talc in it. This sort is found, soft, in small Quantities, in Holes of the Antimony-Vein, *Endellion*, out of which this Sample was taken.

a. 16. Earth, with little white sparry Stones in it. Found in a Vein, in *St. Agnes-Ball, Cornwall*. The Miners call this *Fluken*. 'Tis probable these Stones are only Bits of Spar, broke, and worn thus by the Fall and Motion of Water there. See what I have said on that Subject, treating of Spar; found, with the Iron-Ore, in the *Forest of Dean*.

a. 17. Earth, of an Ash-Colour. Found with a. 22. *infra*, in the Road, midway betwixt *Stainton* and *Hereford*.

a. 18. Blue Clay, part of a Stratum; out of the Pit whence the Marble is got, at *Petworth*.

a. 19. Earth, grey, with a Cast of Green, very stiptick, being Part of a Stratum near the bottom of *Hordell-Cliff*, between *Lymington* and *Christ-Church, Hampshire*.

a. 20. A Piece of a grey Clay; from *Palmore-Cliff*, in Mr. *Scobell's Estate, Cornwall*.

a. 21. Earth, green, with some Spots of yellow; out of a Vein of Calamin, in *Shippin Liberty, Mendip, Somersetshire*.

a. 22. Earth, variegated with grey, and brown. This was originally all red: but the Water pervading the Cracks, draws off the red that is near them. Found, with a. 17. *supra*, in the Road, midway between *Stainton* and *Hereford*.

a. 23. A Sample of the Soap-Rock, which lies in the Sea-Cliffs, about a Mile South-West from the *Lizard-Point*. The Red is soft as Clay, as a great Part of this Matter is. 'Tis all found in Loads, or Veins, of a clayey Stone; much like that, N^o b. 60. *infra*.

a. 24. A brown Earth. Found, lying confusedly in a Sinus of a rocky Cliff, betwixt *Tenby* and *Milford, Wales*.

a. 25. A black Earth. Found in the same Place.

a. 26. A black Earth, made into Form of a Ball, and called *Killow*. *Colow* is the Word by which they denote black Grime of burnt Coals, or Wood. Mr. *Cotton* uses the Word in his *Lucian's Dialogues*----- Being put into the Fire, this emits a slight sulphurous Exhalation. There were several of these Balls, and all had Granules of a white Matter interspersed. From *Dennis-Mouthy*-----*Wales*.

a. 27. *Killow*, dig'd up in great Quantities like Clay; eight Miles from *Dolgadwin*, Northward, near *Dennismouthy*. [Perish'd and gone.]

a. 30. A light earthy Substance, seeming to be composed of rotten Wood. 'Tis black and flaky, holding Vitriol. From the Cliffs beyond *Limington, Hampshire*.

a. 29. Another like black Substance. Found near the former.

S A N D S.

a. 30. Sand, of a yellowish Colour, part of a Stratum, lying above the Strata of Stone. At *St. Agnes Ball, Cornwall*.

a. 31. Grey Sand, with a Species of small Bivalves found in it. 'Tis part of a Stratum wash'd, and cleaned. From the Cliffs beyond *Limington*.

a. 32. There is a Stratum of Quarry-Stone, upon *Shotover-Hill* near *Oxford*, that lies about 3 Yards deep, and is a Foot thick, with Stone of another Sort, above and below. This very Stratum is in some Parts lax, and in Form of Sand; of which this is a Sample. Out of the solid Part of this Stratum, I broke a Piece of Stone which is mentioned below, b. 1. That Piece of Stone lay but at the Distance of 2 Yards from this Mass of Sand.

a. 33. Sand, driven off the Sea-Shore by the Winds up into the Country, and concreted there into this Form and Hardness. The Inhabitants call it *Kern'd Stone*. This was taken up on the side of a Hill, near half a Mile from the Sea: The Place is called *Pyran Sands*. The Sand is held together by a kind of Sparry Matter. I observ'd at the bottom of the Rocks thereabouts, Masses of Rubble Stones cemented together by such Spar. I saw of the same sort of Spar, amongst Rubble Stones upon the Rocks in *Chaldey-Island, Wales*. This Spar, both there and in *Cornwall*, is drain'd forth of the Rocks. *Pyran Sands* cover and lay waste a great Tract of Country. There are like Sands

in several other Parts of *Cornwall*. The Corporation Town of *St. -----* is almost half cover'd by these Sands.

STONES.

Stone of Strata.

b. 1. A Piece of Quarry-Stone, from *Shotover-Hill*. There is an Account of it, *a. 32. supra*.

b. 2. Free-Stone, of a pale brown Colour; with very small Talky Micæ in it. 'Tis Part of a Stratum, about 3 Foot thick. From *Polriddon, Cornwall*.

b. 3. Another Sample, partly of the same, and partly of an Iron Colour, full of Micæ. Part of a Stratum, lying deeper than the former. From the same Place.

b. 4. A Piece of a pale brown Stone, holding Iron; part of a Stratum near a Foot thick, extending for several Miles, and lying above the Shells in *Hordell Cliff*; betwixt *Limington* and *Christ Church* in *Hampshire*.

b. 5. A reddish Stone, gritty; with Micæ in it. All the Strata are of this Sort; but there are small Cracks in several Parts of them: and near the Cracks, the Stone is rendred white by Insinuation of the Water; this possibly drawing off some of the ferrugineous Matter that colour'd the Stone. This may afford a Hint for investigating the Cause of the Variegation of some sorts of Stone and Marble. Found in the Cliffs, on the farther side of the *Severn*, near *Pyrton Passage*.

b. 6. A red Stone, with a coarser Grain. *Caldy Island*. A considerable Part of the Island consists of this.

b. 7. Stone, grey, with a Blush of Red; from the Mountain *Stix*, in *Cumberland*. 'Tis found in Quantity.

b. 8. Stones of a dusky red Colour, from the same Mountain. Found also in Quantity.

b. 9. Stone, from a vast Quarry near *Exeter*. All the Stone in this Quarry is of the same Sort.

b. 10. A Talky Stone, very like Emery; ponderous and seeming to hold Metal. From the Mountain *Skiddaw*, in *Cumberland*. [Mr. H. has this and the following for Tryal, for Emery.]

b. 11. A Stone, very like Emery, found plentifully upon the Moors, North-East from *Skiddaw* Mountain, at the Distance of about 2 Miles. *Cumberland*.

b. 12. A stony Mass, of a grey Colour, near white *. This is of that Sort, that the Tanners call *Growan*. It lies on one side of the Vein in which the Tin-Ore was found, *m. 90. infra*: and is the common Stone on that side. They have three sorts of Stone in *Strata* in *Cornwall*; Free-stone, which they call

* There are several little Hollows in it filled; some with a white cretaceous Matter, and some with Spar.

Moor-stone, a gritty Stone of various Colours, which they call *Growan*; and a talky Fissil Stone, which they call *Killas*. I neither saw or heard of Peble, Flint, or Fossil-Shell in all the whole County of *Cornwall*.

b. 13. *Killas*, a talky fissil grey Stone, being the common Stone on that side the Vein, in which [-----] was found. In the Interstices of the Flakes, is a grey, chalky, or ochreous Matter, as in the Hollows of the foregoing. This probably is conveyed about, and flung into all the Vacancies capable of receiving it, by the Water; being loose, light, and easily movable, as we find in earthy, ochrey, and other loose Matter in all Mines.

b. 14. A grey, slaty, talky *Killas*; out of a Breast in a hollow Road near *Plymouth*, where there are great Quantities of it; and indeed the whole Country abounds in it.

b. 15. *Killas*, or *Delvin*: 'Tis the common Stone of the Rock in which the Tin Vein, at *Zowan-Coniggan*, lies. 'Tis very hard.

S L A T E.

b. 16. Slate, from *Denyball, Cornwall*. This Piece, on three sides, shews the natural Breaches, or Fissures, of the Strata of this Stone.

b. 17. Slate, blue; perhaps the finest in the World. From *Denyball, Cornwall*; where it is got in great Quantity.

b. 18. A Slip of Slate; shewing the Partitions or perpendicular Fissures of the Strata it constitutes. From *Denyball, Cornwall*.

b. 19. A dark grey Slate, used for Coverture of Houses; from Mr. Hicks's Slate-Quarry at *Mullinecke*. The Strata of the Slate here lie pretty much inclining, and are of considerable Extent. The Slate lies from near the Surface down to the Level of the Tide that flows up the River, in the Cliffs of which it lies. What lies underneath is uncertain, they not sinking to the bottom of the Slate. There is a Flexure in this Piece; and there are such in several Parts of the Work, tho' not frequent. Where they are, they run from the Top downwards, as far as I observ'd. There were several of the perpendicular Fissures in this Slate, but narrow like Cracks, and empty. I imagine, that at the same time that the Slate crack'd in one Part, 'twas in others so tough as to abide being bent; by which means these Flexures were probably form'd. I have seen Strata of Coal, near *Lanelthy*, in ----- *Wales*, with like Flexures, but larger. Sometimes they were crack'd at the Angles of the Flexures; the intermediate Mass, tho' parted from the rest, lying obliquely, as in this Specimen. I have observ'd Slate crack'd, with the intermediate Part lying obliquely in this manner, in several Parts of *Wales*, and of *Cumberland*.

b. 20. Another like Sample, from a distant Part of the same Quarry.

b. 21. Slate, blue and white; the latter Colour seeming to be brought on by the Water that pervades it. From the Sea-Cliffs, near *Fowey, Cornwall*. These Cliffs consist of this for a considerable Extent. The Miners and People call this *Killas*; as they do any Stone that splits with a Grain. The Backs, Jointings, or cross Partitions [that intersect the Plates of the Slate, some at right and some at oblique Angles; and in all Bearings and Directions] are very thick and frequent.

b. 22. A grey Flag. Near *Aywood, Herefordshire*.

b. 23. A gritty Flag-Stone, brown, with a Cast of red, thick-set, with a very small Micæ of a white silvery Talc. *Pyrton Passage, over the Severn*. Found upon the Shore.

b. 24. Part of a Stratum, grey, lying not far from the Surface; in Mr. *Marriot's* Lead-Mines at the *How*, near *Grinton* in *Yorkshire*. The Stratum consists of a Slaty Stone. This is composed of several parallel Plates, very thin, hardly exceeding common Writing-Paper in Thickness: There are about 10 in this, and it is not above $\frac{1}{5}$ of an Inch in Thickness. There are several Micæ, or Flakes of Talc lying chiefly at the Surface of the Plates. I have observed sometimes upon parting the Plates, great Numbers of them loose, lying betwixt the Plates. In breaking of the Strata, I have observed that the Plates are gradually thicker, descending from the Top to the Bottom. In a Stratum of 10 Foot in Diameter, the Plates near the Top were as thin as can be conceived. Those at 3 Foot deep were 2 Inches thick; those at 6, half a Foot: The lowest, near a Foot.

b. 25. Brown Slate, composed of numerous infinitely thin Plates. Out of a Trench, in a Wood of Mr. *Harley's*, near his House, by *Aywood, Wales*. Like Masses, but softer, are commonly found upon the Sea-Shores.

b. 26. A red Slate, soft, friable, and of scarcely greater Consistence than Earth. There are numerous small Micæ in it: 'Twas Part of a Stratum about half an Inch thick, extending for a vast way. Above and below were Strata of common Clay. In the Road, 5 Miles beyond *Hereford*.

CHERT, MARBLE, ALABASTER.

b. 27. Chert, a sort of Flint, lying in and constituting a Stratum of several Yards thick. *Swaldale, Yorkshire*.

b. 28. Chert, out of a Stratum half a Mile distant from the former.

b. 29. A dusky red Granite. *Caldy Island, Wales*. There are several considerable Strata of this.

b. 30. A grey, glittering Marble: 'Tis the common Lime-stone. *Pristine*.

b. 31. Black Marble. From *Caldy-Island, Wales*.

b. 32. A soft Stone, speckled, with a faint red and white: It seems to be an Alabaſter; got in Quantity, near *Whitehaven, Cumberland*.

PEBBLES, FLINTS, AGATES.

b. 33. A white Sparry Pebble. Found in *Lime-Road*, betwixt *Bishop-Cliff* and *Newton*.

b. 34. A brown Sparry Pebble. Found near the former.

b. 35. An Agate, of a very observable Constitution. Found near *Beer* in *Devonshire*.

b. 36. A stony Mass, variegated with a dark brown, and a glossy talky white. Shores near *Minehead*, *Somerſetſhire*. Conf.

b. 55. b. 56. *infra*.

b. 37. A small Flint. Found near *Petworth* in *Suffex*. 'Tis finely lineated, and wrought on the Surface; after the Manner of the *Callimus* of some *Ætita*.

b. 38. A Mass, thick ſet with small Pebbles. Found in the Rubble of the Lead-Mine of my Lady *Cambell*, near *Eſtrophene*, *Wales*.

b. 39. Small Nodules, cemented together by a brown stony Matter. Found betwixt *Huntley* and *Norleach*, *Gloucestershire*. There are vast Numbers of them along the Road for several Miles together. These, when smaller, are called *Pisolithi* by Writers.

b. 40. A cancellated Pebble. I observ'd in the Holes of this several small *Bivalves* living. Found on the Shores of *St.-----* a small Island near *Caldy*, *Wales*.

b. 41. Another, perforated by *Pholades*; some small, others pretty large. Found with the Precedent.

TALCS.

Talcs striated.

b. 42. *Gypsum striatum album*. This with the two following lay in the perpendicular Fissures of the Strata of brown Stone; the Fibres running horizontally directly cross the Fissures. *Watchet*, *Somerſetſhire*.

b. 43. Another. From the same Place.

b. 44. Another. From the same Place.

b. 45. Spar; out of a Fissure in a Cliff near the *Lizard*, *Cornwall*.

b. 46. A Piece of Stone, from the upper Part of a Stratum of shivery Stone. That Stratum lay horizontally; and this Mass, which was of considerable Extent, lay flat upon it. 'Tis composed of Fibres parallel, and transverse to the Plane of the Body: It seems to be of a talky Constitution, and form'd in the horizontal Interval, since the Stratum. From a Cliff of the Sea, about a Mile West of *Lime* in *Devonshire*.

b. 47. A talky Spar, out of a Fissure in a Cliff near the *Lizard*, *Cornwall*.

Talcs not striated.

b.48. A friable Substance, grey with a Cast of green; seeming to be Talc. From a String, or small Vein. In *Cleggo Cliff*, near *St. Agnes, Cornwall*.

b.49. A Talky Earth, very fine grey, with a Cast of Green. Found in the Road near *Gwendroth*, not far from the *Lizard Point, Cornwall*.

b.50. A Talc, near as fine as the *Venetian*, but of a reddish Cast; out of a Vein in a Cliff about two Miles North of the *Lizard Point, Cornwall*. A Quarter of a Mile from, N^o i. 13.

b.51. The same sort, but harder. *Ibidem*.

b.52. A Sample of the Soap-Rock, which lies in the Sea-Cliffs about a Mile South-West from the *Lizard Point*. The Red is soft as Clay; as a great Part of this Matter is. 'Tis all found in Loads, or Veins of a Cherty Stone.

b.53. Gypsum, red, not striated. *Watchet*. Found about a Mile from the following. N^o b.54.

b.54. Gypsum, white, not striated. *Watchet*. Found about a Mile from b. 42. *supra*, in an Hollow of a Stratum.

b.55. A Talky Mafs, of a pale or yellow brown, very glossy and shining. From the Shores near *Minehead, Somersetshire*. Conf. b.36. *supra*.

b.56. Another, of a deeper brown. Shores near *Minehead*.

b.57. Part of a Mafs that had been worn and rounded upon the Shores. 'Tis a white Spar, thick-set with Spangles of a white silvery Talc. *Pyrton-Passage, Severn*.

b.58. A Mafs of Stone, grey, talky, worn. Found on the Shores near the *Lizard-Point, Cornwall*.

b.59. A Mica, greenish. Shores near *Tenby, Wales*.

b.60. A Sample of a Rock, black, with Micæ in it. About 2 Miles North of the *Lizard-Point, Cornwall*.

b.61. Micæ, silvery and black. Found upon the Sea-Shores about a Mile West of *Lime, in Devonshire*.

b.62. *Mica nigra*. From the Banks of the River *Derwent*, near *Cockermouth Castle, Cumberland*.

LUDUS HELMONTIJ.

b.63. *Ludus Helmontij*. *Pyrton-Passage*. These Bodies were found in great numbers, here, upon the Shores of the *Severn*.

b.64. *Ludus Helmontij*, found, tho' not very plentifully, by the cross Lanes near *Spinythorne* in *Yorkshire*.

b.65. *Ludus Helmontij*, broke off a Nodule twice the Bigness of a Man's Fist; near *Grinton* in *Swaledale, Yorkshire*.

b.66. *Ludus Helmontij*, found in the Street of *Spinythorne, Yorkshire*.

b.67.

b. 67. A Piece of a Stratum, divided into Partitions, after the manner of the *Ludus Helmontij*. There are several like Strata, lying all near horizontally, and being of all Thicknesses, from $\frac{1}{4}$ of an Inch to a Foot, in the Cliffs of the Sea, about two Miles from *Tenby, Wales*. I traced them in the Fronts of the Cliffs for about half a Mile on end, and observed the same Stratum ever of the same Thickness in all Parts. They were distanced by Strata of Shiver, of which chiefly the Cliffs consist. Underneath there appear several Strata of Coal; and indeed some interposed betwixt the Strata of *Ludus Helmontij*. It seems to hold Iron.

b. 68. *Ludus Helmontij*, seeming to hold Iron. It lies in Nodules to the Bigness of an Horse's Head, in Strata of grey Stone, in the Cliffs of the Ostium of the River, about three Miles from *Tenby*. There are vast Numbers of them.

b. 69. b. 70. A Talus, with part of a Stratum having Partitions or Septa after the manner of the *Ludus Helmontij*; from *Tenby*. The Length of it is the Thickness of the Stratum, which is composed intirely of such Tali, of this Size, and bigger, to about one Inch in Diameter. There are various other Strata, parted, in like manner, by Cracks, into Tali. Some of the Strata are thicker, to a Foot or a little more in Thickness. And in these, the Tali are larger, to about ten Inches, or a Foot, in Diameter. In these larger some of the Cracks are fill'd with white Spar. They were exposed on a Cliff of the River ----- within a Mile of the Sea; and appear'd naked, with Strata, sometimes of black Shiver, and sometimes of Coal, interposed. The Strata were near horizontal, parallel; and each Stratum of equal Thickness in all parts.

b. 71. A Talus, invested with a ferruginous Crust, after the manner of *Ludus Helmontij*; being part of a Stratum, near three Inches thick, in the Brow of a deep hollow way, amidst Shiver, not far from *Brough*, upon *Stanmore*, in *Westmorland*. The whole Stratum is of this sort and thickness. I had opportunity of observing it for twenty or thirty Yards on end.

BEZOAR MINERALE, and GEODES.

b. 72. *Bezoar Minerale*, holding Iron. I suppose, some of them are invested with eight or ten Crusts, but they shiver and fall off when exposed to the Air, as these were. Cliffs near *Tenby*. [This seems rather to be a Talus of some *Ludus Helmontij*.]

b. 73. Four small Nodules. There were others in vast numbers, of which I broke many, and found all, like these, with *Marcasite* in the Center. They seem to hold Iron: and were found in the Beds of Shiver, mention'd in the Account of b. 69, and 70. *supra*. *Tenby, Wales*.

b. 74. A *Geodes*, being a coarse brown Nodule, and having a black Pouder, like that of Coal, and small crystalliz'd Bodies in its Center. These, if not Diamonds, are so hard, that they cut Glass. Found in Shiver, in a Lime-stone Quarry, near *Presteign*, in *Wales*.

b. 75.

b. 75. Bezoar Minerale, seeming to hold Iron. There were some, found together with this, invested with eight or ten Crusts; but they shiver, and fall off, when exposed to the Air; as this was. In the Cliffs near *Tenby*.

b. 76. Part of a *Geodes*, round, tending towards a globose Figure; and so large, that it held a Bushel and an half of Sand. It lay in a Bed of like Sand, ten Foot deep, about a Mile West from *Petworth*, in *Sussex*. It lay in the side of the Bank of a hollow Road, where were many others of various sizes, from one to three foot in Diameter. The Coats of all of them are very thin. The thickest I broke did hardly exceed half an Inch.

b. 77. The Crust of a *Geodes*, found upon the Moors call'd the *Hind-Head*, about five Miles from *Godalmin*, in *Portsmouth* Road. There were great numbers of them; of all sizes, from the bigness of a Walnut to such a size that they would contain ten Gallons. They were generally round, but of very different shapes. I saw none that had more than one Crust; nor did any of the Crusts much exceed half an Inch in thickness. All that I broke were full of a yellowish Sand, and lay in a Stratum of Sand of like Colour and Constitution.

b. 78. A Body consisting of several white transparent Sands, or very small Pebbles, contain'd in Cases, or Crusts, of a ferruginous or ochreous Substance. Taken up in the Quarry in *Petworth-Garden*, *Sussex*.

b. 79. A Piece of the Crust of the *Geodes*, found in great numbers in the Ochre-Pit, on *Shotover-Hill*, *Oxfordshire*.

SELENITES.

b. 80. Selenite, found in a Stratum of blue Clay about eight Foot thick, above the Free-stone Quarries, at the Foot of *Shotover-Hill*.

b. 81. Small *Selenite* lying in Oyster-shells. Out of the same Bed of Clay, *Shotover-Hill*.

b. 82. Selenites, very transparent, found on the Shores, on the East-side of a Creek, about a Mile above *Weymouth-Bridge*.

BELEMNITES.

b. 83. A *Belemnites*, seam'd, striated, and with jointed Bodies in the conick Cavity; out of the Cliffs near the River's Mouth, by *Bridport*, *Dorsetshire*. There were others that had the Joints fairer. They are found there in great numbers.

b. 84. Another, from the same Place.

b. 85. Another, from the same Place.

CORALLOIDEA.

b. 86. Lithostrotion. Some of the Samples have had the Columns crack'd since they were form'd; and the Cracks fill'd up with white Spar. The *Lithostrotion* is all found on the Tops of the Rocky-Cliffs about two Miles from *Tenby*, towards *Milford*. 'Tis found

found in Masses of different sizes, immers'd in a grey Stone. It lies in several Postures; but chiefly erect, or a little inclining, but never horizontal. 'Twas probably white at first; and since gradually tinctured with parts of the Stone in which it lies.

b. 87. *Lithostrotion*. *Ibidem*. b. 88. *Lithostrotion*. *Ibidem*.

b. 89. *Lithostrotion*. *Ibidem*. The Columns of this are near round, or cylindric. There were, in the same Mass, some, that were flat and compress'd; but they are broke off: as are also several angular Columns. *Ibidem*.

b. 90. *Lithostrotion*, a single Column with five sides. *Ibidem*.

b. 91. *Lithostrotion*, a single Column with seven sides. *Ibidem*.

b. 92. *Lithostrotion*, single Columns, with each six sides, but unequal. *Ibidem*.

b. 93. *Lithostrotion*. A Phalanx single of three Columns in a Row. *Ibidem*.

b. 94. ——— A Phalanx also single of four Columns, of a flattened Figure. *Ibidem*.

b. 95. ——— Two Phalanges. *Ibidem*.

b. 96. ——— Two Phalanges, crack'd since they were form'd; and the Cracks fill'd up with a coarse brown sparry Matter. *Ibidem*.

b. 97. ——— Two Phalanges, crack'd; and the Cracks fill'd with white Spar. This was broke off the biggest Piece, of which the Columns were thirteen Inches in length. As to the Diameter of the Columns, the largest I saw was not half an Inch in Diameter, and the least, near a quarter of an Inch; they being genreally pretty nearly of the same thickness. Indeed, the sides being unequal, the same Column is frequently of a greater Diameter, measured one way, than another. And for the number of the Columns, there were in this Collection several Masses, about a Foot thick; I mean, measur'd cross-ways of the Fasces of the Columns. *Ibidem*.

b. 98. ——— A Mass, crack'd; and the Cracks also fill'd with white Spar. *Ibidem*.

b. 99. ——— Another, with a Crack, fill'd with white Spar. The Columns of this are inflected or bent; of which I observed several other Instances. *Ibidem*.

b. 100. ——— A Mass, shewing the Junctures of the Columns. *Ibidem*.

b. 101. ——— A Mass, with an Entrochus immersed in one of the Columns. *Ibidem*.

b. 102. ——— A Mass, having affixed to one end of the Column a Mass of common Stone, of a dark grey Colour, with Entrochi in it, and an Impression of a small Bivalve. *Ibidem*.

b. 103. *Lithostrotion*. A Mass cut and polish'd. 'Tis about the Hardness of the white Genoa Marble. *Ibidem*.

b. 104. *Lithostrotion*. *Ibidem*. b. 105. *Lithostrotion*. *Ibidem*.

b. 106. *Lithostrotion*. *Ibidem*. b. 107. *Lithostrotion*. *Ibidem*.

b. 108. A very soft sandy Stone, of a greenish Colour, having in it several cylindric Bodies, white, and of a like sandy Constitution, about

about one eighth of an Inch in Diameter. These must have been form'd before the main Mass, wherein they are contain'd. There are, in this Mass, also dispersedly, several white Sands, of the like sort. A great part of the Stone of this Quarry is much harder; and made use of for building *Petworth-House*. The Quarry is in *Petworth-Garden*.

b. 109. Another Mass, in which the Bodies are branch'd; of which sort I saw some other Instances. *Ibidem*.

b. 110. A Mycetites. *Chedder-Cliffs, Mendip*.

b. 111. A Body, nearly resembling the coralloid Mushroom of the Red-Sea; immers'd, together with numerous small Sea-shells, in a grey Stone. Found in a Quarry near *Charterhouse, Mendip, Somersetshire*.

b. 112. A coralloid Body, excepting the Colour which is grey, resembling the *Tubularia Purpurea* of *Ferrante Imperato*. Found in the Rubble of a Lead-Mine near the former, *Mendip*.

b. 113. An Entrochus, conic Mycetites, and part of a coralloid Sea-Fan; in a brown Stone; out of a Quarry near *Charterhouse, Mendip*. Tho' the Sea-Fan be no where found in any of our Seas, yet I have observed Pieces of it in Stone in several Parts of England. 'Tis found in the Seas about *Jamaica*, and *Barbadoes*.

b. 114. Part of a coralloid Body, out of one of Mr. *Marriot's* Lead-Mines, at the *How* near *Grinton*, in *Yorkshire*.

b. 115. A Mass, out of a Vein of the same Mine, consisting of an earthy Matter, Spar, and Lead. What is most remarkable, is, that there are in it several coralloid Bodies, very fair.

b. 116. Coralloids, in Stone, from *Caldy-Island, Wales*. This is ill graved, and ill named, *Alcyonium*, by Mr. *Lhwyd* in the *Philos. Transf.* N° 252. p. 187.

b. 117. Coralloids, in a blackish Stone. I caused a Piece of this to be ground, and polish'd; and 'tis somewhat harder than the white *Genoa* Marble. *Caldy-Island*.

b. 118. Coralloids, in like Stone. *Ibidem*. b. 119. *Ibidem*.

b. 120. *Ibidem*. b. 121. *Ibidem*.

b. 122. Coralloids, in a dusky grey Marble, polish'd. *Ibidem*.

b. 123. *Ibidem*. b. 124. *Ibidem*.

b. 125. Polish'd. *Ibidem*. b. 126. Polish'd. *Ibidem*.

b. 127. Polish'd. *Ibidem*. b. 128. Polish'd. *Ibidem*.

b. 129. Coralloids, in a red Stone, much harder than the white *Genoa* Marble. *Caldy-Island, Wales*.

b. 130. Worn and rounded by the Sea. 'Tis polish'd on one side; and proves as hard as black Marble, which is of double the Hardness of the white. *Caldy-Island*.

b. 131. Coralloids, in a dusky brown Stone. *Chedder-Cliffs, Somersetshire*.

b. 132. A coralloid Body, found near *Bride-Church*, three Miles from *Cockermouth*, in *Cumberland*.

b. 133.

b. 133. A Coralloid; found on the Shore near *Aylemouth*, *Northumberland*.

b. 134. A Mass of brown Stone, thick set with Coralloids; being cut on one side, and polished: it proves rather harder than the white *Genoa* Marble. Near *Bristol*.

b. 135. *Ibidem.* b. 136. *Ibidem.*

b. 137. A Coralloid; found near *Preston*, in *Tinmouthshire*, *Northumberland*.

b. 138. A Coralloid; found near *Rorey*, betwixt *Cockermouth* and *Eggermond*, in *Cumberland*.

b. 139. A Coralloid; found near *Rorey*, about a quarter of a Mile from the former.

b. 140. A Coralloid Body, of that sort call'd the *Honey-Comb-Stone*; found in the Fields near *Heddington*, *Oxfordshire*.

b. 141. A Coralloid *Astroites*; found in the Road betwixt *Oxford* and *Eynsham*.

S P A R S.

b. 142. White shivery Spar; from a Vein about 20 Foot over. 'Twas nearly of the same Thickness in all Parts, for two hundred Foot in height. It stood near perpendicular, and was compos'd of several Ribs, in which the Spar was of various Colours. In a Cliff by *Muscleridge*, near *Tenby*, *Wales*.

b. 143. Glossy, brown, ponderous Spar. Out of a Fissure near *Lanelthy*, *Wales*.

b. 145. White, glossy Spar, with some Spots of green; found upon the Surface of the Earth near *Dolgadwin*, in *Montgomeryshire*. There are vast Quantities of this upon the Surface, both here, and indeed all the Country round. There are great numbers of Veins under Ground of like sort of Spar there. Those on the Surface seem to have been forced from these Veins by Water, as the Shoad-stones were.

b. 146. A Piece of white Spar; out of a Fissure near *Lanelthy*, *Wales*. I have seen white Pebles, or Fragments, rounded, and worn, of the very same Constitution.

b. 147. Spar, white, with a Cast of green; out of Mr. *Marriot's* Lead-Mines at the *How*, near *Grinton*, in *Yorkshire*. There are, in all Parts of it, Veins, branched, consisting of Matter not so transparent as the rest of the Body. This is ponderous, and perhaps may hold some Lead.

b. 148. Another Sample, with Lead-Ore incorporated with it; from the same Vein.

b. 150. Spar, white, with a Blush of a dusky Purple, breaking into Rhomboid Squares. Taken out of a Fissure of a Stratum near *Newtown*. They are trying here for Lead. *Conf. b. 184. infra.*

b. 151. Spar, glossy, and talky, white, with a Cast of green. From *Redruth*, out of a Vein mix'd with Copper and Tin.

b. 152. A brown Spar; out of a Limestone-Quarry in *Caermarthen* Road, about four Miles short of *Tenby*. It lay in a Fissure.

b. 153.

b. 153. Spar, red, and holding Iron, vein'd with white. Found in a Fissure of a Rock, over-against the Hot-Well, but on the other Side of the River, by *Bristol*.

b. 154. A white Sparry, or Coralline Incrustation, with *Corallina* growing upon it. Out of the Sea near *Low-Island*. 'Twas struck off a loose Stone: and several of the Stones thereabouts had Crusts and Precipitations of the like upon them.

b. 155. A grey sparry Incrustation, compos'd of several Cortices one upon another, broke off a Mass on the Floor; form'd by Water falling from the Roof above, in *Wookey-Hole*, near *Wells*, *Somersetshire*.

b. 156. A coarse marley Spar; from an incrusting Rill, on the Side of a Mountain, in *Oxford-Road*, five Miles short of *Gloucester*.

b. 157. Spar, form'd successively, Crust upon Crust, and made round by being beat about, and mov'd by Drops of Water falling from the Top of a Grotto, by an Iron-Work, near *Clourwall*, in the *Forest of Dean*, *Gloucestershire*. These two Samples were found among several others immers'd; and, as it were, frozen in a sparry Crust of the Floor, form'd by Spar precipitated out of the falling Water, after they were too ponderous to be mov'd any longer. This affords us plain proof of the Growth of Spar at this day. Other Proofs there are, in great abundance in the *Stalactites* hanging from the Roofs, and the sparry Incrustations on the Sides of the Mines wrought anciently, and deserted after the Ore was got out.

b. 158. Spar, in Squares, fallen off from a Body of shattery Spar, in an Iron-Work near *Clourwall*: agitated, and somewhat fretted and worn by the Water, dropping from the Roof above, and beating them about. The same Water bringing sparry Particles along with it, incrusts and incloses some of them, that lie where the Force of the Water is least. Those, b. 157. are Instances of these Bodies so incrusted. Confer. b. 197. *infra*.

b. 159. White Spar, crusted upon Coal, very fine, with *Stalactites* falling from it. From *Tenby-Cliffs*, *Wales*.

b. 160. A red sparry Plate; found with the *Stalactites*, b. 161. *infra*.

b. 161. A *Stalactites*; out of an Iron-Mine, in the *Forest of Dean*. Such are commonly found in Grotto's and Fissures in the Mines, and the Tops of old deserted Works about *Clourwall*. I observ'd great Numbers of these there; and most of them fistulous, or hollow.

b. 162. *Ibidem*. b. 163. *Ibidem*. b. 164. *Ibidem*.

b. 165. *Ibidem*.

b. 166. Light, fistulous, white, friable, sparry *Stalactites*. Found hanging down from the Arches of a Stone-Bridge, over a River betwixt *Estraphene* and *Caermarthen*. There are vast Numbers of them there, of all Sizes, to a Foot in Length. This gives undeniable Evidence of the present Growth of Spar.

b. 167. Sparry Concretions, on a blue slatey Stone; out of Mr. Waller's Slate-Quarries at *Ynys-hire, Wales*.

b. 168. Spar; from a Fissure of one of the Quarries in *Portland*.

b. 169. Spar, tuberos, and cavernous. From one of the Quarries in *Portland*.

b. 170. Spar, in Shoots or Columns; found in an horizontal Interval, betwixt two Strata, in an erect Posture, about 10 Foot deep, in a Lead-Mine near *Charterhouse*. The Strata seem'd to have been dislocated, borne from their original Site, and distanc'd by some external Power: To which they were the more obnoxious, by reason of two perpendicular Fissures that run near parallel to each other, at about 15 Foot distance. There are Sparks of blue Lead-Ore, incorporated with the sparry Columns; and the Miners say they found a pretty deal of the same Kind of blue Ore in that Interval, which is the only Case in which Lead is found lying horizontally. And this is very uncommon. I never saw but this Instance of it, and one in *Arkendale*. This Interval was about half a Foot in Diameter, and the other in *Arkendale* about two Inches. Tho' the Lead in these was not originally formed in the Manner of a Stratum: but run after the Dislocation of the Strata, into the Intervals, as that in the perpendicular Fissures did. The Spar being thus form'd, in these Intervals, into Columns, gives me a Suspicion, that the Columnar Coralloid Bodies in *Cumberland*, in the *English Catalogue*, Part the First, Page 282. e. 17 & 18. were form'd by the same Means; they standing parallel, erect, and in the horizontal Intervals of the Strata of Stone. I have observ'd, in some Stone-pits near *Oxford*, the Honey-Comb-Stone, with the Hollows erect, lying in the horizontal Intervals of the Stone. Confer. b. 157. *infra*.

b. 171. More like sparry Columns. From the same Interval.

b. 172. More likewise. From the same Interval.

b. 173. White Spar; out of a Vein of Lead-Ore, in the *Charterhouse* Liberty, *Mendip, Somersetshire*.

b. 174. A crystalliz'd Spar; out of a Vein of *Manganese*. In Mr. *Ingram's* Mine at *Bruntyle*, near *Llanedloes*, in *Montgomeryshire*.

b. 175. Spar, adhering to Stone, with Shoots of White-Lead-Ore crystalliz'd on its Surface. From Mr. *Harley's* Mine, in *Eskergalid, North-Wales*.

b. 176. Spar, with white Lead-Ore. From *Barrow-Work*, the Duke of *Somerset's* Mine in *Cumberland*. It lies in a Vein amongst blue Lead-Ore.

b. 177. Tin-Grains, Tin-Ore, and *Cornish* Diamonds, being Part of a Vein, and adhering to a Piece of the Stone of the Side; from *Wallwork, Cornwall*.

b. 178. Spar, with *Cornish* Diamonds; from the side of a Cavity, in a Squat, at *Hewas-Work*, not far from *Polgouth*, in *St. Stephen's* Liberty, *Cornwall*.

b. 179. Spar, with *Cornish* Diamonds; out of a Squat near the precedent.

b. 180. Spar, with *Cornish* Diamonds; from a Cavity in a Tin-Vein, in *St. Stephen's* Liberty, *Cornwall*.

b. 181. A friable Mineral, grey, with a Cast of green and yellow, seeming to consist of Spar, and Sulphur. 'Tis plated, and cavernous; very halituous, and stinking. From a Tin-Vein, in *St. Stephen's* Liberty, *Cornwall*.

b. 182. A like Mineral, shot into small crystalline Columns. From a Vein of a Mine near the precedent.

b. 183. Another; from a neighbouring Vein.

b. 184. Spar, white, part of it crystalliz'd. Taken near *b.* 150. *supra*, out of a Fissure of a Stratum near *Newtown*.

b. 185. White Spar, shot upon a dark grey Stone, into triangular Crystals. *Pyrton-Passage*. Broke out of a Stratum of Stone at the bottom of the Cliff.

b. 186. A radiated Spar. I have an Ore of Antimony radiated like it. Out of a Rock in *Caldy Island*.

b. 187. Spar, clear, and crystalline, with a talky Gloss. 'Tis shot into Rhomboid Figures, which are placed in Rows. Found in a Vein among Iron-Ore, near *Clourwall*, *Forest of Dean*, *Gloucestershire*.

b. 188. A talky Spar, of a Rhomboid Figure; out of a perpendicular Fissure, in one of the great Quarries in *Portland-Island*.

b. 189. *Ibidem*.

b. 190. Hexagonal Shoots of Spar; from a Fissure of a Rock near *Royadner*, in *Radnorshire*.

b. 191. Spar, white and red, crystalliz'd. Found in a Rock near the Lead-Ore, N^o 1. 36. *infra*, in a Mine near *Estrophen*, *Wales*.

b. 192. Spar, internally white, and red on the Surface; shot into large hexangular Pyramids. Found in a Rock in *Caldy-Island*, on the Side towards *Tenby*, *Wales*.

b. 193. *Ibidem*. *b.* 194. *Ibidem*.

b. 195. Spar, crystalliz'd; from a Cavity in a Tin-Vein, in *St. Stephen's* Liberty, *Cornwall*.

b. 196. A Shoot of an hexagonal Crystal; out of a Vein of the Iron-Ore, in *Hartry* Liberty, *Mendip*. The Constitution of it is remarkable, it appearing to be composed of several hexagonal Cases, one within another: and by that means shewing the Method and Order in which the crystalline Matter succeeded in the Formation of this Body.

b. 197. *Flores Martis*; found, cover'd with stagnant Water, in an Iron-Mine near *Clourwall*. There is of it, in Sprigs, near two Inches long, growing upright, on the Floor of the Grotto mention'd *b.* 157, & *b.* 158. *supra*: and form'd there by Spar brought with the Water falling from the Top of the Grotto.

b. 198. Out of a Fissure of the same Work.

b. 199. Five small Crystals. Out of the Cracks of the Pin-Ore; n. 52, 53, to 68. *infra*, betwixt *Lanelthy* and *Pontipool*, *Wales*. Mr. *Lewis*, the Master of those Iron-Mines, has of them that are very fine. See the Manner how they grow in.

b. 200. Spar, crystalliz'd, with Grains of sulphurous Copper; out of a Copper-Vein. *Wheal-Gilbert*, *Cornwall*.

b. 201. Spar, in hexagonal Shoots, along with Masses of *Blende*, and small Efflorescencies of the same. Under each of these is a Pore in the Spar. There are vast Masses of it in the Lead-Veins of the Mines of *Eskergallid*, Mr. *Harley's* Mine in *North-Wales*.

b. 202. *Ibidem.* b. 203. *Ibidem.* b. 204. *Ibidem.*

b. 205. *Ibidem.* b. 206. *Ibidem.*

S A L T S.

c. 1. Nitre-Earth. From a Place call'd *Pidgeon-Hill*, from the Resort of Pidgeons thither to pick the Nitre. 'Tis about a Mile from *Llangothley*, in *Wales*, and fifteen Miles beyond *Shrewsbury*. 'Twas given me by Mr. *Cafebrook* of *Bristol*, who is Proprietor of the Soil where it is found.

c. 2. From the same Place.

c. 3. This has been wash'd; but was found with the former.

c. 4. A yellow Substance, saline, mix'd, but chiefly vitriolick; found pretty plentifully on the Cliffs beyond *Limington*.

c. 5. Another, of a deeper yellow, saline; from the same Cliffs.

c. 6. Another, paler, saline; also from the same Cliffs.

BITUMINOUS BODIES.

d. 1. Canal-Coal. *Bolton*, in *Cumberland*.

d. 2. Another sort of Canal-Coal; from the same Pit. The lower Part of the same Stratum is of common Coal.

d. 3. A slatey Stone, very light, of a dark grey Colour; broke out of a Stratum of about a Foot in thickness. They call it *Coal-stone*. It flames easily, and burns freely: but holds and endures the Fire much longer than Coal. They use it for heating of Ovens. *Portland-Island*. There is a *Cornu Ammonis*, and various other Shells in it.

S U L P H U R S.

e. 1. Sulphur-Ore. *Redruth*, *Cornwall*.

P Y R I T Æ.

e. 2. A Piece of Slate; from Mr. *Hickes's* Slate-Quarry at *Mul-lineck*, with Grains of *Marcasite* in it, *Cornwall*.

e. 3. *Pyrite*; found in great Numbers near *Cockermouth*, *Cumberland*. See e. 5. *infra*.

M A R C A S I T Æ.

e. 4. A Piece of *Mundick*, crystalliz'd; out of a Tin-Vein, *Gedolphin-Ball*, *Cornwall*.

e. 5. A *Pyrites*, crystalliz'd, and shot into cubick Figures. Out of the Cliffs near the River's Mouth by *Brid-Port*, *Dorsetshire*. There are great Numbers of *Pyrites*, of this, and other Kinds, beat out of these Cliffs by the Sea, and cast on the Shores there.

e. 6. A *Marcasite*; from *Gamp*, *Cornwall*.

e. 7. A *Marcasite*; from a Tin-Load, in another Work, in *St. Stephen's Liberty*. The *Cornish* Miners call all *Marcasite*, whether they be red, silvery, or yellow *Mundick*.

e. 8. *Marcasite*. *Eftemtean*, *Wales*. There is incorporated with it a little Lead-Ore. There is a vast Quantity of this *Marcasite*, in the Vein with the Lead-Ore. *Vid. e. 26. infra*.

e. 9. A cavernous *Marcasite*, of that sort that *Monfieur Schonberg*, and the *Saxon* Mineralists, call *Mater Metallorum*. [See the *Catalogue of the foreign Fossils*, N^o 4. o. 18.] From *St. Stephen's Liberty*, in *Cornwall*.

e. 10. *Marcasite*, with a little *Blende*, and *Spar*. 'Tis florid, grumous, and much like that which the *Germans* call *Mater Metallorum*. From *St. Stephen's Liberty*, *Cornwall*.

e. 11. A vitriolick *Mundick*. *Key-Parish*, *Cornwall*.

e. 12. *Shoad-Stones* *, of several sizes; from *St. Agnes-Ball*. These, and those N^o m. 1. and m. 41. were all taken fresh out of the *Shoads*; and yet, by the Smoothness of their Surfaces, they appear to have been worn by Water, which must have been before they were lodg'd there.

e. 13. White *Mundick*. *Relistion*, *Cornwall*. 'Tis of so great Gravity, that there must be something extraordinary in it.

e. 14. White *Mundick*. *Karnbrey-Parish*, *Cornwall*.

e. 15. White *Mundick*. *Relistion*. This is a very poisonous Mineral, and doubtless holds *Arsenick*.

e. 16. *Mundick*. *Baldice*, in *Key-Parish*, *Cornwall*.

e. 17. Out of a Vein, or Load of Copper-Ore, in *Guallen-Parish*, *Cornwall*. It looks like *Bismuth*.

e. 18. White *Mundick*, very rare; from a Vein in *Cleggo-Cliffs*, by *St. Agnes*, *Cornwall*. It probably holds *Arsenick*.

e. 19. Yellow *Mundick*, with *Mock-Lead*. *Guinop*, near *Poldice*, *Cornwall*.

e. 20. *Mundick*, out of a Tin-Vein. *Godolphin-Ball*, *Cornwall*.

e. 21. A *Marcasite*, that runs to a *Regulus*, that no Method is found yet to reduce to a Metal. From *Mr. Raw's Works*, near *Marzion*, or *Market-few*, *Cornwall*.

e. 22. *Mundick*. Thrown up from a Work near *Fatwork*, *Cornwall*. There are a few *Cornish* Diamonds in it.

e. 23. *Marcasite*, and *Spar*; out of a Tin-Vein. From *Poldice*, *Cornwall*.

* These, abounding in *Vitriol*, this has shot, and the Bodies are fallen to pieces. These may be seen in his Letters. The Descriptions of the Bodies in this Catalogue, are generally drawn by myself.

e. 24. Mundick, with Spar, out of a Tin-Vein. *Godolphin-Ball.*

e. 26. Marcasite. *Estemtean.* There's Lead-Ore with it; and there is a vast Quantity of it in the Vein with the Lead. *Vid. e. 8. supra.*

e. 27. Mundick, with Iron-Ore. *Gwendron, near Helfton, Cornwall.*

e. 28. Mock-Lead and Mundick. *Gweldron, near Helfton, Cornwall.*

CALAMIN.

f. 1. *Calamin*, cellular, cavernous, and very much resembling the interior Constitution of Bones. The Workmen reckon that the best, which nearest approaches dried Bones both in Texture, and Colour, *viz.* a pale brown. From *Shipham-Liberty, Mendip, Somersetshire.* There are several Mines of this Mineral thereabouts. It lies in Masses in the perpendicular Fissures, from near the Day to ten Fathom deep, among Clay, coarse Spar, and Riders of Stone*. This Mineral appears very much like the Samples of some of the Lead-Veins, in *Arkendale*; and the North of *England*: and at *Shipham* the Calamin has frequently Sparks of Lead concreted with it. Nay, they have sometimes found here a considerable Quantity of Lead at the bottom of some of their Calamin Veins; and probably would find it in the rest, did they expect it, mine, and search in pursuit of it. There is found frequently a great Quantity of common Spar, in the Veins along with the Calamin; in some, in form of *Riders*, in others in form of *Ribs*.

f. 2, 3, 4. *Calamin*, three Samples of the best sort, from the same Mine, with Lead concreted with it. In the Preparation of this Mineral, the Lead-Ore calcines along with it. Lead no ways incommodes the Workers of Brasses; so far from it, that it mixes and incorporates very kindly with Copper: and the Workers ever use some Lead in the making of Copper.

f. 5. *Calamin*, with Lead, from another Mine, in this Liberty.

f. 6. Another Sample, from a different Mine there.

f. 7. Another, from a still different.

f. 8. Another, with Lead-Ore, and white Spar incorporated with it, from the same Mine with f. 7.

f. 9. Another, from a yet different Mine.

f. 10. Another, from a still different Mine. This has a pretty deal of Ochre with it; as also of Lead-Ore.

f. 11. A Mineral of a red Colour; out of one of these Calamin Mines: and probably holding some very small proportion of Calamin.

* This Piece is of the better sort; the Miners reckon it the very best. The greenish grey is the native Colour of the Calamin. The red and brown are adventitious; and owing to the Soil, or Ochre of the Vein.

f. 12. A Mass composed partly of Blend, and partly of Calamin; vein'd, or rather crufted, alternately, in a very beautiful manner.

ANTIMONY, and SULPHUR.

g. 1. *Antimony*, from *St. Cue, Cornwall*. The Mine is now not wrought.

g. 2. Another Sample, from the fame Mine.

g. 3. A Mass of Antimony with native Sulphur, and Spar, as also an hexagonal Column of white Spar. From the fame Mine.

g. 4. Another Mass. *Ibidem*.

g. 5. An hexagonal Column of Spar, white, with a Cast of purple. *Ibidem*.

g. 6. Another Mass of Antimony. *Ibidem*.

g. 7. Another Mass, with native Sulphur, and white Spar. *Ibidem*.

g. 8. Another. *Ibidem*.

g. 9. Native Sulphur, with white Spar and a few Sparks of Antimony. Out of an Antimony-Vein. *Ibidem*.

g. 10. Part of a Shoad, of several hundred Weight; consisting chiefly of white Spar, with a little Antimony. It lay within a Foot or two of the Day amongst many Fragments, within three or four Foot of the Vein. From *Endellion-Parish, Cornwall*.

g. 11. Antimony, out of a Vein. *Endellion*.

g. 12. Antimony, out of a Vein, at *Endellion*. These Mines are work'd only for Antimony; of which many Tons have been raised here. It lies only in Fissures or Veins, that are irregular, both as to their Capacity, and Tendency; from the very Surface of the Rock, which is within four or five Foot of the Day, to ten or twelve Fathom deep. The yellow Matter that 'tis cover'd with, is Sulphur. 'Twas more unctuous; and burns freely with a blue Flame, at the Mines. This Coat is additional; the Vein of Antimony having crack'd and parted, so that the Parts fit and tally one to another; and the Sulphur introduced since by Water, passing, hath fill'd up the Cracks, coated and cover'd over the Tali, or Parted-Masses, of Antimony. *Confer. l. 60. infra*.

g. 13. Antimony, out of a Vein. *Endellion*.

g. 14. Antimony, from a Vein. *Endellion*.

g. 14^x. Out of the same Vein.

g. 15. Antimony in white Spar. Out of another Mine in the same Tract.

g. 16. Antimony with white Spar, part crystalliz'd. I saw of the *Cornish* Diamonds above an Inch long in this Vein. *Ibidem*.

g. 17. Native Sulphur, out of an Antimony-Vein. *Endellion*.

g. 18. Another Sample of native Sulphur. Out of the same Vein.

g. 19. Antimony. *Endellion*. It seems both by the Weight, and by the Hue, and Complexion of the Mass, to contain likewise Lead.

MANGANESE.

b. 1. A Mass, white, semidiaphanous, glossy, and very ponderous; doubtless holding Lead. On one side is a Crust of Manganese; on the other a yellow Accretion, appearing to be Sulphur. Found but pretty rarely, in a Vein of Manganese in *Hartry-Liberty, Mendip, Somersetshire*.

b. 2, 3, 4, 5. Other Varieties of the same. The Manganese upon some of them is crystalliz'd. *Ibidem*.

b. 6. A Mass of the same, whiter and less transparent; cover'd over with a Crust of Manganese. *Ibidem*.

b. 7. Another, with the Surface thick set with small Caverns. *Ibidem*.

b. 8, 9. Two Samples, from another of these Manganese-Mines. They appear like Talc; but are very ponderous, and doubtless hold Lead.

b. 10, 11. Two others, striated, and fibrous, crusted about with Manganese. *Ibidem*. The Manganese is composed of various parallel Crusts; as is that N^o 16. *infra*.

b. 12. Another, composed partly of white Lead-Ore, and partly of Manganese; both shot very curiously into small Crystals.

b. 13. Manganese, black with a Cast of grey, or rather of blue; which the Miners reckon the richest and finest; out of a perpendicular Fissure or Vein. *Hartry-Liberty, Mendip*. The Veins were of all Dimensions to about three Foot in width. The Miners frequently come at the Manganese at the Depth of two or three Fathom, sometimes shallower; and prosecute it down to five or six. One I saw, that was wrought to twelve Fathom. Underneath they usually find hard Iron-Ore, and sometimes of the striated crusted Ore, call'd *Hæmatites*. Manganese is rarely found but in an Iron Vein; the upper part of which Vein it sometimes fills. In some places it is found quite up to the top of the Vein; nay, loose likewise sometimes among Rubble at the top of the Rock. And the Iron Miners of other Countries would term Manganese no other than the *Sample* of an Iron Vein. The Manganese lies in the Vein in Lumps wrack'd, in an irregular manner, among Clay, coarse Spar, and Chips of Stone. It has ordinarily the appearance of Iron Slags; and this, like some of these, and indeed to the common *Hæmatites*, is run into Tubera, or Bubbles on one side.

b. 14. A Sample, not much inferior; from another Mine in that Neighbourhood.

b. 15. Another, harder, and not so good; having Tubera on one Surface, and Crusts one within another, not unlike those of the *Hæmatites*. From another of these Mines.

b. 16. Another with a Cavern, on one part, having lodg'd in it a Mass of white Lead-Ore. *Ibidem*. *Confer.* N^o 10, 11. *supra*.

b. 17. Another, with Masses, either of the same Ore, or Spar, lodg'd in it. From another of these Mines.

b. 18. A Mass of Manganese, enclosing in its Center a Mass of a blackish talky Spar. *Ibidem.*

MOCK-ORES, and Samples of Veins.

i. 1. Blend, or Mock-Lead; with Potters Lead-Ore; cover'd with a Crust of crystalliz'd Spar. *Cumustwith*, one of the Company's Mines, in *Montgomeryshire*.

i. 2. Blend, out of a Lead-Mine, at *Estrophene*; which, I think, is in *Radnorshire, Wales*.

i. 3. A Marcasite, with Blend incorporated with it. From *Polmore-Cliff*, in Mr. *Scobel's* Estate, *Cornwall*.

i. 4. Another Marcasite, with Blend, and Spar, also in it. *Ibidem.*

i. 5. A metallic Body with some Efflorescencies of green Copper; the greatest part of it appearing somewhat like the Potters Lead-Ore: tho' it is not that, but probably Blend. Found in a Vein of the Sea-Cliff in *Cleggo, Cornwall*.

i. 6. A Sample of a Vein, from the same Cliffs.

i. 7. Mock-Lead, from Mr. *Tonquin's* Works at *Gamp*. 'Tis a Rib that fill'd a Vein, and has in it several cross Veins of Spar.

i. 8. Mock-Lead, or Blend, with an Accretion of white crystalliz'd Spar; from *Polliven*, near *Helston, Cornwall*.

i. 9. Blend, with several Veins of white Spar in it. *Cumustwith* Lead-Vein, *Wales*.

i. 10. A blue Mass, very glossy and shining. In one part of the Vein of this there is Blend; in another Spar, crystalliz'd upon, and growing from each side of the Vein, and shooting towards the middle of the Vein. From *Cumustwith, Wales*.

i. 11. Mock-Lead. *Trevescas-Works, Cornwall*.

i. 12. A Marcasite, with Blend incorporated with it, as also some Spar. From *Polmore*, in Mr. *Scobel's* Estate.

i. 13. A Mass seeming to hold Metal, probably Iron; and referable to the *Hæmatites*: with *Mundic* in it, as also *Steatites*. Found in a Shoad in Mr. *Robinson's* Land, two or three Miles from the *Lizard Point, Cornwall*.

i. 14. A mineral Substance, of a dusky ferruginous Hue; having in it some green Efflorescencies of Copper and various Shoots, of a Mineral, of the Complexion of Antimony, in a stellar Form, very beautiful. Found with the three following, and the precedent, in Mr. *Robinson's* Land, among Fragments and Rubble, in a Shoad, above the Rock, or firm Strata. The Tanners say there is found of the very same Mineral, in the Strings or small Veins, of the said Rock underneath. Confer. i. 52. *infra*.

i. 15. *Ibidem.* i. 16. *Ibidem.* i. 17. *Ibidem.*

i. 18. A Mass of Blend, from a Shoad or Stream-Work at *Whole, Cornwall*. Confer. m. 8. 12. 88. *infra*.

i. 19. A metallic Body, part of a Load; found about three hundred Yards from the Tin-Work of *Trowa*, in *Breag-Parish, Cornwall*.

wall. There are in it Shoots of a native Metal, exactly of the Complexion of Brass. It emits no Fumes in the Fire.

i. 20. A Mineral, found in great Quantities in a Tin-Vein. From *Hard-head*, in *Cornwall*.

i. 21. Lead-Ore, with a little white Spar, in Blend, brown, glossy and shining like Talc. Out of a Mine near *Esirophene, Wales*. 'Tis judg'd to hold Copper.

i. 22. Call. It holds Iron. From *Peran-Well*, near *Penrin, Cornwall*.

i. 23. An Ore, seeming to be of Tin; but none has been yet got out of it. From a neighbouring Mine of Mr. *Ewstlick*, near *St. Just, Cornwall*.

i. 24. Part of a Vein, grey, and glossy; consisting of white Spar and Blend. It has been assay'd for Tin; but yields none. From a Work near *Roche, Cornwall*.

i. 25. A Mineral, very ponderous, and probably holding Tin. 'Tis full of what they call *Cockle*, which is a black, thready Mineral, seeming to be a fibrous Talc. 'Twas part of a Squat, at *Hewas-Work*, not far from *Polgouth*, in *St. Stephen's Liberty, Cornwall*.

i. 26. Call. From *Maudulin*, in *Peran-Well, Cornwall*.

i. 27. Call. *Trefuce-Wood*, near *Poldice, Cornwall*.

i. 28. A Sample of a Vein, holding Tin, Spar and talky Micæ; out of a Vein in that Stone which the Tinnors call *Growan*. From a small Tin-Work, a Mile South-West of *St. Agnes, Cornwall*.

i. 29. A Mass, composed chiefly of Talc and Spar, from *Murvey-Cliffs, Cornwall*; found amongst Strings of Mundick and Copper.

i. 30. A Vein-Stone, consisting of a grey talky Spar. Out of a Tin-Load, in *St. Stephen's Liberty, Cornwall*.

i. 31. A Vein-Stone, from *Three-Burroughs*, in Mr. *Scobel's Estate*. It was tried for Tin, but yielded little or none.

i. 32. Part of a Vein, black, flakey, thready, and grumous. From a Load in *St. Stephen's Liberty, Cornwall*. It holds Sulphur, and stinks when wet. Part of the same Vein, moulder'd and liquated, when exposed to the Weather. Underneath this was Tin-Ore.

i. 33. A talky Stone, of the same sort with that in which the Vein of Tin lies. From *Treviddo-Ball, Cornwall*.

i. 34. A mineral Mass, by means of Veins and Partitions, divided into various Cells. The Partitions are hard, and of a dusky brown, near a Rust-Colour. The Cells are fill'd with a friable, yellow Ochre. Digg'd up near the Road betwixt *Shipham* and *Charterhouse, Mendip*. They had raised a considerable Quantity of it; but, whether for the Ochre, or in expectation of Calamin in it, I cannot tell.

i. 35. A Mineral out of Mr. *Marriot's Lead-Mines* at the *How*, near *Grinton*, in *Yorkshire*.

i. 36. A Sample of a Vein, part of a Load, from a Cliff about half a mile North of the *Lizard-Point, Cornwall*.

i. 37. A white Stone, with Pores fill'd with a dusky grey Earth, part of a Mass, of about fifty Pounds Weight; found amongst some others on the Road, about two miles from *Radnor*, in the way to *Estrophene, Wales*.

i. 38. A Sample of a Vein, part of a Load, from a Cliff about half a mile North of the *Lizard-Point, Cornwall*.

i. 39. A sort of Rust-colour'd Stone, frequent in the Rocks by *Minehead*, vein'd with a yellowish, glossy, talky Spar. The stoney Masses, b. 36, 55, 56. *supra*, are Pieces out of the Fissures or Veins of the said Stone, forced off, and afterwards rounded by the Sea.

i. 40. Grey Stone with whitish Spots in it, very numerous, seeming to be Fragments of whitish Stone inclosed in it. From *St. Agnes-Ball, Cornwall*. The Miners there call this *Vein-stone*.

i. 41. Vein-stone, green and yellow; the latter very friable, and soft. From a Tin-Load, in *St. Stephen's Liberty, Cornwall*. There were found some small Pieces of Copper-Ore in the same Load.

i. 42, to 51. inclusive. Samples out of various Veins, all near *Redruth*. The Miners call them *Gossens*. They shew a Variety of mixed Matter; and amongst the rest, Spar, tinged blue and green, by Copper.

i. 43. *Ibidem.* i. 44. *Ibidem.* i. 45. *Ibidem.*

i. 46. *Ibidem.* i. 47. *Ibidem.* i. 48. *Ibidem.*

i. 49. *Ibidem.* i. 50. *Ibidem.* i. 51. *Ibidem.*

i. 52. This Mineral was found in Mr. Ball's Estate at *Minehead, Devonshire*, ten miles South of *Exeter*. This is of the same kind with that i. 14. *supra*.

COPPER-ORES.

k. 1. A Mass of Copper, native, from *Ross-Common*, (near *Trevellot*) in Mr. *John Estwick's Estate, Cornwall*. Such is very rarely found.

k. 2. Native Copper. From *Trevescas-Work, Cornwall*. This Mine was recover'd at a vast Expence, but very little Copper was got; Water bearing so hard upon them and finally drowning them out.

k. 3. *Ibidem.* k. 4. *Ibidem.* k. 5. *Ibidem.*

k. 6. Native Copper, with a white gritty Spar. From *Cornwall*. Sent by Mr. *Causter of Redbrook*.

k. 7. Out of the same Vein. k. 8. Out of the same Vein.

k. 9. Native Copper in very thin Plates; out of the firm Load or Vein at *Trevellot*; with a Sample of the Matter of the Load in which 'twas found. Some of it grew also in the Cracks of the Rock at the sides of the Vein, at 12 or 15 Fathom deep.

k. 10. Grains and Flakes of Copper from another Part of the same Vein.

k. 11. Copper Ore, green, with Grains of native Copper in it. From *Zowan Coniggan, Cornwall*.

k. 12.

k. 12. Copper Ore, with a Vein of Spar; amongst which are various Masses of *Native Copper*. Out of a Vein (now not wrought) in *Trevellot Cliff*, near *St. Twist*, *Cornwall*.

k. 13. Another Sample, with much *Native Copper*. From the same Vein.

k. 14. Another, likewise, with *Native Copper*, incorporated with Iron-Ore. From still the same Vein.

k. 15. Another, adhering to a Piece of red Stone; being Part of the side of the same Vein. There is upon it a whitish Clay, of which there was a considerable Quantity in this Vein; and I observ'd small Masses of *Native Copper* frequently amongst it.

k. 16. Another, out of the same Vein. Attempting to break it, a Mass of Copper discover'd it self, so tough and flexil as not easily to be broke, or suffer the Pieces to part.

k. 17. Another, out of still the same Vein, with much *Native Copper* upon it. It seems also to hold Iron; and there are small Rhomboides upon it, as sometimes happens in Iron-Ore.

k. 18. Another, from the same Vein; with a Sprig of *Native Copper* upon it.

k. 19. Another, from the same Vein; with a like Sprig, and much Spar.

k. 20. Another, from the same Vein, with numerous Grains of *Native Copper* in it.

k. 21. Another, with *Native Copper*, growing in a Thread or small Vein, from still the same Vein.

k. 22. Another, from still the same Vein, with a considerable large Plate of *Native Copper*.

k. 22. † A Piece of grey Stone, having in it a Vein, fill'd partly with Copper-Ore, and partly with *Native Copper*. Found among the Wastes anciently digg'd out of the same Vein.

k. 23. Copper-Ore, of a Lead-Colour, much resembling what the Smelters call *White Copper*. This is the last Colour that Copper assumes in Fusion before it becomes red. This Ore is so very fine and free from stony Matter, that it will cut with a Knife. Out of a small Tin-Mine near the *Land's-End*, *Cornwall*.

k. 24. Another Sample of the same, with green Ore along with it. Found in a small Tin-work near the precedent. In several of the Tin-works in *Cornwall*, there is Copper-Ore of almost all sorts, as well as Mundick in the Tin Veins.

k. 25. Blue Copper-Ore. Found in small Quantities at ----- on *Aldston-Moor*. It may serve for a Blue for Painters.

k. 26. Copper-Ore, appearing to hold near half Copper. From *Feldum* near *Richmond*. 'Tis found in Quantity, and wrought by Mr. *John Warde*. 'Tis in Colonel *Byerley's* Lordship, *Yorkshire*.

k. 27. This seems to be a green Copper-Ore. Out of a Vein of a Rock near *Eskirher* ----- *Wales*.

k. 28. Copper-Ore. From a Load in *Tolvern-Work*, *Cornwall*.

k. 29. Copper-Ore. *Chefwater*, *Cornwall*.

- k. 30. Copper-Ore. From *Trelawood*. Mr. Pollard's Work, *Cornwall*.
- k. 31. Copper-Ore. Out of a Tin-Vein from *Poldice*, *Cornwall*.
- k. 32. Copper-Ore, holding a little Tin. 'Tis wrought for Copper; from *Gamp*, *Cornwall*.
- k. 33. Copper-Ore. From *Chefwater*, *Cornwall*.
- k. 34. Copper-Ore. From *Chefwater*.
- k. 35. Copper-Ore. From *Chefwater*.
- k. 36. Copper-Ore. From *Chefwater*.
- k. 37. Copper-Ore. From *Chefwater*.
- k. 38. Copper-Ore, poor, hardly worth working; called *Gof-sens*. From *Redruth*, *Cornwall*.
- k. 39. Copper-Ore, with Mock-Lead in it. From *Wheal Gilbert*, *Cornwall*.
- k. 40. Copper-Ore, somewhat differing. From a Mine near the former, *Cornwall*.
- k. 41. Copper-Ore, still a little different. From another Mine in the same Place.
- k. 42. Copper-Ore, having a little Mock-Lead in it. From another Vein in the same Place.
- k. 43. Copper-Ore. From *Wheel-Rose*. Mr. Tonquin's Work, *Cornwall*.
- k. 44. Copper-Ore. From *Tolgash-Downs*, *Cornwall*.
- k. 45. Copper-Ore, out of several Mines, belonging to Mr. Henry Ewstuck, near *St. Just*, *Cornwall*. In some of the old Works here, work'd by Sir Clement Clarke, are numerous Plates of pure native Copper, lying in the common Copper-Ore, in solid Iron Ore. Found in the same Load, and in the Stone, on each side of the Load, or Vein.
- k. 46. *Ibidem*. k. 47. *Ibidem*. k. 48. *Ibidem*.
- k. 49. Copper-Ore. *Relistion*, *Cornwall*.
- k. 50. Copper-Ore. *Trevescas*, *Cornwall*.
- k. 51. Copper-Ore. *Wheal Rose*, near *Redruth*, *Cornwall*.
- k. 52. *Ibidem*.
- k. 53. Copper-Ore, said to be rich. From *Relistion-Work*, *Cornwall*.
- k. 54. Copper-Ore, pretty good. From *Trevescas-work*, *Cornwall*.
- k. 55. Copper-Ore. From *Treverton*, *Cornwall*. The Salts shooting, 'tis dissolved.
- k. 56. Copper-Ore. *Redruth*, *Cornwall*.
- k. 57. Iron, and Copper, *Guinear Works*, *Cornwall*.
- k. 58. Copper-Ore, with Tin. Mr. Hill's Wood, near *Helfton*, *Cornwall*.
- k. 59. Copper Ore. *Zonner-Works*, *Cornwall*.
- k. 60. Copper-Ore. From a Mine formerly wrought at *Ashburton* in *Devonshire*.
- k. 61. Copper-Ore, gather'd out of Mr. Trevenion's *Deads*, or *Waffles*, in *St. Stephen's Liberty*: 'Tis work'd by Mr. Wayn. It had
lain

lain long among the Rubbish of that Mine in great Quantity, *Cornwall*.

k. 62. A Marcasite, with white Spar, out of the same Rubbish, and likewise wrought for Copper.

k. 63. Copper-Ore, red, with green, very rich; out of a Load in *Gwallin Parish, Cornwall*.

k. 64. Copper-Ore, black, very rich. Out of a neighbouring Load, in *Gwallin Parish, Cornwall*.

k. 65. Copper-Ore, very poor, with much Spar. *Eskirher, Wales*.

k. 66. Copper-Ore, from *Tolvern*. They sell it for ----- a Ton. *Cornwall*.

k. 67. Somewhat better Copper-Ore. From another Vein of the same Work.

k. 68. A green Ore, seeming to have a little Copper. From a Vein in *Cleggo-Cliffs, Cornwall*.

k. 69. Copper-Ore. *Northmoulton, Devonshire*. This Ore, with the shivery Slate in which 'tis found, constitutes a Stratum of about 3 Foot thick. The Strata on each side it, are of much like Slate. All the Strata stand edge-ways, or perpendicular. The Work is at present overflow'd with Water.

k. 70. *Ibidem*.

k. 71. *Ibidem*.

LEAD-ORES.

l. 1. Lead-Ore, white and fibrous from *Barrow-Work*; the Duke of *Somerfet's* Mine in *Cumberland*. It lies in a Vein amongst blue Lead-Ore, and yields upon the Assay somewhat above three fourths of Lead.

l. 2. White-Lead-Ore. From the same Vein.

l. 3. White-Ore. From still the same Vein.

l. 4. White-Lead-Ore, partly flaky, and partly fibrous. From a Mine of Mr. *Edward Harley's* at *Eskergallid* in *Montgomeryshire*.

l. 5. *Ibidem*.

l. 6. Another Sample, with a Cast of black. *Ibidem*.

l. 7. l. 8. Two more, of a brown Colour. *Ibid*.

l. 9. A white Mineral, appearing very much like Tincall, having a pungent or saline Taste when first taken up; given me by one of Mr. *Ingram's* Miners. Mr. *Pigg*, Mr. *Harley's* Steward, promis'd me to get more of it. In Complexion, it very much resembles the following Lead-Ore.

l. 10, 11, 12. The Pieces of white, flaky Lead-Ore, very glossy. Found in a perpendicular Fissure amongst blue or Potters Lead-Ore, about 14 Fathom deep; in a Mine of Mr. *Edward Harley's* at *Eskergallid* in *Montgomeryshire*.

l. 13. White-Lead-Ore. From Mr. *Harley's* Mines at *North-Wales*.

l. 14. *Ibidem*. l. 15. *Ibidem*. l. 16. *Ibidem*.

l. 17. Lead-Ore. *Guarnock* near *Truro, Cornwall*.

l. 18. Lead-Ore, of a greenish yellow Colour, cavernous and porous; found partly in Ribs and partly in Lumps, after the Manner of *Boos-work*; in a Vein in *Green-hill*, near *Charter-house*,
Mendip,

Mendip, Somersetshire. There was a considerable Vein of it, and several Pits, near 20 fathoms in it; but it is now deserted.

l. 19. Lead-Ore, of a greenish Colour. *Ibidem.*

l. 20. Another Sample, green with a Cast of brown, owing to the Clay in which 'twas lodg'd. *Ibidem.*

l. 21. Green Lead-Ore concreted, in a thin Plate to a reddish Stone*, being part of one side of the Vein. The Stone on the other side is of the same Colour and Constitution. The Lead-Ore on this Sample is shot into little green Crystals. *Ibidem.*

l. 22. Yellow Lead-Ore, *Penrose Work.* By *Helston, Cornwall.* This is stamp; but seems to be of the same sort with that from *Mendip.*

l. 23. Native-Lead. 'Tis soft, flexible, and cuts with a Knife like melted Lead. This is the only Sample of the Kind I ever saw. Found in a Vein amongst Manganese, in a Mine of that Mineral in *Hartry Liberty, Mendip, Somersetshire.* *Purum autem saepe invenitur Aurum, Argentum, Aes, Argentum vivum, minus saepe Ferrum, & Plumbum cinereum: vix unquam Plumbum candidum & nigrum. Agricola de re Metal. Lib. 5. p. 76. c.*

l. 24. Tessellated, Diced or Cubic Lead-Ore. Out of the Lead-Mines near *Llanidloes, Wales.*

l. 25, 26. Diced Lead-Ore, very ponderous and rich; found about 3 Fathom deep in Clay, in Mr. *Ingram's Mine* at *Bruptyle* near *Llanidloes* in *Montgomeryshire.* The Mine is but just opened; but the Part where this lay appeared to be the Top of a Vein; and there is a Rib of blue Lead-Ore underneath.

l. 27. Another Piece of Diced-Ore, with coarse white Spar. The Cubes on one Flat are generally small; on the other generally large. *Ibidem.*

l. 28. Diced Lead-Ore. *Ibidem.* l. 29. Diced Lead-Ore, *Ib.*

l. 30. Diced Lead-Ore. *Ibidem.* l. 31. Diced Lead-Ore. *Ib.*

l. 32. A Lump of blue Lead-Ore, out of a Vein in *Hartry*, on *Mendip.* 'Twas found lying loose and independent about 15 Fathom deep. The common blue Lead-Ore of *Mendip*, lies in Veins or perpendicular Fissures of the Stone, which are short, irregular and no other than *Bellies.* The Miners here call them *Cour-fes*†. Into these, several Threads or cross Fissures terminate.

l. 33. Another; from a Vein of a neighbouring Mine.

l. 34. Another; from another of these Mines.

l. 35. Another; from a still different Mine in this Tract.

l. 36. Ore of Lead, with Copper, both very fine. Found, filling a small Fissure of a grey Stone, in a Mine of my Lady *Campbell's*, near *Eistrophene, Wales.*

l. 37. *Ibidem.*

* Mr. Kemp try'd a Stone of a like Colour and Constitution, and obtained Gold out of it. He had it from one, who would not tell him from what Part of England it came.

† Where the Ore lies soft, they call it Country,

l. 38. Lead-Ore, in Veins of Stone. *Goginion*, one of the Company's Works in *Montgomeryshire, Wales*.

l. 39. Lead-Ore. *Goginion, Wales*.

l. 40. A blue Stone, crack'd much after the manner of the *Ludus Helmontij*: and the Cracks partly fill'd with white Spar, striated a-cross, after the manner of the *Septa* of that Body, and partly with Lead-Ore. From *Cumustwith*. 'Tis pretty uncommon. These are only Strings of Ore, and were beat off the Side of a Gill, near the Bottom.

l. 41. Another Piece of like Stone, with large *Septa* Strings, or Veins of Lead-Ore, and Spar. The main Crack here was not pass'd quite thro' the Stone. So that those Veins were made by shrinking of the Stone, after the Manner of the *Ludus Helmontij*. *Ibidem*.

l. 42. Another. Found along with the two foregoing.

l. 43. Another. *Ibidem*.

l. 44. Another. The *Septa* chiefly of Lead, and very large. *Ibidem*.

l. 45. Another. *Ibidem*. In this Vein, with Lead-Ore and Spar, are some few Sparks of a yellow shining *Marcasite*.

l. 46. Another, with a large Vein of Lead-Ore on one Side, terminating in a much lesser Vein of Spar on the opposite Side. *Ibidem*.

l. 47. Another, parted at the Vein, so as to shew the Constitution of the Lead-Ore. *Septum*. *Ibidem*.

l. 48. Lead-Ore, small grain'd. *Cumsumluck*, one of the Company's Mines, in *Montgomeryshire, Wales*.

l. 49. Lead-Ore, with Copper, and *Marcasite*. *Cumsumluck*.

l. 50. Lead-Ore, with white Spar. *Cumsumluck*.

l. 51. Talky Lead-Ore. *Goginion, Cornwall*.

l. 52. Steel-grained Lead-Ore. *Goginion, Cornwall*.

l. 53. Steel-grained Lead-Ore. *Eskirher, Wales*. This Mine they call the *Welch-Potosi*: and a vast Quantity of Lead-Ore hath been rais'd out of it.

l. 54. Potters Lead-Ore. *Eskirher, Wales*.

l. 55. Lead-Ore. *Estemtean, Wales*.

l. 56. Lead-Ore, with *Marcasite*. *Estemtean*. [Dissolv'd.]

l. 57. Lead-Ore. *Goginion, Cornwall*.

l. 58. Lead-Ore, partly steel-grain'd, and partly flakey. *Goginion*.

l. 59. Lead-Ore, with some Sparks of the steel-grain'd Kind: but chiefly flakey, some of the Flakes having a Gloss of Blue. *Goginion*.

l. 60. Blue Lead-Ore, very fine and clean. This is only a Lump of *Boos-Work*, out of a Vein; but the greater Part of the Vein was crack'd, and parted, in such sort, that the Parts answer and fit, and tally to one another, like those of the Antimony-Vein at *Endellion*, *Confer. g. 12. supra*. This is very rich in Silver; perhaps beyond any in all *England* besides. This Ore, when only dress'd, sells for 8*l.* a Ton, which is about the Value of Lead it-
self.

self. One of the Proprietors, and some of the Workmen, averr'd that a Ton of this Lead yields 140 Ounces of Silver. From *Guarnock*, near *Truro*, *Cornwall*. The Vein of Ore was about a Foot over: The Miners say, in some parts they found the Ore near three Foot in Diameter. This lay about 15 Fathom deep.

l. 61. Lead-Ore. *Guarnock*, by *Truro*, *Cornwall*.

l. 62. Lead-Ore. *Penrose Works*, *Cornwall*.

l. 63. Lead-Ore. *St. Myran*, near *Padstow*.

l. 64. Lead-Ore. By *Pyran-Downs*, near *Penrin*, *Cornwall*.

l. 65. Lead-Ore. *Towan-Cliff*, near *Pyran-Sand*, *Cornwall*.

l. 66. Lead-Ore. From Lord *Mohun's Park* at *Bowconick*.

l. 67. Lead-Ore. *Crowan-Parish*, Sir *John St. Aubin*, *Cornwall*.

l. 68. Lead-Ore. *Penwortey*, near *Truro*, *Cornwall*.

l. 69. Remov'd to its proper Class.

l. 70. Blue Lead-Ore, vein'd with white Spar. From *Eskergallid* in *Montgomeryshire*. Mr. *Harley's Lead-Mine*.

l. 71. Blue Lead-Ore; found near *Dolgadwin*, in *Montgomeryshire*. 'Twas turn'd up by the Plough: and suppos'd to have been formerly dropt. The Crust was superinduced by the Weather: at least, I have seen a like Crust induced upon Pieces that had so lain long expos'd.

l. 72. A Lump of blue Lead-Ore, compos'd of two or three Crusts of a sparkling Lead-Ore, broken, and exhibiting a Cavity within, in which are some talky crystalline Shoots; out of a Vein in *Hartry*, on *Mendip*, *Somersetshire*. 'Tis hollow, after the manner of the *Geodes*, and the echinated crystalline Balls.

l. 73. Lead-Ore. *Relistion Works*, *Cornwall*.

l. 74. Potters Lead-Ore. Mr. *Peck's Mine*, at *Delivy*, *North-Wales*.

TIN-ORES.

Of Tin Ores m. 1. Shoad-Stones, found several Fathoms deep, in general, but above the Rock, or solid Stone, on *St. Agnes-Vid. m. 88.* Ball, of several Sizes. These, and those N^o *e. 12.* infra. and *m. 41.* were taken fresh out of the Shoad; and yet by the smoothness of their Surfaces, appear to have been worn by Water; which must have been before they were lodged in this Shoad.

m. 2. Tin-Grains, from several Veins of the Mines near *St. Agnes, Cornwall*. The Crystallizations of these are not so distinct, that a certain Judgment can be pass'd of their Figure.

m. 2^x. A Mass of Tin-Grains, several seeming to be concreted into one; so that nothing can be ascertain'd as to their natural Figure. From the same Mine.

m. 3. Tin-Grains, from *Cleggo-Cliffs*, and the Sands at the Foot of them, *Cornwall*. Among these there are several Instances of the Tin, incorporated with Crystal, shooting into a quadrilateral pyramidal Figure.

m. 4. Ibidem. All these Grains, that are distinct, and fair, are in form of quadrilateral Pyramids.

m. 5. Tin-Grains; from Zonner-Work, Cornwall, near St. Ives. The Tin-Ore, got in these Mines, is more considerable for its Richness, than its Quantity. The Zonner Tin-Ore is the richest in Cornwall.

m. 6. Tin-Grains; from Polgouth, Cornwall.

m. 7. A Piece of Tin-Ore, ponderous, and very rich. Out of a Mine, near St. Agnes, Cornwall.

m. 8. Green Tin, very rich, and fine; out of a Shoad, or Stream-Work, at Whole, Cornwall. Confer. i. 18. supra, & m. 12. & m. 88. infra.

m. 9. Tin-Grains, of a Figure more oblong than any I ever saw: and not unlike the Cornish Diamonds in shape. From Vellanuraine, Cornwall.

m. 10. Tin-Granes. Cornwall. Mr. Causter of Redbrook. There are, in this, several Grains distinct, and of a quadrilateral pyramidal Figure.

m. 11. Tin-Grains; from Vellanuraine.

m. 12. Grain-Tin, very rich, and fine; out of a Shoad, or Stream-Work, at Whole, Cornwall. Conf. i. 18. and m. 8. supra, and m. 88. infra.

m. 13. Tin-Grains. Zonner-Work, Cornwall.

m. 14. Tin-Ore, very rich; from Trevan.

m. 15. Tin-Grains, very fine; from a Vein of a Mine in Vellanuraine, Cornwall.

m. 16. Tin-Grains, the Soil of the Vein red; from Vellanuraine. These Grains are in quadrilateral Pyramids.

m. 17. Tin-Grains, with Spar, white, purplish, and one Spark of a bright smaragdine Green; out of a Tin-Mine near St. Agnes.

m. 18. Tin-Grains, very fine; out of a Vein near the precedent. St. Agnes.

m. 19. A Mass, with transparent Shoots, that by their Complexion, seem to hold Tin; which, if they do, is a great Curiosity. From a Mine near St. Agnes.

m. 20. Tin-Ore, with Grains, and Spar. From Zonner-Work. Vid. m. 27. infra.

m. 21. Tin-Ore, very rich, with a Vein of Spar, and Tin-Grains; from Vellanuraine.

m. 22. Tin-Grains; from St. Agnes. Those that appear distinct, are quadrangular and pyramidal.

m. 23. Tin-Ore, with Grains; from Guinier-Work, Cornwall.

m. 24. Tin-Grains, black, very bright and shining, with white Spar. Reliffion, Cornwall.

m. 25. Grey Stone, with Tin, Spar, and Marcasite crystalliz'd upon it; from Gamp. Mr. Tonquin's Work, Cornwall.

m. 26. Tin-Ore, from Trewan, very rich. Indeed the black Tin is ever all of the same Richness, and yields alike.

m. 27.

- m.* 27. Tin-Ore, from *Zonner*; out of the same Shaft with *N^o m. 20. supra.*
- m.* 28. Tin-Grains; from *St. Agnes.*
- m.* 29. Tin-Grains; from *St. Agnes.*
- m.* 30. Tin-Ore, with Grains, and Spar, very rich. It adher'd to the Stone of the side of the Vein. This is of a pale Colour, near white, having in it several extremely small Veins of Tin-Ore. From *Zonner-Work.*
- m.* 31. Another, still somewhat more clear, and free; being as rich as the Tin-Grains. From *Zonner.* All that is glossy, and shines in it, is of the same Constitution with the Tin-Grains.
- m.* 32. Another Sample, with Spar, and Grains. From the same Mine.
- m.* 33. Tin-Ore, of a rusty brown, very rich; from *Fatwork.*
- m.* 34. Tin-Ore, rich; from *St. Agnes-Ball.*
- m.* 35. Another Sample, very rich, with Sulphur in it; from the same Place.
- m.* 36. Rich Tin-Ore, grey, intermingled with white Spar; from the side of a Vein, or Load, at *Fatwork.*
- m.* 37. Tin-Ore, very rich. *Creekbrans, by Poldice.*
- m.* 38. Tin-Ore, very rich; from *Woodyate.* Mr. Pollard's Works.
- m.* 39. Tin-Ore, extreme rich; from near *Redruth.*
- m.* 40. Tin-Ore, very rich; from *St. Agnes-Ball.*
- m.* 41. A Shoad-Stone, rich, in Tin: and having Tin-Grains crystalliz'd in a Sinus of it. Found on *St. Agnes-Ball,* along with *e. 12. supra,* and *m. 1.*
- m.* 42. Tin-Ore, very rich, Part of a Vein; from *St. Agnes-Ball.*
- m.* 43. Tin-Ore, of a brownish grey, with a Vein of white Spar; from *Fatwork.*
- m.* 44. Tin-Ore, very rich. The richest Part is of a dusky Colour, with a Blush of red. From *St. Twist-Ball.*
- m.* 45. Tin-Ore, not so rich. From another Shaft on the same Ball.
- m.* 46. Tin-Ore, very rich. From a Load, *Polgouth.* This vast Mine is now under Water; but they are in hopes of draining it.
- m.* 47. Tin-Ore, grey, rich, with white Spar. From a Work near *Fatwork.*
- m.* 48. Tin-Ore, of a dusky brown, near black; with small Tin Grains. From a Work near *Fatwork.*
- m.* 49. Tin-Ore, pretty rich. From *Zoan-Coniggan.*
- m.* 50. A Piece of glossy Tin-Ore, very rich, and near as fine as the Tin-Grains. *Fatwork.*
- m.* 51. Tin-Ore, of a dusky Hue, very rich. From *Vellanuraine.*
- m.* 52. Tin-Ore, with Cockle, pretty rich in Tin. From *Treviddo Ball* near *St. Ives.*
- m.* 53. Another, with small Tin-Grains. From the same Place.
- m.* 54. Tin-Ore. From *Redruth.*

m. 55. Tin-Ore, with Cockle, *i. e.* Talc, striated or fibrous? From *Treviddo-Ball*, near *St. Ives*.

m. 56. Tin-Ore, poor and talky. From a Shaft on *St. Twist's-Ball*.

m. 57. Tin-Ore, abounding in Talc. From *Zowan-Coniggan*.

m. 58. Tin-Ore, with Grains finely crystalliz'd. From *St. Agnes-Ball*.

m. 59. Tin-Ore, grey; of the midling sort. From a Mine near *Mervia-Ball*.

m. 60. Tin-Ore, of the better sort; from a Vein in *Cleggo-Cliffs, Cornwall*.

m. 61. Tin-Ore; from *Port-kellis*.

m. 62. Tin-Ore, with Mundick; *Fus-Hill*, near *Wakehampton*, in *Devonshire*.

m. 63. Tin-Ore, very rich, of a glossy brown Colour, with a small Intermixture of Sparks of Marcasite; from a Work near *Fatwork, Cornwall*.

m. 64. Tin-Ore, rich; from a Load in *St. Stephen's Liberty, Cornwall*.

m. 65. Tin-Ore, a flat Piece, that fill'd the Vein; from *St. Agnes-Ball, Cornwall*.

m. 66. A Piece of talky Stone, with part of the Vein of Tin adhering to it; from *Treviddo-Ball*. In this the Talc of the Stone is flakey, that of the Vein fibrous.

m. 67. Tin-Ore, from *St. Twist's-Ball*.

m. 68. Tin-Ore; from the side of a Cavity of a Vein shot into grumose Efflorescencies. *Fatwork*.

m. 69. White Tin-Ore; *Carenky-Works, Cornwall*.

m. 70. Blue Tin-Ore; *Portkellis, Guindon-Parish*.

m. 71. Tin-Ore; from *Hard-head*, near *Mr. Nancy's, Cornwall*.

m. 72. Tin-Ore. *Godolphin-Ball*. Pretty good.

m. 73. Another sort, with a Vein of Tin-Grains; from *Godolphin-Ball*.

m. 74. Tin-Ore, from *Gamp, Mr. Tonquin's Work*.

m. 75. Tin-Ore, from *Gamp, Mr. Tonquin's Work*.

m. 76. Tin-Ore, with Marcasite. From *Godolphin-Ball*.

m. 77. Tin-Ore, from *Zonner-Work*; with Tin-Grains, small, but very fine.

m. 78. Tin-Ore, with Tin-Grains, finely crystalliz'd; from *St. Agnes-Ball*.

m. 79. Tin, Copper, Mundick, Spar, and Mock-Lead, in one Stone; *Trevestas-Works*.

m. 80. Tin-Ore; *Lannar, in Guinop*.

m. 81. Tin-Ore, rich; from *St. Agnes-Ball*.

m. 82. Tin-Ore, of a brownish grey Colour, rich vein'd and intermix'd with white Spar; from a Work near *Fatwork*.

m. 83. Tin-Ore, extremely rich; from *Polgouth*.

m. 84. Tin-Ore, sparry; from *Godolphin-Ball*.

m. 85. Tin-Ore, pretty rich; from *Godolphin-Ball*.

m. 86. Tin-Ore, with *Cornish* Diamonds crystalliz'd along with it; from a Work near *St. Agnes-Ball*.

m. 87. Tin-Ore, lying in dusky red Spots, very rich; with Cockle, and white Spar. It shews the full breadth of the Load or String. From - - - - - near *Roche, Cornwall*.

m. 88. Tin-Ore, very good, in white Spar; being a Piece of a *Squat*, at *Hewas-Work*; not far from *Polgouth*, in *St. Stephen's Liberty*. 'Tis broke off near the Edge of the *Squat*; and has adhering some of the cretaceous Matter of the Killas to each Surface. Tin-Ore is found lying in four several Methods: 1°. In *Fissures, Veins, or Loads*. 2°. In *Shoads*, which are Trains of Matter, driven by Water from the Loads, and lying above the Rocks, at or near the Surface, sometimes bare to the Day; and sometimes cover'd with Earth and Rubble, to three, six, or ten Foot deep. That at *Whole**, is the only fresh Shoad-Work, or Stream-Work, at this day in Working in all these Parts. 3°. *Pedankarn*, which is Tin-Ore interspers'd in Sparks in the Strata of Growan. It is rarely found in this Form; there are only two small Works of this sort now a going in all *Cornwall*; the one at - - -, the other at - - - - -, both near *Godolphin-Ball*. 4°. *Squat*, or *Flat-Work*. This also is very rare. I know no Work now going forward in *Cornwall* of this sort, except three or four Shafts at *Hewas*. The *Squat* consists of Tin-Ore and Spar, incorporated in much the same manner as in the Loads. The *Squat* is of a flat Form, thickest in the middle, and gradually lessening all round, so as to terminate in Edges. It is not round; but generally extended in length farther one way than another. I saw none above a Foot thick in the middle; but am told they find them to three Foot thickness. The largest extend to ten or twelve Foot in breadth, and eighteen or twenty in length. Some are small: I observ'd one but about two Foot long. They are commonly broke and parted by Fissures, after the manner of the *Ludus Helmontij*, tho' not near so regularly; and the Fissures are at two, three, or four Foot distance. I observ'd Cavities in several of them; there is indeed a small one in this Sample, *m.* 88. with Spar, *Cornish* Diamonds, or Crystals, shot in them. Those I saw lay about twelve Fathom deep, but they are found, uncertainly, at several Depths, even in the same Work, lying under one another. They are found only in Killas, and lie parallel to the Grain of the Stratum of the Killas, which is a fissil Stone. Those I observ'd lay with their Length stretching to the Rise and Dip of the Killas. In these Works of *Hewas* there was a Stratum of Growan lay above the Stratum of Killas; a thing rarely observed elsewhere.

m. 89. Tin-Ore, from *Nuns, Dartmore*, in *Devonshire*.

* See Samples out of this Shoad, i. 18. *supra*; also *m.* 8. and 12. *supra*.

m. 90. Tin-Ore, the best which that Vein affords, tho' poor, grey, vein'd with red; from *Hewas-Work*, not far from *Polgouth*. *Vid. m. 93. infra.*

m. 91. Burnt Tin, from the great Melting-house by *Truro*. This has undergone a previous Calcination to pass off the Copper and Sulphur; and fit it for Fusion.

m. 92. Tin-Ore, from *Trevan*, very rich.

m. 93. Poor Tin-Ore, grey with Blend; from the top of the Vein in which *m. 90. supra*, was found.

m. 94. *Pedonkarn*, a sort of Tin-stone. The Tins lodg'd in dusky grey Specks in a pale grey Stone, part of a Stratum. There are Micæ, as also white Spar amongst it. From *Trowa*, in *Breag-Parish*, *Cornwall*.

m. 95. Part of a Shoad born off the same Stratum, and lying, amidst many others, near the Quarry, for such indeed it is, or Mine, out of which the preceding was got.

m. 96. *Growan*, part of a Stratum, with Micæ in it. Found near the former, at *Trowa*, in *Breag-Parish*.

m. 97. Part of the same Stratum, holding a little Tin.

m. 98. Tin-Ore, white; from *Morva-Ball*. The Tin is in black Grains; and there are Micæ in it. This is of their midling Ore.

m. 99. Killas, grey; with Micæ and Veins of Tin in it. From *St. Agnes-Ball*.

m. 100. Tin-Ore. From *Fatwork*.

m. 101. Tin-Ore, variegated with black, red, and pale brown. Part of the Mass is concreted into Grumuli. From *Crowder*, about a mile from *Fatwork*. 'Tis pretty rich of Tin.

m. 102. Another Sample, as rich, black and red; from another Vein, in *Crowder*.

m. 103. Tin-Ore, red, very rich; from *Vellanuraine*.

m. 104. Tin-Ore, in a dusky red Mineral; from near *Redruth*.

m. 105. Tin-Ore, of a red Colour; with Tin-Grains, black. It is very rich. Found in considerable Quantity in a Load in *Gwal-len-Parish*.

m. 106. Red Tin-Ore, pretty rich, out of the same Vein.

m. 107. Red Tin-Ore. This is a poor Ore. From *Morva-Ball*.

m. 108. Tin-Ore. *Welred*, in *Lelant-Parish*.

m. 109. Tin-Ore, pretty rich; from *Trelawood*, Mr. Pollard's Work.

m. 110. Tin-Ore, of a poorer sort; from *Tolvern*.

m. 111. Tin-Ore pretty good; from the same Place.

m. 112. Red Tin-Ore. *Carenky Works*.

m. 113. A Body, porous and cavernous; holding some small Quantity of Tin, for which it is work'd. *St. Agnes-Ball*.

m. 114. Tin-Ore, with some shew of Copper; from *Trewellor*. The same Vein yields in some parts Tin, in others Copper.

m. 115. Tin-Ore; from a Vein of *Crowther Work*.

m. 116. Another, paler, but as rich; from a Vein in the same Liberty.

IRON ORES.

n. 1. A brown, powdery Spar. They say it holds Iron. Found amongst the Iron-Ore, *Clouerwall*, in the *Forest of Dean, Gloucestershire*. Those of *Clouerwall*, and those of *Stainton*, are the Iron-Mines of chief note here.

n. 2. Two Pieces of white, friable, crisply Spar, with Iron Cylinders in them. There were more. The Cylinders lay in the Spar, generally parallel; and only a very few cross-ways. Found with the former.

n. 3. *Ibidem*.

n. 4. *Diaphanous* Spar, shot into Rhomboids; and, by Intervention of Iron-Ore, form'd into Cylinders, or *Stalactitæ*. Out of a Fissure, having in it much Iron-Ore. *Ibidem*.

n. 5. *Ibidem*.

n. 6. *Stalactitæ* composed of Iron-Ore, with a Congeries of *Rhomboid* Crystals, transparent with a Cast of *Yellow*. Out of the Iron Veins. Breaking and examining a vast deal of this Ore, I observed all the Crystals and crystalliz'd Spars, and every thing that was shot, had, generally, a Tendency to a *Rhomboid* Figure.

n. 7. More, *Rhomboid*, and crufted round small *Iron Stalactitæ*.

n. 8. More, very small. In this Mass are several *Iron Rhombs*.

n. 9. *Talky Spar*, brown, form'd into *Rhombs*, and affix'd upon *Iron Stalactitæ*.

n. 10. *Iron Rhombs*, found amongst the Ore in the Iron Veins, *Clouerwall*. I observed some of them of a red Colour, others black, others brown.

n. 11. *Ibidem*.

n. 12. *Ibidem*.

n. 13. *Ibidem*.

n. 14. *Ibidem*.

n. 15. *Ibidem*.

n. 16. *Ibidem*.

n. 17. *Ibidem*.

n. 18. Besides the *Rhombs*, there are in this several Cylinders, striated like the *Hæmatites*.

n. 19. Brushy Iron-Ore, with *Iron Rhombs*.

n. 20. Brush Iron-Ore, or *Iron Stalactitæ*. Several of the *Stalactitæ* are striated, like the Crusts of the *Hæmatites*, from their Surface towards their Axis. I examin'd a vast many others, and found them striated in like manner.

n. 21. *Ibidem*.

n. 22. *Ibidem*.

n. 23. *Ibidem*.

n. 24. *Ibidem*.

n. 25. *Ibidem*.

n. 26. Iron-Ore, with small Bits of a white semi-diaphanous Spar scatter'd in it.

n. 27. Brush Iron-Ore.

n. 28. Brush Iron-Ore, ramose.

n. 29. Small Iron Columns, fretted over with Spar. They are parallel to each other; but intercepted by various tranverse Iron Plates.

n. 30. This and the following Iron-Ores, to n. 39. inclusive, from Grotto's in the Mines; and the Tops of the old deserted Works; about *Clouerwall*.

n. 31.

n. 31. *Ibidem.*n. 32. *Ibidem.*n. 33. *Ibidem.*n. 34. *Ibidem.*n. 35. *Ibidem.*n. 36. *Ibidem.*n. 38. *Ibidem.*n. 39. *Ibidem.*

n. 40. *Hæmatites*, out of the Top of a Manganese Vein, about three Fathoms from the Surface. *Hartry-Liberty, Mendip.*

n. 41. Another Sample; from the same Vein.

n. 42. A Piece of very hard Iron-Ore; found about twelve Fathom deep, at the bottom of a Manganese Vein, in one of those Mines. It appears to be pretty rich in Iron.

n. 43. A Mass of Iron-Ore, having on one side small *Stalactitæ*, after the manner of the brush Iron-Ore. From another of the Manganese Veins. *Ibidem.*

n. 44. A Mass of Iron-Ore, with Spar crystalliz'd upon it, very much like that of the *Langron-Ore*. *Ibidem.*

n. 45. Iron-Ore, poor; from *Mervæ-Cliff, Cornwall.*

n. 46. Iron-Ore, part resembling the *Hæmatites*. From a Load or Vein near *Pyran-Sands, Cornwall.* The Vein has been work'd formerly, and is vastly large.

n. 47. Iron; from *Lenevet-Parish, Cornwall.*

n. 48. Iron-Ore. *Pyran-Sands, Cornwall.*

n. 49. Iron-Ore, *Relistion*, very rare, *Cornwall.*

n. 50. Iron-Ore, *Lizard-Point, Cornwall.*

n. 51. Iron-Ore, *Poldice, Cornwall.*

n. 52. Iron-Ore, in form of the *Lodus Helmontij*, only the Cracks are empty, excepting that there are a few Grains of Crystal or Spar in some of them. There are Samples of these Grains loose, *b. 199. supra.* Iron Mines betwixt *Lanethly* and *Pontipool*. This sort is call'd there *Pin-Ore*. See more of it, *infra, n. 58, & seq.*

n. 53. A Body appearing to be of the same Constitution with the *Lodus Helmontij*, only the Septa are very numerous, so that it must have been much shatter'd. They consist of Iron-Ore; the Tali of a fine soft red Ochre, that would be very apt to crack, part and shatter. From the same Mines.

n. 54. A Piece broke off the precedent Body.

n. 55. Two small Pieces of a *Lodus Helmontij*. The Septa Iron-Ore very fine, of a dusky brown Colour; the Tali of a grey soft Stone. From the same Mines.

n. 56. Septa, of the *Pin-Ore*, composed of several Plates. From the same Mines.

n. 57. *Ibidem.*

n. 58. This, and the six following Iron-Ores, to n. 68. inclusive, from Major *Hanbury's* Works near *Pontipool*. They call this sort *Pin-Ore*. 'Tis in Nodules of the *Lodus Helmontij* Kind, and lies in Strata of Shiver over the Coal. See more of this, *n. 52. supra.* It seems to shrink and crack more when brought up into the Air; as the *Lodus Helmontij* also does. I observed the *Lodus Helmontij* near *Highgate*, when exposed to the Air, shiver'd all to pieces.

n. 59. *Ibidem.*

n. 60. *Ibidem.*

n. 61. *Ibidem.*

n. 62. *Ibidem.*

n. 63. *Ibidem.*

n. 64. *Ibidem.*

n. 65. This seems to be rich, but runs difficultly, so that the Miners do not much value it. 'Tis ever found in flat Masses, in form of Cakes. *Pontipool.*

n. 66. Another, of like kind, from the same Mine.

n. 67. A brownish grey Iron-Stone, lying in thin Strata, crack'd, and parted into Tali. These Strata lie, some above, others under the Coal. 'Tis poor, but runs freely. *Pontipool.*

n. 68. A Sample, of another Stratum, of the same Mine.

The Iron-Ore, at Major *Hanbury's* Works, at *Pontipool*, is of two sorts. The first is form'd into Masses, after the manner of the *Ludus Helmontij*. These lie, irregularly, above the Bed of Coal there, and is call'd *Pin-Ore*. Some of them have shrunk so much, and consequently the Partitions are so wide, that there is near as much void Space as Substance in the Body. Where those Spaces are fill'd, or Septa found, they are ordinarily of Iron-Ore; as those of the common *Ludus Helmontij* are of Spar. The other sort of Iron-Ore, here, lies in Strata, about nine Inches thick, all crack'd into Squares, and oblong Figures, so as to appear like a Pavement.



*A CATALOGUE of the Additional Ex-
traneous English Fossils; viz. Shells, Teeth,
Bones, and other Parts of Animals, chiefly
Marine.*

*As also of VEGETABLES, digged up in
England.*

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&c. | <i>Echini Spatagi Cordiformes</i> , d. 1,
&c. |
| <i>Polyleptoginglymi</i> , a. 62, &c. | ———— <i>Galeati</i> , d. 10, &c. |
| <i>Pectunculi laves</i> , a. 65, &c. | ———— <i>Conoides</i> , f. seu <i>Pileati</i> ,
d. 27, &c. |
| ———— <i>fasciati</i> , a. 73, &c. | ———— <i>Ovarij</i> , d. 36, &c. |
| ———— <i>striati</i> , a. 76, &c. | Appendix 1. <i>Entrochi</i> , ^x d. 47,
&c. |
| <i>Tellina</i> , a. 80, &c. | 2. <i>Entrocho-Asteria</i> ,
^x d. 58, &c. |
| <i>Cunei</i> , a. 83, &c. | 3. <i>Asteria</i> , ^x d. 62, &c. |
| <i>Musculi</i> , a. 99, 100, 101. | <i>Partes Piscium</i> , e. 1, &c. |
| <i>Pholas</i> , a. 102. | <i>Partes Quadruped.</i> f. 1, 2. |
| <i>Concha Anomala</i> , f. <i>incerti Ge-
neris</i> , a. 103, &c. | <i>Shells and other Bodies in Stone</i> ,
g. 1, &c. |
| <i>Patella</i> , b. 1, &c. | <i>Parts of Vegetables digged up
out of the Earth</i> , h. 1, &c. |
| <i>Vermiculi</i> , b. 6, &c. | |
| <i>Nautili</i> , c. 1, &c. | |
| <i>Ammonita</i> , c. 3, &c. | |

Additional Extraneous English Fossils.

PECTINES.

- a. 1. A Pecten, out of the Cliffs near the River's Mouth, by *Bridport, Dorsetshire.*
- a. 2. A Pecten, found at a considerable Depth in the Earth below three Strata of Stone, at *Stoke*, twenty-four Miles from Sea, in the Mannor of *Castle Cary, Somersetshire.*
- a. 3. A Bivalve, from the West-side of *Portland.*
- a. 4. A very fair Pectunculus, one Valve echinated, or spiked. Out of a Chalk-pit near *Carshalton, Surrey.*
- a. 5. A Scallop. Out of a Chalk-pit, near *Croydon.*
- a. 6. An echinated Pectunculus, found 25 Foot deep, in the great Chalk-pit beyond *Croydon, Surrey.*
- a. 7. A Pecten, out of a Chalk-pit on *Barkhamstead-Common, Hertfordshire.*
- a. 8. Impression, of a Scallop, on a grey Flint. *Ibid.*
- a. 9. A Pecten. This appears about the Margin, not unlike the bottom of a Balanus; from a Chalk-pit near *Croydon.*
- a. 10. A Pecten. *Ibid.*
- a. 11. Another, less. *Ibid.* The same Pit.
- a. 12. Another. *Ibid.*
- a. 13. Impressions of two very small Pectens, in a grey Flint. *Barkhamstead-Common.*
- a. 14. An Impression of a small Pecten, upon an Achate. Found upon a Hill near *Croydon.*
- a. 15. A brown Flint, having upon it the Impression of one Valve of a Shell, that appears to be of the common Cockle-kind. Found near *Croydon.*
- a. 16. A Pecten, from the West-side of *Portland.*
- a. 17. An Impression of a Pecten upon a flinty Pebble; found in a Field near *Keston, by Bromley, Kent.*
- a. 18. A Pectunculus, *Pyrton-Passage.* We find of this Kind at *Whitton, in Lincolnshire.*
- a. 19. Found in a Chalk-pit, near *Croydon, Surrey.*
- a. 20. A Pecten; from *Honeycomb-Lays*, a great Quarry in *Maisy-Hampton-Parish, Gloucestershire.*

OSTREA.

- a. 21. A Pair of Oyster-Shells, of the common sort, digg'd up, among great Numbers of others, about 14 Foot deep, in a Bed of brown Sand, that lay over a Stratum of Chalk. In a Valley about a Mile from *Hertford.*

a. 22. A Pair of Oyster-Shells; from *Catsgrove*, half a Mile North of *Reading*. There were vast numbers of them, in a Stratum of Sand, of about a Foot thick, and See Dr. Plot's lying about 25 Foot underneath the Surface. The Hist. of Ox-Pit is very large: and wrought for Chalk, and for fordshire, p. - Brick-Clay. 'Tis upon the Top of a Hill. The uppermost Stratum is of Gravel, about two Foot thick. Then Clay of various Colours, purple, blue, red, liver-colour, 33 Foot. Next the Sand, with the Oyster-Shells, composed of Grains, greenish, black, and white, one Foot thick. Under this a dusky Clay, with some Oyster-Shells in it, but very tender and rotten, a Foot thick. Underneath Chalk, in which the Workmen have sunk near 20 Foot without finding the Bottom. In this I observ'd only Fragments of the *Pinna Marina*; and one plicated *Echinus*. I observ'd in other Pits work'd for Chalk, Gravel, &c. the like Oyster-Shells, in a Bed of Sand, of the same sort with that set forth above, and of much the same Thickness; in some Places 15, in others 20 or 25 Foot deep, for two Miles on every side *Reading*. Mr. Steele.

a. 23. A Pair of Shells, of the common Oyster-kind. *Beckingham*, betwixt *Bromley* and *Croydon*. Out of a Marl-Pit.

a. 24. A Pair of Oyster-shells, parted so as to shew a Stone cast in the Cavity of them, very fair and curious. Found at a considerable Depth in the Earth, below 3 Strata of Stone; at *Stoke*, 24 Miles from Sea, in the Mannor of *Castle-Cary*, *Somersetshire*. Sent by Mr. Player.

a. 25. Several Shells, and particularly the flat Valve of a large Oyster, in Stone. Found in digging Clay for Tiles, near *New-Cross*, by *Deptford* in *Kent*.

a. 26. An Oyster-shell; found betwixt *Oxford* and *Einsam*, *Oxfordshire*.

a. 27. One Valve of an Oyster-shell. Found, in great Numbers, on the plough'd Lands, with other Bivalves, near *Ailesbury*. They are found in all Parts round the Town.

a. 28. The upper Shell of an Oyster. Found in a Chalk-Pit, near *Croydon*, *Surrey*.

a. 29. A Mass of Stone, having in it an *American Tree-Oyster*, and several *Belemnites*. Found at a considerable Depth in the Earth, below 3 Strata of Stone; at *Stoke*, 24 Miles from Sea, in the Mannor of *Castle-Cary*, *Somersetshire*. Mr. Player.

a. 30. *Otites Plotij*. *Fairford-Field*, *Gloucestershire*. This is the upper, or flat Valve, of a kind of small Oyster; and is found here very commonly. But the other, or concave Valve, being more tender and brittle, is rarely found whole.

a. 31. The upper Valve of a small Oyster. Found near *Biffeter*, in a Stone-Pit, near *Blackthorn-Hill*.

a. 32. A small Pair of Oysters; found, on the Shores, on the East-side of *Creek*, about a Mile above *Weymouth-Bridge*.

a. 33. A *Pectunculus rostratus*. Found, amongst great Numbers of the same, and other sorts, in the Gravel on *Wickball*, an high Hill near Mr. *Windam's* House, about 4 Miles from *Wilton*, *Wiltshire*.

a. 34. A *Concha rostrata*. *Wooton*, *Oxfordshire*.

a. 35. A crabs *Concha*. Found near *Ailesbury*.

a. 36. One Valve of a large *Concha*; from a Hill near *Einsam-Ferry*, *Oxfordshire*.

a. 37. Small Bivalves; from the West-side of *Portland*.

a. 38. Five Shells; found, about 50 Foot deep, in the great Chalk-Pit on the South-East of *Croydon*.

Concha rugosa, Rostrum recurvo *.

a. 39. *Concha rugosa*; found on the Brow of a Hill on the West-side of *Bath*.

a. 40. *Concha rugosa*; from *Charleton*, 8 or 10 Miles from *Lincoln*, in *Lincolnshire*.

a. 41. *Concha rugosa*; found in a Gravel-Pit on *Hampstead-Heath*.

Concha Anomia laevis.

a. 42. *Concha Anomia*. *Lansdown*, near *Bath*.

a. 43. A *Concha Anomia*; found in digging a Ditch near *Bissiter*, *Oxfordshire*.

a. 44. *Concha Anomia*; found in a Chalk-Pit near *Deptford*.

a. 45. *Concha Anomia*. *Lansdown*, near *Bath*.

a. 46. *Concha Anomia laevis*. From a Chalk-pit near *Guildford*, Dr. *Sheppard*.

a. 47. A *Concha Anomia*; found, among several others, in a Chalk-pit near *Chatham*.

a. 48. A *Concha Anomia*; found in digging of a Ditch, near *Bissiter*, *Oxfordshire*.

a. 49. A *Concha Anomia*; out of a Stone-pit on *Blackthorn-Hill*, near *Bissiter*.

a. 50. A *Concha Anomia*; out of a Quarry at *Womandham*, in *Leicestershire*, upon the Borders of *Rutland*.

a. 51. *Conchites Anomius*, form'd of Flint, the Shell being perished, but the Impression of the Outside of it preserv'd; in a grey Flint, found near *Wickham*, *Kent*.

a. 52. A *Concha Anomia*, fill'd with a white crystalliz'd Spar, and lodg'd in a grey Flint. Found near *Caesar's-Camp*, beyond *Bromley*, *Kent*.

Concha Anomia striata.

a. 53. *Concha Anomia*. Found near *Worksworth*, in the Peak, in *Derbyshire*.

* This Species is common on the Shores of *Yorkshire*, near the Mouth of the River *Tees*.

a. 54. A striated *Concha Anomia*. From *Chiselhurst*, betwixt *Bromley* and *Dartford*, in *Kent*.

a. 55. *Pectunculus Anomius*; found in a Chalk-pit, in the great Field near *Epsom-Church*, *Surrey*. There are found *Echini Ovarij*, *Cordati*, & *Galeati*, in the same Pit.

a. 56. *Concha Striata*. *Coln St. Allens*, *Gloucestershire*.

a. 57. *Concha striata*. *Ibidem*.

a. 58. A *Concha Anomia*, fulcated; found in a Chalk-pit, near *Chatham*.

a. 59. *Pectunculus Anomius*, fill'd with crystalline Spar. *Fairford-Quarry*.

a. 60. A Flint, found in a small striated *Concha Anomia*. Out of the middle of a large Flint, near *Barkhamstead*.

a. 61. A *Concha Anomia striata*, in black Flint; out of a large Chalk-pit, near *Whelpley-Hill*, *Hertfordshire*. The Place is call'd *Cross of the Oak*, 2 Miles from *Barkhamstead*.

POLYLEPTOGINGLYMI:

a. 62. Out of a Stone-pit, near *Dinton-Mill*, about 3 Miles from *Ailesbury*.

a. 63. Found near *Ailesbury*.

a. 64. Out of a Quarry near the Church of *Melbury-Abbas*, *Dorsetshire*.

Pectunculi laves.

a. 65. A *Bivalve*, seeming to be of the same Species with that commonly dug up at *Richmond*. *English Catalogue*, Part 2. f. 433. This was found upon the very Top of a very high Mountain call'd *Wimple*, near *Radnor*, in *Radnorshire*, on the Borders of *Herefordshire*.

a. 65^x. The *Pectunculus maximus subfuscus*. *List. Hist. Conchyl.* N^o 108. compress'd by some external Force. There is of the *Pyrites*, concentered upon the Outside, and probably likewise the Inside of it. From the great Clay-pit near *Richmond*.

a. 66. A *Pectunculus*, out of a Chalk-pit, near *Croydon*, *Surrey*.

a. 67. Spar, in Form of a *Pectunculus*; out of the Sea-Cliffs, near *Bridport*, *Dorsetshire*.

a. 68. Another Specimen. *Ibid.*

a. 69. Out of a Stone-pit, near *Dinton-Mill*, about three Miles from *Ailesbury*, *Buckinghamshire*.

a. 70. Found near *Ailesbury*.

a. 71. Two Pair. Found near *Bromley*, *Kent*.

a. 72. A large *Pectunculus*. Out of the Cliffs near *Bridport*, *Dorsetshire*.

Pectunculi fasciati.

a. 73. Out of a Stone-pit, near *Dinton-Mill*, *Buckinghamshire*.

a. 74. Found at *Stoke*, in the Mannor of *Castle-Cary*, *Somersetshire*.

a. 75.

a. 75. Found, amongst a vast Number of the same sort, and others, at the Depth of 4 Foot, in digging a Ditch, at Orset, near Tilbury, in Essex.

Pectunculi striati.

a. 76. Found near 60 Foot deep, in the great Clay-pit, Richmond, Surrey.

a. 77. A *Pectunculus*, found in a Stone-pit in a Field call'd Hawkson, in the Parish of Can, near Shaston, Dorsetshire.

a. 78. Found, near a. 74. *supra*, at Stoke, Somersetshire.

a. 79. An Impression of a *Pecten*, upon a flinty Pebble; found in a Gravel-pit, near Bromley, in Kent.

T E L L I N Æ.

a. 80. *Tellina*; found at Stoke, Somersetshire.

a. 81. From the great Quarry. Portland.

a. 82. Found at Lansdown, near Bath.

C U N E I.

a. 83. Out of a Tile Clay-pit, in *Childrens-Field*, in the Parish of Thurnham, 3 Miles from Maidstone, Kent.

a. 84. A *Bivalve*, with a most beautiful pearly Coat; covering a very fine Brass-like *Pyrites*. Found in a Clay-Pit behind *Trinity-Chapel*, at the End of *Bond-street*, *Piccadilly*.

a. 85 & 86. Two Pair of *Bivalves*, of the same Species with those f. 586. in the *English Catalogue*; found near *Woolwich*.

a. 87. Out of a Stone-pit, near *Dinton-Mill*, *Bucks*.

a. 88. A *Bivalve*, from the Top of *Wolston-Hill*, in *Gloucestershire*, four Miles from *Tewksbury*. All the Stone is vastly full of Shells. Mr. *Derham* took the Height of this Hill by a Quadrant, and found it 3 Furlongs perpendicular.

a. 89. Out of a Stratum, 9 Foot deep, at *Edgecomb*, near *Croydon*. This Stratum was thick set with Shells of the same sorts with those found at *Stifford*, in *Essex*, in several Places on *Black-Heath*, and in various other Parts of *Kent*, *Essex*, and *Surrey*.

a. 90 & 91. Two; found on the Sea-Shores, about 4 Miles on this Side *Weymouth*.

a. 92. From *Stoke*, *Somersetshire*.

a. 93. Found near *Wotton*, *Oxfordshire*,

a. 94. Found upon a Hill on the West-side of *Bath*. They are very numerous there.

a. 95. Spar form'd in the room of a Shell. Found near *Ailesbury*.

a. 95^x. A *Vitriolick*, or *Sulphureo-Metallic* Body, in form of the Shell, N^o f. 608, in the *Catalogue of the English extraneous Fossils*. 'Twas dig'd up at ----- in the Estate of Sir *Cecil Bishop*, about a Mile from *Abbingdon*. 'Twas found about 50 Yards deep, along with other like Bodies, in Form of Shells, and other.

others in Form of Sticks, or Parts of Trees, but of like vitriolic Constitution. These vitriolico-metallic Principles, in State of Solution, in Water, dissolved the Shell gradually, and concreted successively, in the same Manner and Form. There's something like this in the Solution of Iron, and Concretion of Copper, in a Spring in Hungary. See the Catalogue of the Foreign Native Fossils. And nothing is more common than Spar in Form of Shells; of which the precedent is an Instance, and there are many others in my Cabinet. Vitriol, and Spar, being in the same Water, passing the Strata, in which Shells are lodg'd, the Vitriol dissolves the Shells, the Water washes the dissolved Parts away, and precipitates Spar in their room, till this, having fill'd the Cavity, formerly fill'd by the Shell, of Course resembles the Shell, being moulded and cast in the Cavity where-out that Shell deserted. Where there happens to be no Spar, the Vitriol affixes any other Matter that it has dissolved, as Metal, and frequently also concretes it self, as in this present Instance, and many more that I have seen. See a Sparry Body, in Form of the very same Species of Shell, g. 9. *infra*.

a. 96. A grey Stone, form'd in a Bivalve, of that Kind called by Dr. Plot, *Hippocephaloides*. Found in digging for Marle, near Ailesbury. 'Tis observable, that the Shell being perish'd and gone, there are in the room of it many small Crystallizations of a yellow brassy Marcasite.

a. 97. Another *Hippocephaloides*, out of a Stratum 10 Foot deep, in a Stone-pit near Dinton-Mill, Bucks.

a. 98. Another, with Marcasite, crystalliz'd upon the Surface, in room of the Shell from the same Pit, at Dinton-Mill: Likewise I have observ'd, in room of the Shell, in the *Hippocephaloides* of Portland, Selenites crystallized; in manner not very unlike that of this Marcasite.

MUSCULI.

a. 99, 100, & 101. Three Pair of Muscles. Out of the Cliffs on the East side of the Creek, about a Mile above Weymouth-Bridge.

PHOLAS.

a. 102. A brown Flint, in which was the Shell of a Pholas, now perish'd; but the Flint has preserv'd the Impression, both inside and outside of that Shell. Gravel-pit, near Streatham, Surry.

Concha anomala, seu incerti Generis.

a. 103. Parts of a Bivalve, in its Texture striated a-cross, after the Manner of a *Pinna Marina*. Out of a Chalk-pit near Guildford, Surry.

a. 104. A Bivalve in Maum, a harder sort of Chalk, used chiefly for Lime. White-Down, near Wotton, Surry. This lay 25
Foot

Foot deep; but the whole Bed, to the very Surface, is full of these Shells, and of *Pyrita*.

a. 105. *Whelpy-Hill*, near *Barkhamstead*, *Hertfordshire*.

a. 106. Part of a Shell, with the Texture of the *Pinna Marina*. Chalk-pit on *Barkhamstead* Common, *Hertfordshire*.

a. 107. Fragments of Shells; out of a Chalk-pit on *Detling-Hill*, within 2 or 3 Miles of *Maidstone*.

a. 108. Other Fragments of Shells, seeming to be of the same Kind; out of a Chalk-pit on *Boxley-Hill*.

a. 109. Shells, seeming to be Part of that from which the *Entrochus* arises; from a very large Chalk-pit, above 50 Foot deep, near *Tongum*, betwixt *Guildford* and *Farnham*, in *Surry*. There were vast Numbers of Fragments of this sort of Shell in the Chalk; as also of the *Echini*, and several other Shells.

P A T E L L Æ.

b. 1. A flinty Peble. Found on a Hill betwixt *Adington* and *Croydon*, with either the Shell, or the Impression of a *Patella* in it.

b. 2. A *Patella*. From a Chalk-pit near *Epsom*.

b. 3, 4. These two Bodies, and the following (N^o b. 5.) Mr. *Stone-street* judges to be *Patella*: I am in doubt of that. These two were found in a Chalk-pit by *Bushy*, about a Mile from *Watford*, *Hertfordshire*; where these Bodies are found in great Quantities.

b. 5. Out of a Chalk-pit near *Deptford*.

V E R M I C U L I.

b. 6. A *Vermiculus* adhering to part of the Shell of a conic *Echinus*. Out of a Chalk-pit, near *Croydon*.

b. 7. Part of a Shell of Texture like that of the *Pinna Marina*, with the Shell of a *Vermiculus*, and several other Shells of some kind of Bivalve, affix'd upon it. From a Chalk-pit, on *Whelpy-Hill*.

b. 8. A Cluster of *Vermiculi Marini*, very fine. Out of a Chalk-pit, near *Croydon*, *Surrey*.

N A U T I L I.

c. 1. A *Nautilus Gracorum*, having a glittering brassy *Pyrites* adhering to it externally. 'Tis broke; and the Inside is lined with a Crust of alike *Pyrites*, striated a-cross, after the manner of the talky plated Spars. There are also Plates of *Pyrites*, striated in like manner, running cross the Cavity of the *Volutæ*, in room of the *Diaphragms* which are broken, and the Fragments lie dispersed in several places, being incorporated with the Mass of the *Pyrites*. Found in the great Clay-pit at *Richmond*, *Surrey*.

c. 2. Three Joints of *Nautiloides*. Found near *Bath*.

AMMONITÆ.

- c. 3. An Ammonites, from *Stoke, Somersetshire*.
 c. 4. Ammonites. *Ibid.* c. 5. Another. *Ibid.*
 c. 6. Ammonites. Found amongst Multitudes of others, in a vast Pit of *Maum*, used for Lime, at the bottom of *Box-hill*, near a Mile from *Darking*, in *Surrey*.
 c. 7. A Segment of a *Cornu Ammonis*. Found amongst several others, in a Chalk-pit, at *Wotton*, three Miles beyond *Darking*, *Surrey*. They were much of one size, and about three Inches broad, but very tender. There were several other Shells with them.
 c. 8. *Whitby, Yorkshire.* c. 9. *Pyrton-Passage, Gloucestershire.*
 c. 10. *Whitby Alum-Mines.*
 c. 11. Ammonites. *Stoke, Somersetshire.*
 c. 12. Ammonites. *Keinsham.*
 c. 13. Mr. *Squire's Alum-Mines*, at *Blackhead*, near *Whitby, Yorkshire.*
 c. 14. Ammonites, with Fragments of the Shell upon it. *Whitby Alum-Mines.*
 c. 15. *Stoke, Somersetshire.* c. 16. *Weymouth.*
 c. 17. An Impression of an Ammonites upon a flinty Pebble, found near *Shooters-Hill, Kent.*
 c. 18. A very small *Cornu Ammonis*, found in the middle of a Pebble, near *Bromley*, in *Kent.*
 c. 19. A Segment of a *Cornu Ammonis*, found near *Beer, Devonshire.*
 c. 20. A Segment of the two contiguous Shells of the inner part of the Volutæ of a large Ammonites. There are Ammonitæ of this Species found here vastly big. Mr. *Hutchinson* sent, in this Parcel, a Segment of a Voluta that was eighteen Inches about. *Pyrton-Passage.*
 c. 21. Part of the outside Shell of another, very crass. *Pyrton-Passage.*
 c. 22. Three Bodies, round, and environ'd with Ridges and Furrows alternately. There were found various Shells, and Sharks Teeth, along with these. *Folkston-Cliffs, Kent.* There are of these in the *Catalogue of the English Extraneous Fossils*, N^o p. 156, 157, 158.

COCHLEÆ.

- c. 23. A River Snail-Shell; and several turbinated Stones, form'd in like Shells, variously compress'd. From the *Marble-Quarry*, four or five Miles from *Petworth, Sussex.*
 c. 24. A Stone cast in a turbinated Shell. Out of the *North-Chapel Marble, Sussex.*
 [A.] c. 24^x. A River Snail-shell decay'd, and shewing Spar within. Found near *Camberwell*, with N^o c. 36. *infra.*
 c. 25. Cochlites. Found near *Ailesbury.*

c. 26. A Stone form'd in a turbinated Shell, found in the Highway at the hither end of *Ailesbury Town*.

c. 27. A turbinated Shell, from the great Clay-pit, near *Richmond*.

c. 28. A turbinated Shell, found along with that in the *English Catalogue*, N^o e. 124^x. in sinking a Well at *Pinner-Hill, Middlesex*.

c. 29. Great Clay-pit. *Richmond, Surrey*.

TROCHI.

c. 30. Mr. *Hutchinson*. c. 31. *Shotover-Hill*, near *Oxford*.

c. 32. *Trochus, Bridport, Dorsetshire*. The Body being broke, the interior Frame of it is laid open. The Shell is perist'd, and succeeded by a Spar.

RHOMBI.

c. 33. Four Rhomboid Shells, found in digging a Ditch, near *Biffeter, Oxfordshire*.

c. 34. Found with the precedent Rhomboides, near *Biffeter*.

BUCCINA.

c. 35. A very elegant Buccinum, found amongst great Variety of Shells, Sharks Teeth, and other marine Bodies, about sixty Foot deep, in the great Clay-pit at *Richmond, Surrey*.

c. 36. A Buccinum, found, in digging a Ditch, at the South-End of *Camberwell, Surrey*. There were found, with this, several other kinds of Shells, of the same sorts with those found on *Blackheath*, also near *Woolwich*; and at *Stifford in Essex*.

c. 37. A Shell of the same Species with those dug up near *Woolwich*, e. 77. *English Catalogue*, Part 2. This was dug up at *Sundridge*, near *Bromley*.

c. 38. A Buccinum, of the same Species with those dug up near *Woolwich*, e. 112. *Catalogue of the English Fossils*, Part 2. Found with the former at *Sundridge*.

c. 39. A turbinated Shell, found, about two Foot deep, in a very high Ground, near that call'd *Cæsar's Camp*, three Miles from *Bromley, Kent*. 'Tis of the same Species with those found at *Woolwich*. *English Catalogue*, e. 77.

c. 40. A Stone, red, form'd in a turbinated Shell, found, with *Entrochi*, at *Bothel*, in *Cumberland*, in a Bank on the high Road-side, leading from *Carlisle* to *Cockermouth*.

c. 41. A Pyrites, found in a turbinated Shell; from the great Clay-pit, near *Richmond*.

Echini Spatagi Cordiformes.

d. 1. *Echinites Cord*. The greatest part of it was immersed in a large Flint; and almost cover'd by it. Found by *Barkhamstead*.

d. 2. *Echinites Cord*. much sulcated, or chop'd. *Downs* near *Carshalton, Surrey*.

d. 3.

d. 3. *Echinites Cordiformis*. Found in a Gravel-pit near *Croydon, Surrey*. This Shell seems to have been broken on one side; and the flinty Matter to have enter'd at the Breach, where likewise a great Appendage of Flint was form'd.

d. 4. Impression of an Echin. Spat. Cord. on Flint. *Amerston-Common, Buckinghamshire*.

d. 5. A cordated Echinite. Found by *Raisbury* in *Buckinghamshire*, near *Stains*.

d. 6. Another, found in a Gravel-pit on the Backside of *Trinity-Chapel*, at the end of *Bondstreet, Piccadilly*. There seems to have been the Base of a Balanus on the inside of the Echinus in which this Body was formed.

d. 7. *Echinites Cordiformis*. Found near *Barkhamstead*.

d. 8. A cordated Echinite. *Croydon*.

d. 9. A Flint form'd in the Shell of a cordated Echinus Spatagus. By the Impressions, apparent on the Stone, 'tis evident the Shell was compress'd by some external Force before the Stone had attain'd its present Hardness. Found near *Croydon, Surrey*.

Echini Spat. Galeati.

d. 10. A galeated Echinus, the largest I ever saw. Out of a Chalk-pit near *Sutton, in Surrey*.

d. 11. A very fair galeated Echinites, found near *Malden*.

d. 11^x. A galeated Echinite, found on the Top of an high Hill, in Mr. *William Collins's* Estate, in the Parish of *Exminster*, three Miles from *Exeter*.

d. 12. A galeated Echinite, of a Species somewhat differing from the common. Found in a Field near *Little-Hallingbury* in *Essex*; not far from *Bishop-Stratford*.

d. 13. *Echinites galeatus*. Found near *Barkhamstead*.

d. 14. A galeated Echinites, much compress'd; found near *Beer* in *Devonshire*. This was the first sign of an Impression or Shell I met with from the *Land's-End* to this Place; I not finding the least Vestigium of any Fossil Shell in all *Cornwall*.

d. 15. *Echinites galeatus*, much compress'd. *Carshalton, Surrey*.

d. 16. A galeated Echinite, consisting of a grey Flint, very perfect and fair. Found near *Marlow, Buckinghamshire*.

d. 17. A galeated Echinite. Found near *Adgcomb-House*, near *Croydon, Surrey*.

d. 18. Another, more copp'd, or tending to a conoid Shape. Downs near *Carshalton, Surrey*. In this the Sutures or Partitions of the Plates of the Shell are finely exhibited.

d. 19. Another, taller. *Ibid.* d. 20. A galeated Echinite. *Ibid.*

d. 21. *Echinites galeatus*. *Ibid.*

d. 22. A dark brown Flint, form'd in the Shell of a galeated Echinus Spatagus. Found near *Carshalton, in Surrey*. It represents the whole Inside of the empty Shell very exactly.

d. 23. Another like Flint, form'd in the Shell of an Echinus of the same Genus, but of a somewhat different Species. From the

same Place. This exhibits the Impression of the lower part of the Shell; but has a Cavity at the Top, form'd by the Fish, or some part of it, which happen'd to be remaining in this Shell when the flinty Matter enter'd.

d. 24. An Echinite found on the Shores under *Haudle-Cliff*, near *Hurst-Beach*, betwixt *Christ-Church* and *Limington*.

d. 25. Echinites galeatus. *White-Down*, near *Wotton*, *Surrey*.

d. 26. An Echinite, found by the Road near *Kennington-Green*, by *Lambeth*. There are some Remains of the denser and firmer Parts of the Shell yet adhering to the Surface of the Stone.

Echini Spat. Conoides, seu Pileati.

d. 27. Echinus Spat. Pileiformis, seu Conoides. Found in the same Pit where the Oyster-shell, a. 22. was found, at *Catsgrove*, near *Reading*.

d. 28. A conic Echinus. *Croydon*.

d. 29. Echinus pileatus, out of a Chalk-pit at the very Top of *Whelpley-Hill*, near *Barkhamstead*, *Hertfordshire*. This Hill is of a considerable Height.

d. 30. An Echinus pileatus. From the great Chalk-pit near *Chiselhurst*, *Kent*. There is a Mass of Flint adhering to it externally.

d. 31. A conic Echinite, loose, in a Flint. Found near *Upminster*, *Essex*.

d. 32. Echinites pileatus. Found among several others, near *Reading*, in *Berkshire*.

d. 33. A conic flinty Echinite, found in the great Gravel-pit on the East-side of *Hyde-Park*, without. 'Twas found, in the midst of a large Flint, environ'd on every side with flinty Matter; and yet the Shell was perish'd, and gone. There was an Impression of the Outside of the Shell upon the environing Flint. Water will insinuate itself into Flints through certain imperceptible Cracks. This is most evident in those Flints that have Dendritæ in them. By Water thus insinuating itself, and carrying Salts, the Shells in Flints are sometimes dissolv'd and destroy'd.

d. 34. Echinites Conoides. Found near *Sanderstead*, *Surrey*.

d. 35. A small Echinite, found inclosed near the Center of a pretty large Flint; near *Croydon*, *Surrey*.

Echini Ovarij.

d. 36. An Echinus Ovarius. Chalk-pit at the End of *Deptford*.

d. 37. An Echinus Ovarius, in black Flint. Found near *Adcomb-House*.

d. 38. An Echinus Ovarius. Found, in digging of a Ditch, near *Biffeter*, *Oxfordshire*.

d. 39. An Echinites, or Flint, cast in the Shell of an Echinus Ovarius; in which are, I think, Impressions of the Teeth. Found near the Road a little on this side *Watford*, *Hertfordshire*.

d.40. An Echinites Ovar. in a brown Flint, in which is a fair Impression of the Outside of the Shell. Gravel-pit, on *Egham-Heath, Berkshire*.

d.41. An Impression of two Plates of an Echinus Ovarius on a Flint. Found in the great Gravel-pit near *Nibbs-Pond, St. Giles's*.

d.42. Impression of an Echin. Ovar. on a flinty Pebble. *Peckham, Surrey*.

d.43. Impressions of Plates of the Shell, and Spinæ, of Echini; out of a Gravel-pit near *Cassiobury-Park, Hertfordshire*. The Flints hereabouts have commonly like Impressions.

d.44. An Impression of the Spinæ of an Echin. Ovar. in a grey Flint. Found in Gravel, near *Hatfield, Hertfordshire*.

d.45. Lapis Judaicus. The clavated Spike of an Echinus; part of it is immersed in a black Flint. Found in a Chalk-pit, near *Guildford, in Surrey*.

d.46. A jointed Body, of like kind with those mention'd in the second Part of the *Catalogue of the English Fossils*, N^o i. 1, & seq. Found in a Chalk-pit, beyond *Croydon*, near *Smitham-Bottom*.

APPENDIX I. *Entrochi*.

*d.47. A concavo-convex pentangular Plate, part of a Shell, seeming to be of that sort that belongs to the Entrochus; and supposed by Dr. *Beaumont*, and those who call this Body a *Rock-Plant*, to be the Bulb or Root from which it arises. Whereas this Entrochus is only an Appendage, or Train to that Shell. From a Chalk-pit on *Epsom-Common*.

*d.48. Another, from the same Chalk-pit.

*d.49. An Entrochus, from *Lassington, in Gloucestershire*. Found with the Star-Stones.

*d.49†. Entrochi, found (on a Bank in the High-Road-side leading from *Carlisle* to *Cockermouth*) at *Bothel, in Cumberland*.

*d.50, & 51. Entrochi, from *Moreland, in Westmorland*. Found upon the Banks of the River, at the upper end of the Town.

*d.52. Entrochi, found at about a Mile and half's distance from the River, near *King's-Meaburn, Westmorland*.

*d.53. Entrochi, out of a Lime-stone Ground at *Bothel, in Cumberland*.

*d.54, & 55. Entrochi. Lead-Mines, *Crofsfells, Cumberland*.

*d.56, 57. Entrochi, out of the Brook call'd the *Fairystone-Brook*, at *Strickland-head, Westmorland*.

APPENDIX 2. *Entrocho-Asteria*.

*d.58. Entrocho-Asteriæ, from a Brick Clay-pit, on the South-side of *Islington*.

*d.59. 60. Entrocho-Asteriæ, found in the Tile Clay-pit behind *Trinity-Chapel*, at the end of *Bondstreet, St. James's*.

*d.61. An Impression of an Entrocho-Asteria on a Flint. *New-Cross, near Deptford*.

APPENDIX 3. *Asteria*.

*d. 62. An *Asteria*, found near the Top of *Breeden*, an high Hill, in *Worcestershire*.

*d. 63. *Asteria*, from a Brook in the Forest of *Blackmoor*, near *Melbury*, *Somersetshire*.

*d. 64. *Asteria*, found in a Gullet in the Street in the lower part of *Leppington-Town*, *Yorkshire*.

*d. 65. *Asteria*, found, in great Numbers, in a Brook, at *Levisston*, near *Sherburn*, *Gloucestershire*.

*d. 66. Two Joints of an *Asteria* in a black Flint. From a Chalk-pit near *Guildford*, *Surrey*. Dr. *Sheppard*.

*d. 67. A flinty Peble, with the Impression of a short Column of an *Asteria* on it. Found near *Bromley-Church*, *Kent*.

Partes Piscium.

e. 1. Part of a Bone found in a Quarry upon *Coln-Breach*, in *Coln St. Allens-Fields*, *Gloucestershire*.

e. 2. A large Vertebra, five Inches over, one Inch and $\frac{1}{2}$ high, found in a black Grit-stone, forty Foot deep, on occasion of trying for Coal, in a Ground call'd *Richmonds*, near *Whiteings-Water*, in *Melbury-Abbas* Parish, near *Shafton*, in the County of *Dorset*. There were other Vertebrae found with it; as also Sea-shells.

e. 3. A large Vertebra, found two Foot deep near *Ashley*, *Northamptonshire*.

e. 4, 5. Part of two Vertebres of some Fish. Found about forty Foot deep in the great Chalk-pit at the West-end of *Greenhithe*.

e. 6. A Vertebre, small, found in Marl, in *Bewly-Parish*, by *Limington*, *Hampshire*.

e. 7. A Body seeming to be the Head of a small Bone. Chalk-pit, by *Deptford*.

e. 8. A Piece of the upper part of the Skull of some kind of Fish, found, with *Bufonitæ*, in a Quarry a Mile from *Fairford*, *Gloucestershire*.

e. 9. Three boney Substances. Found near *Witney*, *Oxfordshire*.

e. 10. A *Glossopetra*, or Shark's-Tooth, found, among many others, and small Fragments of Bones, as also Oyster-shells, in a Bed of Sand, at *Catsgrove*, near *Reading*.

e. 11. A small *Glossopetra*, digged up, with several others, in a Brick Clay-pit, near *Islington*, *Middlesex*.

e. 12. A Shark's-Tooth, out of a Brick Clay-pit, on the Top of *Shooters-Hill*, in *Kent*.

e. 13. Four Teeth. *Witney*.

e. 14. A Tooth, lodg'd in a brown Stone. From a Stone-pit, near *Witney*, *Oxfordshire*.

e. 15. A Body of a dark brown Colour somewhat inflected; in some parts striated, in others studded on the Surface; with a medullar

dullar Substance, of a very pale brown Colour, running length-ways of it; it lies in Stone. Found in a Quarry near *Stonesfield, Oxfordshire*.

e. 16. *Witney*.

e. 17. *Witney*.

e. 18. A Tooth, conic, somewhat inflected; found, in Marl, in *Bewley-Parish*, by *Limington, Hampshire*.

e. 19. *Witney*.

e. 20. *Bufonitæ*, or Teeth of the *Lupus Marinus*; found, in a slatey Stone, in a Quarry call'd *Honeycomb-Layes*, in *Mazy-Hampton Parish*, near *Fairford*, in *Gloucestershire*. There are like Bodies found also in a Quarry in *Fairford-Fields*, about half a Mile North-East of the Town; and at *Stunsfield* in *Oxfordshire*, in a Stone-Quarry. Mr. *Fettyplace Bellers*.

e. 21. *Stunsfield-Quarry, Oxfordshire*.

e. 22. *Siliquastra*, of various Figures, and Sizes. *Stunsfield-Quarry, Oxfordshire*. As these Bodies seem to have serv'd for the Coverture or Paving of the Mouth of some kind of Fish, so some of them appear to have lain in the midst: others to the sides; and they are so form'd, that those that have lain to the right side, have the Angle rounded off on that side; as the other, *Antagonists*, have it rounded off the left; the two *Opposites* usually pairing. Some of them appear to be worn by grinding or chewing; and one or two, by the agitation of the Sea. Of these last, I have seen several, tho' they are not near so common as the others.

e. 23. *Witney*.

e. 24. One rhomboidal boney Scale of the Needle-Fish, out of *Stunsfield-Quarry*, two Miles from *Woodstock*. The Mass off which this was broke, *Thomas Wells*, the Quarry-Man, assured me was flat, cover'd over with Scales, and above three Foot long.

e. 25, 26. Coalplate, with Impressions, which seem to be of the Scales of some Fish*. It lay about forty Foot deep, just over the Bed of Coal, in an old deserted Coal-pit at *Merackson*, about three Miles from *Tenby*.

e. 27. A round Bone, with a Hollow on one side, and a Spine arising out of it, as usual, either in the *Thornback*, or some other Fishes of that kind; immersed in a small Peble. Found in Gravel near *Croydon*.

e. 28. A boney or horney Body, slender, round, long; lying in an hard Stone, in which are Impressions of various Shells. *Witney*.

Partes Quadrupedum.

f. 1. A very extraordinary boney Body; dug up with the Elephant's Tusk mention'd in *English Catalogue*, Part. 2. o. 2. at *Bowden Parva*, in *Northamptonshire*. Sent by Mr. *Morton*, who imagines it to be part of the Proboscis of that Elephant.

* I much doubt whether this be not rather to be referred to the Class of Vegetables, p. ---. infra.

f. 2. Part of the Grinder-Tooth of an Elephant, digged up near the same Place where the Elephant's Tusk, *English Catalogue*, Part 2. N^o 0. 2. was digged up. *Bowden, Northamptonshire.*

Shells, and other Bodies, in Stone.

g. 1. A Mass of brown Stone, that has lain exposed to the Rain and Weather, by means of which it is much worn, and the Sand beat away, so as to discover very numerous Sea-shells within, chiefly of the two kinds of *Conchæ anomia*. Taken off the Top of a loose Wall, in *Bristol Road*, near *Bath*.

g. 2. Great Numbers of the *Concha anomia striata*, in a Red-stone, part of a Stratum nine Foot deep, out of a Quarry at *Womandham*, in *Leicestershire*, upon the Borders of *Rutland*. Some of these, being broken, shew a white transparent crystalliz'd Spar in the Cavities of them.

g. 3. Several *Conchæ anomia*, in Stone. *Lansdown*, near *Bath*.

g. 4. A fine grey Sand, thick set with Species of small Bivalves, part of a Stratum of a Cliff. Midway betwixt *Limington* and *Christ-Church*, *Hampshire*.

g. 5. Small Shells, in great Numbers, all near of the same Size and Growth, seeming to be Vernal, and young Shells, of some kind of large Bivalve, found on the Shores, on the East-side of a Creek, about a Mile above *Weymouth Bridge*.

g. 6. Stone, with various Shells in it. *Pyrton-Passage*.

g. 7. A Mass of marley Clay, now dry'd and harden'd, from *Sundridge*, near *Bromley*, in *Kent*, so thick set with Shells, that it seems to have more testaceous than earthy Matter in it. They lay from near the Surface to twenty Foot deep. They use this Earth, with the Shells in it, as Marl, for Manure. In the Sand and Gravel-pits, at both ends of *Woolwich*, and betwixt that Town and *Charlton*, there are Strata in which, I think, these Shells lie thicker. Indeed so thick in some places, that there seems to be very little terrestrial Matter interposed. 'Tis remarkable that they are of the same sorts with these; as are likewise those found at *Stifford* in *Essex*, and in several other Parts of that County, *Kent*, and *Surrey*.

g. 8. Stone of a dusky brown Colour, very thick set with Bivalves. From a Quarry near *Clay-Cross*, in the Parish of *North-Wingfield*, in *Scarsdale*, *Derbyshire*.

g. 9. A sparry Body exactly in form of one Valve of one of the knobb'd Bivalves; being form'd in room of one of the said Valves, that being first corroded, and carry'd off; struck out of a piece of *Ludus Helmontij*. Found about a Mile above *Weymouth-Bridge*.

g. 10. Part of a Stratum of Stone of a dark grey Colour, holding Shells, and small Fragments of other marine Bodies in it. Found in Mr. *Marriot's* Lead-Mines at the *Howe*, near *Grinton*, in *Yorkshire*.

g. 11. A Mass of Stone thick set with turbinated Shells, seeming to be of River-Snails, of that kind call'd by Dr. *Lister* *Cochlea vivipara*.

vivipara. Dug out of a Marl-pit in *Sutton-Valence*. Sent by Dr. Hatley.

g. 12. A Mass of brown Stone, beat from the Strata of the Cliffs, and worn by being shuffled on the Shores to and again by the Water; having great Numbers of Shells in it, both bivalve and turbinated: as also one *Dentale*, found loose upon the Shore, mid-way betwixt *Limington* and *Christ-Church*.

g. 13. A Mass of black Stone, with Shells of the very same Kind in it; found upon the Shore not far from the former.

g. 14. A blackish Marl, now dry'd, and harden'd, with Shells also of the same Kinds in it; from the same Place.

g. 15. A very hard Stone, of a reddish Colour, having in it great Numbers of that sort of River-Shell which Dr. Lister calls *Cochlea vivipara fasciata fluviatilis*, N^o 26. List. Hist. Conchyl. fluv. which Species is now found living in the *Thames*, and some other Rivers of *England*. There are two Pieces of this Stone, which were broke from, and so tally to each other. From the same Place.

g. 15^x. The same sort of Stone, found on the Shore under *Hor-dell-Cliffs*, *Hampshire*. 'Twas beat, by Storms, and Tides, out of those Cliffs: and shuffled and worn, on those Shores, so as to shew the Shells, in it, in various Sections in a very beautiful manner.

g. 16. A dusky grey Stone, with Shells of the same Kind, and others, in it. From the same Place.

g. 16^x. Another, having in it several of the *Cochlea vivipara*, several small *Buccina*, and a compress'd *Cochlea*, seeming to be all River-Shells. From the same Place.

g. 17. A brown earthy Mass, with numerous Shells in it, out of the Hollow of a large turbinated Shell. Found in the Cliffs beyond *Limington*.

g. 17^x. Stone so thick set with Shells, that the testaceous seems to exceed the arenaceous Matter of the Mass. From *Bossal*, *Yorkshire*.

g. 18. A black Slate, holding in it great Numbers of *Spinula* of an *Echinus spatagus*. From the Top of the Mountain *Skiddau*, in *Cumberland*; where like Slate is found in vast Quantities.

g. 18^x. Shells of some kind of *Tellina*, in black Slate; found with great Numbers of Ferns, and other Plants, in a Coal-pit at *Houghton le Spring*, in the *Bishoprick of Durham*.

g. 19. *Chert*, a sort of flinty Stone, with a grey hard Stone joining it. They together constitute a Stratum, and meet in near a Line, by that means dividing it into two Parts. This Stratum over-lies the Lead-Works. There are Impressions of Shells in it. In Mr. Marriot's Lead-Mines at the *Howe*, near *Grinton*, *Yorkshire*.

g. 20. A Piece of Stone, with Ova of Fishes, and Fragments of Shells in it. *Northleach*, *Gloucestershire*.

g. 21, 22, 23, 24. Stone, corroded by Marine Steams. It hath in it Shells, and *Entrochi*, that have escaped, and remain intire. So that these abide those Steams better than the Stone; which yet

I find to be harder than the common *Genoese* Marble. From the Cliffs of *Caldy-Island, Wales*.

g. 25. From the same Cliffs. 'Tis cut, and part of it polish'd; in doing which, on this, and several others, Judgment was made of the Hardness of this Stone.

g. 26. From the same Cliffs. This, besides Shells, *Entrochi*, and other Bodies, has in it fair Pieces of *Corallina reticulata*, or *Planta Marina retiformis*, *Joh. Bauhini & Clusij*, commonly call'd the *Sea-Fan*.

g. 27. This has in it Part of a *Sea-Fan*, of an inflected Body, seeming to be an *Entrochus*; and a Ray of one Species of *English* Star-Fish, with *Cirrhi*, very conspicuous, on one side. From the same Cliffs.

g. 28. Black Marble, vein'd with white Spar. 'Tis full of *Entrochi*. One is very large, broke, and parted; and a Vein of Spar intersects or passes betwixt the Pieces or Parts. This shews that the Stone was crack'd and broke; and that that Spar was introduced into the Fissures since the Compilation of the Stratum of Marble; which may serve to give a Hint of the Origin of at least one sort of the Veins in Stone and Marble. From *Caldy-Island, Wales*.

g. 29. From the Cliffs of *Caldy-Island*.

g. 30. *Entrochi*, in a soft Stone, grey, and red. *Caldy-Island*.

g. 31. A Stone, with vast Numbers of *Entrochi* and *Bivalves* in it; found in the Rubble of a Lead-Mine, in *Charterhouse* Liberty, *Mendip*.

g. 32. *Asteria*, very fair, in Stone. *Pyrton-Passage*.

g. 33. *Asteria*, in a very fine hard Stone. *Pyrton-Passage*.

g. 34. A Mass of Stone, with Shells and *Asteria* in it. *Pyrton-Passage*.

g. 35. A dusky grey Stone, having in it Shells, Spikes of *Echini mar.* and several *Entrocho-Asteria*. *Pyrton-Passage*.

g. 36. A Mass of yellow shining mineral Matter, much like that of the *Pyrites*, with numerous Shells, *Asteria*, and Joints of the Wires of the *Asteria* in it; all of a yellow, shining, brass-like Complexion. *Pyrton-Passage*.

Parts of VEGETABLES, digg'd up out of the Earth.

b. 1. A Piece of an Oak that was 31 Foot in Length, and 7 in Girt, near the Root. There were Stumps of the Root on, about 2 Foot in Length, and of the Branches to 5 or 6 Foot. Found, about 3 Foot deep, in *Sunning-Hill-Park*, 4 Miles from *Windfor*. They are very numerous, both here, and in the neighbouring Peat-Moors. In some they find Hazle-Shrubs, and Nuts. They split the Oaks, and use them for Pales; in which they abide the Weather, and last longer than the common Oak.

b. 2. Wood, broke off a Stump of a Tree that was in a growing Posture, erect, and the Roots extended horizontally in every Direction. There were some hundreds in the like Posture, stand-

ing about a Foot above the Surface. They were much perish'd and rotted. I saw no Mark of an Ax, or other Tool, upon any, nor were there any of the Bodies of the Trees remaining. They stood all in a Peat-Marsh that was very boggy. They were all of a sort; and I took them to be Firs. Three Miles from *Llanedloes*, in *Montgomeryshire*, betwixt that Town and *Eskergalid-Mines*. This Marsh, or Bog, is at the Top of a high Mountain.

h. 3. A Bit of Wood, saturated with Bitumen; from *Honeycomb Lays*, a great Quarry in *Mazy-Hampton* Parish, *Gloucestershire*.

h. 4. A grey stoney Mass, part of a very large one, that had in it what appear'd very much like the Branches of a Tree very much rotted. There were in the same Mass great Numbers of Sea-Shells, both Bivalves, and turbinated. There appear'd, in various Parts of it, a talky Spar, grey, with a Cast of yellow. There were Veins of it likewise diffused through the Wood. Found upon the Shores of the Creek, about half a Mile above *Weymouth-Bridge*. In a Stratum of hard Stone, in a Quarry near *Bridport*, *Dorsetshire*. I likewise observ'd Wood, and Sea-Shells.

h. 5. A Piece of Wood, out of the same Stone.

h. 6. A brown friable Substance, which Mr. *Player* takes to be Wood. There is a Vein of white Spar in it. Out of a Quarry near *Stoke*, *Somersetshire*.

h. 7. A Body with the appearance of Wood, but having in it Veins, or rather Diaphragms of Spar; from *Honeycomb-Lays*, a great Quarry in *Mazy-Hampton* Parish, *Gloucestershire*.

h. 8. Part of a stoney Body, of a Cyndric Form, somewhat resembling Part of a Branch of a Tree. In the Middle is a white Substance, of somewhat harder Consistence than that of the compactest Chalk. This answers to the Pith, and is surrounded with numerous thin Coats, compos'd of a Matter more hard and stoney, of a brown Colour, and not unaptly resembling some Wood. Dug up in the great Tile Clay-pit, near *Richmond*, *Surrey*.

h. 9. Petrify'd Wood, of a deep brown Colour, near black; and having a Vein of a very pale or yellowish brown talky Spar running length-ways of it. This Body is very hard, and ponderous; but has much of the Grain of Wood. 'Twas given me by Monsieur *Misson*, who broke it off the Trunk of a Tree, petrify'd, and of the same Constitution and Colour throughout; in Length about 14 Feet, in Diameter above a Foot at one End, tapering, and somewhat less at the other, where there were some small Remains of Branches. It lay on the Shore, near *Harwich*, underneath the Cliff, out of which doubtless it had been beaten by the Agitation of the Sea. Sir *Anthony Dean* saw the Piece that is polish'd, [*h. 10.*] as also the Tree under the Cliff; and attests this Account. When he saw the Tree, it was yet actually lying in the Cliff: but a great part of it uncover'd and bare. He judg'd by the Shape that 'twas a Tree. This was in the Year 1666.

h. 10. A Piece of the same Wood, polish'd. 'Tis not very hard.

h. 11.

b. 11. A Body, having very much of the Grain and Appearance of Oak; but is ponderous, and much saturated with the Matter of the *Pyrites*. From the Cliffs of *Sheppey-Island*.

b. 12. Suppos'd to be petrify'd Wood. Found, near the Sea, in a Sinus of *Maidstone River, Kent*.

b. 13. A Body, appearing like Wood petrify'd. Out of a Gravel-pit near *Islington, Middlesex*. Upon tryal, for the polishing of it, it proves harder than *Porphyry*.

b. 14. A Body resembling Wood, but hard and stoney. Found in a Gravel-pit, on a Hill near *Kingston upon Thames*, South-East of the Town.

b. 15. A Body suppos'd to be Wood petrify'd. Found in a Gravel-pit on *Hampstead-Heath*.

b. 16. A Body suppos'd to be Wood petrify'd. It lay in a Bed of Sand, 15 Foot deep, on *Amerston-Common, Buckinghamshire*.

b. 17. A Piece of grey Stone, part of a Stratum, lying above the Coal, in the Pits near *Kirthlygear, Wales*, having in it an *Equisetum palustre*. In the same Stone are found various Kinds of Fern, and particularly the *Osmunda Reg.*

b. 18, 19. Grey Stone, having in it Sprigs of an *English Plant*, viz. *Muscus Clavatus Foliis cupressi, C. B. & Gerb.* Out of the Coal-pits of *Houghton*, in the *Bishoprick of Durham*.

b. 20. Part of an Iron-stone Nodule, having upon it Leaves, and Impressions of the Fern-kind, particularly the common Female-Fern, and *Osmunda regalis*; from a Coal-pit near *Little-Dean*, in the *Forest of Dean, Gloucestershire*. These Bodies are of the same sort with those call'd in the North *Cats-Heads*. These here are of various Sizes, from 3 Inches over, to 6 or 7; and generally of a flattish Shape. They lie all flat-ways, in the same Stratum, single, in the same horizontal Plane, and not one upon another. This Stratum is of Earth, as I remember, of a rust Colour; and 2 or 3 Foot thick. It lies immediately above the Stratum of Coal, under a Stratum of Stone, that was, in this Pit, solid, though, in some of the rest, 'twas broken, and rubley. These Bodies lie about 12 or 14 Foot below the Surface.

b. 21. Part of another, from the same Stratum, but from another Pit: This Stratum being found much at the same Depth in all the Pits of this Gang. There are, in this, Fern of three Kinds; of which the Leaves of two are preserv'd in Substance, by the Intrusion of mineral Matter. But the third Kind, both in this, and all the other Nodules that I broke, was found in Form of a fine dusky brown Powder; after having made Impressions, of both its Surfaces, on the two opposite contiguous Parts of the Stone.

b. 22. Part of the Powder of those Leaves, out of the foregoing Nodule.

b. 23. Sir *George Wheeler*, who sent this from the Coal-pits of *Houghton*, takes it for a *Dryopteris*. But it seems to me to be one of the *American Female-Ferns*.

b. 24.

b. 24. Sent, by the same Gentleman, from the same Pits, with the Title of *Fru menti spica*. It seems to me like the top Branch of some Pine.

b. 25, 26. These are parted from each other, and exhibit some Fruit, probably of the Pine-kind. Out of the same Coal-pits.

b. 27. Mr. Miller takes this for the exterior Skin of a young vernal Pine Cone. Also from *Houghton* Coal-Pits.

b. 28. Out of the Duke of *Somer set's* vast Coal-Work, at *Whorlton-Moor, Northumberland*. Found about 5 Foot above the Coal. Mr. Miller will have this to have the Aspect of a *Virginia* Maize, or *Indian* Wheat, tender, young, vernal, and not ripen'd. The Hazle Nuts, digg'd up in *England*, are rarely such as appear to be ripen'd. The Pine Cone are in their vernal State; as are all the Vegetables, and the young Shells. The Deluge came on, and a stop was put to their further Growth, at the End of *May*. Vid. *Nat. Hist. of the Earth*, Part 3. Sect. 2. Confect. 5.

b. 29. Found together with the precedent, in a Bed of grey Shiver.

b. 30. Found in a Coal-pit, at *Lanelthy, Wales*.

b. 31. A Body composed of a grey sparry Stone, infected with a brown; thick set with large Tubercles, like some I have observ'd upon a Species of *Tithymal*. 'Tis flat, and appears to have been compress'd by some external Agent, the Tubercles standing thicker, and being more prominent on the Sides than on the Flats. Found, as these Bodies here usually are, in a Bed of Shiver, 5 Fathom deep, at *Lanelthy, Wales*.

b. 32. Another, found with the precedent, not different, only 'tis less. This hath the Pith. (*Conf. b. 41. infra.*)

b. 33. A Body compos'd of a coarse Spar, grey, with small Sparks in it very glittering. 'Tis oblong, and of a compress'd Figure, being 2 Inches and $\frac{1}{4}$ in Diameter, one way, and only 1 Inch and $\frac{1}{4}$ the other. It belongs to the same Class with those in the *Catalogue of the English Fossils*, Part 2. p. 266. q. 29, 30, 30^x. and has little Holes, with *Papilla* in them, placed in a quincunx Order, as those have. This was lodg'd in a Stratum of Stone, at *Stubbing-Edge*, near *Ashover*, in *Scarsdale, Derbyshire*.

b. 34. Another like Body, but near approaching a Cylindric Form, being 3 Inches in Diameter one way, and 2 and $\frac{1}{4}$ the other. 'Twas five Foot long, taken forth of a Stratum of a Quarry near *Higham*, in *Scarsdale, Derbyshire*. 'Tis compos'd of a coarse Spar, of a dusky brown Colour, with a Cast of red, having numerous small glittering Sparks in it. It has something, analogous to a Pith, (*Confer. b. 41. infra.*) passing it length-ways; tho' not in the middle of the Cylinder, but somewhat verging towards one Side: as also *Papilla*, or Studs set in a Quincunx Order. The *Arbor Lavendulae Foliis* hath Studs, like these, and set in the same Quincunx Order. These, in this Plant, are only the *Vestigia*, or Marks left by the fallen Leaves.

b. 35. A Body, oblong, somewhat bent, and flatted, with a Ridge running on one side, and a Creest or *Sinus* all along by it. 'Tis compos'd of a sparry Stone, grey, vein'd with blackish. It has all over the Surface, *Papilla*, or Studs, flattish, about the Bigness of a Vetch, each having [where the Body is not defaced] a small Hollow in the middle, and being set or placed in a Cavity just big enough to contain the Studs. They are ranged pretty regularly in a Quincunx Order. This seems to have been externally crusted over with a thin black *Cortex*. How long this was, originally, I cannot tell; but I broke near 2 Foot off this, creested, and studded as this is: and of the same Colour, and Constitution. *Lanelthy-Coalery, Wales.*

b. 36. Another, of a greyish, brown, sparry Stone, cover'd with a black Crust, very glossy and shining; and having a *Pith*, attending the *Sinus*, much as in that. *Lanelthy.*

b. 37. A Piece of the precedent, thinn'd, or flatted, at one extreme.

b. 38, 39. Two Pieces, very thin, and flat, compos'd of a dark grey Stone, thick set with small Spangles of a white silvery Talc. This was above a Yard long, and had a Root somewhat waved and bifid. *Lanelthy.*

b. 40. Another, with a Creest running length-ways of it. There are *Papilla* also, as in the rest: and Wrinkles, as if the Body had been somewhat compress'd and flatted by some external Force. 'Tis compos'd of a grey sparry Stone. It seems to have had something answering a *Medulla*, or *Pith*, running length-ways through it, not in the Middle, or Axis, but somewhat approaching that side on which the Creest is. This has slight Remains of an external black *Cortex*. I observ'd like Wrinkles, and Phenomena, on several others of these Bodies. *Lanelthy.*

b. 41. Another, from *Lanelthy*, of a pale brown sparry Stone. This has running length-ways of it a pretty deep Creest, and, in it, a Body that at one End is extant, and appears in the Creest: but, at the other, is immers'd in the Stone, so as there to resemble what I have mention'd in *b. 40.* as a *Pith*: and 'tis, probably, the same with that. This appears as a Branch arising out of the main Trunk: and indeed is no other. At first I judg'd it a *Pith*. But a more careful View of this Body, *b. 41.* and *b. 42.* brought me to think it rather the Commencement or Beginning of a Branch. *Confer. b. 45. infra.*

b. 42. Another, little different, with a like Body in the Creest. *Lanelthy.*

b. 43. Another, of a light grey sparry Stone; tinged in some parts with a yellowish or Ochre Colour, that seems to be adventitious, and introduced by the Weather, to which some of these Bodies had lain expos'd. The *Papilla* in this are different from those of all the precedent; being flatter, or rising much less, and having in the Hollow a small Point, or Apex, in the Middle. This has a *Pith* in it. *Lanelthy.*

b. 44. Another of a round Shape, and nearer approaching a Cylinder than any of the former. The *Papillæ* of this differ little from those of *b. 35. & seq.* only they are less. It consists of a pale grey sparry Stone, rendred brown by the Weather. It has a Pith, tho' there be no Creeft on the Surface. *Lanelthy.*

b. 45. Another, little different, only the *Papillæ* are somewhat bigger. This has also a Pith appearing at one End, but not at the other; which likewise I took notice of in several others of these Bodies, so that it does not pass the whole Length of them. *Lanelthy.*

b. 46. Another, compress'd unequally. These Bodies seem to have been tender and soft, as the *Arbor Lavendulæ Foliis* is. *Lanelthy.*

b. 47. Another, with a Body like that in *b. 41.* in the Creeft. This is of a sparry Stone, mix'd with red and yellow. In one of this sort I observ'd the *Papillæ* passing [as the Knots in Fir-Wood] like so many Pins, from the Surface to the Axis of the Body. *Lanelthy.*

b. 48. Another, compos'd of a grey sparry Stone, with *Papillæ* on the Surface, in a Quincunx Order. It has the interior Body, or Pith, passing the whole Length of it. 'Tis broke, so as to shew the Figure and Constitution of the interior Body. This was cover'd over with a thin, black, shining Cortex, that shiver'd and fell into a black Powder. It appear'd to be of a Constitution not different from that wherewith the exterior Body is wont to be invested. *Conf. b. 35.* This was found in a Bed of Shiver, about 6 Foot deep, in a worn Hollow-Way, in *Caermarthen* Road, four Miles short of *Tenby*.

b. 49. Another. *Houghton* Coaleries, *Bishoprick of Durham.*

b. 50. Another, much compress'd. *Houghton.*

b. 51. This is so much flatted, as to be reduced to near a Plane. Indeed it appears like the Skin, or Cortex, of the *Arbor Lavendulæ Foliis*, smooth, and clapt on a flat Piece of Shiver. The various Degrees in which these are flatted, some more, some less, shew this Shape to be forc'd, and that they are naturally cylindrick. This is out of a Coal-Pit, near *Kirthlygear, Wales.*

b. 52. An Impression of a Body, flat, or plane, with undulated Lines on the Surface, and round Marks, ranged in a Quincunx Order, on a dark grey Shiver. *Houghton* Coalery.

b. 53. A Body, flat, having on it *Sulci*, parallel at the Distance of somewhat more than an Inch. On the Intervals are Marks, not very unlike those of *b. 43. supra*, and likewise set in a Quincunx Order. *Houghton* Coalery. 'Tis cover'd with a thin, black, bituminous Crust.

b. 54. Another, with the *Sulci* somewhat nearer. Out of the same Coalery.

b. 55. Another. On the Surface of this are very fine small *Striæ*, running parallel to the *Sulci*. Out of the same Coalery.

b. 56 & 57. Bodies, somewhat resembling the *Vesiculæ* of the great *English Fucus*. *Kirthlygear* Coal-pits, *Wales.*

*A CATALOGUE of the Second Addition
of English Native Fossils.*

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OCHRES.

a. 1. **A**N Ochre, vein'd; from *Rose-Park*, in *Cumberland*. 'Tis very light, fine, and impalpable. The like is frequently observ'd in Adits of Coal-pits, in *Cumberland*, *Northumberland*, and *Yorkshire*.

a. 2. An ochreous Matter, found in the midst of a Bed of Chalk, at the Depth of about 50 Foot, in the great Chalk-pit at *Greenhithe*, *Kent*. The whole Mass was near as big as a Man's Head.

a. 3. An ochreous earthy Substance, fibrous, and flakey, with a Grain not unlike Wood, seeming to be a Sample of a Vein; out of a Quarry near *Plymouth*.

a. 4. Rudle. *Quarrington Hill, Durham*.

BOLES, CLAYS, CHALK.

a. 5. An Earth, astringent, and of a red Colour; found in a Cavity of a Block of Grit-Stone, on *Stubbin-Edge*, in *Ashover* Parish, *Scarsdale*. This is what the Germans call *Steinmark: Agricola, Medulla Saxi*, and—*Marga in Saxi inclusa*.

a. 6. Earth, stiptic, of a reddish brown Colour. Out of a Sand-pit, in *Sir Walter Young's Yard* at *Escott*, betwixt *Exeter* and *Honyton, Devonshire*.

a. 7. Tobacco-Pipe Clay, from the *Isle of Wight*. They call it *Hayters-Clay*. This Sort is very fine. 'Tis indeed the finest in *England*, but apt to shrink in baking: So that they do not work it alone, like that of *Pool*, but make up $\frac{1}{4}$ of the following Sort along with it.

a. 8. Another Sample, coarser, from the same Place.

a. 9. Clay, very pale, near white; fine and clean. From *Purbeck Island*. 'Tis used for the making of Tobacco Pipes. As also for the making of the more ordinary Pots at *Fulham*; where 'tis call'd, *The blue Purbeck-Clay*.

a. 10. Clay, paler, and whiter than the former: Also from *Purbeck Isle*. Used for Tobacco Pipes. Likewise for the finer Pots, at *Fulham*; where 'tis call'd, *The white Purbeck Clay*. This, and the former, burn, in their Fire, which is very strong, to Yellow: and not to a White. The Whiteness of their Ware is caus'd by the other Ingredients, which they mingle and work up with their Clays.

a. 11. Pieces of small Scallops, in Brick-Clay, dug up near *Pindar* of *Wakefield*, behind *Gray's-Inn*.

a. 12. Clay used for the making of Tiles, from the Clay-Pit at *Turnham*, within 3 Miles of *Maidstone, Kent*. There are Remains, and Impressions of Scallops on this also.

a. 13. Earth out of a vast Chalk-Pit, in *Buckinghamshire*, betwixt *Blechly* and *Leighton*. 'Twas pitch'd in the Chalk in manner of an erect Cylinder, about 2 Foot in Diameter, and 40 Foot in Length; appearing as if a Shaft had been sunk in the Chalk, and afterwards fill'd up with Earth. The Earth was all of this sort, from the Top to the lowest Part of the Cylinder that was discernible, which was to the Bottom of the Pit. How far deeper it might go down, is uncertain. I have seen several like Cylinders, and some of a greater Diameter, in the Chalk-Pits of *Northfleet*, and *Greenhithe*, in *Kent*: And have sometimes suspected that these were left empty, and that Part of the Water, after the Deluge, return'd by these, into the Abyss; they being afterwards fill'd with Earth. This is certain, the greater
Part,

Part, if not all, that vast Mass of Water retir'd by the Chasms, and Apertures, at the Bottom of the Ocean.

a. 14. Chalk, compos'd of plain parallel Plates, each about $\frac{1}{20}$ of an Inch in Thickness, alternately white and a pale yellow. This lay near the upper Surface of the Grand-Bed of Chalk: So that these were probably so many Settlements, towards the latter End of the Subsidence of that Bed, when there was but very little cretaceous Matter sustain'd behind in the Water; the main of the Mass being settled down before.

a. 15. Chalk out of a vast Chalk-Pit in *Buckinghamshire*, betwixt *Blechly* and *Leighton*.

S A N D S.

a. 16. Sand, from *Bestead*, near *Maidstone*, in *Kent*.

a. 17. Sand, common on the Shores betwixt *Minster* and *Shearness*, in the Isle of *Sheppy*. There are amongst this, indeed, Fragments of Shells, reduc'd to Powder by the Agitation of the Sea: But the greatest Part of it consists of extreamly small Pebbles of the very same Kind with those commonly found in Sand-Pits, at Land, in various Parts of *England*; particularly in several Parts of *Kent*: and doubtless in the *Mediterranean* Parts of *Sheppy* Island, were due Search made. Indeed there is no question but this very Sand is wash'd out of the Cliffs there, as the *Lodus Helmontij*, and other Bodies found with it certainly are; which I rather mention, because some Medlers with natural History speak of *Sea-Sand* as a Thing different from *Land-Sand*.

a. 18. Loom, out of the great Sand-Pit near *Woolwich*. It lies underneath the Earth in which the Shells are found. 'Tis good: and used in the Iron Foundery there, for casting of Cannon Balls, Bombs, &c. 'Tis also used in other Iron Founderies about the Town.

a. 19. Sand out of a Stratum, underneath the Loom, at *Woolwich*. This Stratum is clear'd to 20 Foot in Depth; how far deeper it may lie, is uncertain.

a. 20. Sand, and Ouse, taken up from the Bottom of the *Thames*, on *Yanlet-Spit*, off the Isle of *Grains*, not far from the *Ostia* of the *Thames*.

STONE of STRATA.

b. 1. Part of a Stratum, of Sand-Stone, of a pretty fine Grit, one Inch and $\frac{3}{4}$ in Thickness; with Veins alternately grey and brown, running parallel to the Surface of the Stratum. There are in it numerous very small Spangles of a white silvery Talc. Out of a Quarry on *Overton Hill*, in *Ashover* Parish, *Scarsdale*, *Derbyshire*.

b. 2. A gritty Stone, with small Spangles of a white silvery Talc in it, and much of the same Composition with that of the Body 14 $\frac{1}{2}$, in the Catalogue of the *English* extraneous Fossils, which was found lodg'd in the Stratum, off which this
Piece

Piece was struck, only 'tis of a somewhat paler brown Colour. This Stratum appears above the common Surface, on *Overton Hill*, in *Ashover* Parish, in *Scarsdale, Derbyshire*.

b. 3. Stone of much the same Colour with the foregoing, and with like Spangles in it; but having a larger Grit, consisting chiefly of very small pellucid Pebles, not different from those of the Grit-Sand. Also from *Overton Hill*.

b. 4. Freestone, i. e. that rives, splits and breaks indifferently in any Direction. 'Tis compos'd of Sand, white and brown; with an Intermixture of small silvery Micæ. Got at - - - - near *Newcastle*. 'Tis used for Building. Also for Glass-Furnaces. It abides the Fire well, if kept constantly hot: but cracks when the Fire goes out.

b. 5. A Piece of Stone, of the sort foregoing, that has stood a Year in a Glass-Furnace. When thus impair'd by the Force of Fire, they grind it down to Powder: and mixing it with *Sturbridge-Clay*, employ it for making the Stands or Rests on which they place the Pots in which they melt Glass.

b. 6. This sort of Rudle Stones lie all over the Ground, about *Shotover*, for a considerable Space, in the Sand, the Stratum of which is about a Foot thick, as Flints lie in Chalk.

b. 7. Part of the Rock-Stone, from a Cliff about half a Mile North of the *Lizard Point, Cornwall*.

b. 8. A Stone, brown, with a Cast of Green: thick set with small Holes, some of them fill'd with a blackish stony Matter. Found on *Blackberry-Hill*, near *Stratton, Devonshire*. There were many more lying on the Ground thereabouts: And there are also of them in *Cornwall*. They are call'd *Honey-Comb-Stones*, in both Counties.

b. 9. A light, smooth, friable, earthy Substance, of a brown Colour, used for cleaning Bras: And for polishing Crystal, *Bristol* Stones, Pastes, Enamels, and factitious Gems. From - - - - *Derbyshire*. The Workmen call this, *Rotten Stone*.

b. 10. A Mass of Stone, brown, with Veins of white Spar in it, very common in the Brooks and Rivers of *Cumberland*. They are beat out of the Rocks, and worn by the Water.

b. 11. A Piece of Stone, near the Constitution of a Hone, from the Shores of *Whitby*.

b. 12. A Stone interchangeably variegated with parallel Veins of black and white; with Veins of Spar crossing it obliquely. This was found on the Side of a Vein at *Fatwork, Cornwall*.

b. 13. A Shoad Stone, with no Tin in it; found in the Shoad amongst others that held Tin, at several Fathoms deep, but above the Rock, or solid Stone, on *St. Agnes-Ball*.

SLATE.

b. 14. A brown Slate, with numerous small Spangles of white silvery Talc in it. Out of a Quarry on *Overton Hill*, in *Ashover* Parish, *Scarsdale, Derbyshire*.

b. 15. Slate, very fine, got near *Broadgate-Park*, in the Manor of *Grooby*, *Leicestershire*. Lord *Stamford*.

b. 16. The common Stone of the Mine of *Comb-Martin*, *Devonshire*. 'Tis found over a great Part of the County, and call'd there *Killus*.

b. 17. A thin Slate; grey, with a Cast of Green; having very small Sparks of a white silvery Talc in it. This sort lies immediately over the Pitch Stone, at *Bentall*, in *Shropshire*.

MARBLE.

b. 18. Marble, the Ground black, vein'd with red, yellow, and white. From a Quarry near *Plymouth*.

b. 19. Marble, the Ground white, spotted and vein'd with red. Also near *Plymouth*.

b. 20. Marble, vein'd, and spotted, with Black, White, Red, and Yellow. From a Quarry near *Torbay*.

b. 21. Marble, spotted with White, and a dusky Grey, near Black. This Marble is very fine; but mighty full of Flaws. *Torbay*.

These 4 Sorts of Marble, and indeed all the Marble of *Devonshire*, burn to a Lime: whereas the *Genoese* Marble burns to a Grit, or sandy Substance.

b. 22. Dendrites. Found loose, on the North Shores of *Caldy-Island*.

b. 23. Porphyry. The Spots are probably Fragments of Shells, and other like marine Bodies, incorporated with the Marble. From the Shores of *Scarborough*, *Yorkshire*.

b. 24. Granite. From the Shores of *Scarborough* also. Are not this and the former Ballasts: and brought from abroad?

b. 25. Stone, somewhat resembling Granite, very common in the Brooks of *Cumberland*.

Pebles, Agats, Flints, Flinty Ætite, & Geodes.

c. 1. Stone, of a yellowish brown Colour, thick set with white Pebles, generally about the Size of Pease. This is much of the same Tenor, with one kind of Millstone; only 'tis of a coarser Grain. From *Lumms* in the Parish of *Matlock* in the *Peak*. This Piece was broke off a Stratum that was above Ground, and expos'd to the Air.

c. 2. A Peble, round, seeming to be compos'd of many small ones, chiefly white. Found, near *Tamworth*, in *Staffordshire*.

c. 3. Pebles, join'd by a sparry Cement. Very frequent about *Barkhamstead*; and call'd the *Breeding-Stone*. The Mass appears to have been rounded and worn by the Motion of Water. This happen'd to great Numbers of Bodies, at the Surface of the Earth, on the Departure of the Water of the Deluge.

c. 4 Found with the precedent, near *Barkhamstead*.

c. 5. A Mass of Pebles, found in the Road betwixt *Puckridge* and *Ware*.

c. 6. From *Aldenham*, near *Watford*, *Hertfordshire*. Like Masses are frequent thereabouts: And some very large to near a Tun in Weight. 'Tis call'd there *Pudden-Stone*.

c. 7. Part of a cemented Mass, found very plentifully in a Field, call'd *Starv'd Acre*, near *Barkhamstead* in *Hertfordshire*.

c. 8. A Plate, cut off a Pebble, and polish'd. 'Tis spotted with Red, White, and a dusky Brown near Black. Near *Barkhamstead*, *Hertfordshire*.

c. 9. Another, on one Side a plain Agat Ground, of a dusky Hue: on the other striped with a greenish Yellow, and White; with some Spots. Found near *Stepney*.

c. 10. A flinty Pebble, having on one Side semicircular Lines, alternately grey and brown. Mr. *Miller*.

c. 11. A Plate, cut off the same, and polish'd.

c. 12. A flinty Pebble; cut and polish'd on one Side; striped with Ash-Colour and Grey, near *Charlton*, *Kent*.

c. 13. A flinty Pebble, striped, near *Barkhamstead*.

c. 14. A Pebble, in one Part finely lineated with White and Brown alternately. Found in the Garden of *Adgcomb*, near *Croydon*, *Surrey*.

c. 15. A small Pebble finely lineated. Found upon plow'd Lands in a Field, in *Beckenham* Parish, near *Langley* in *Kent*. It has been broke, and glew'd together again. The Lineations are superficial, and do not enter the Substance of the Stone.

c. 16. A Piece of a variegated flinty Pebble, struck out of a large Mass of Pebbles cemented together with the common natural Cement. This Mass was 2 or 3 Tun in Weight: and found by *Corner-Hall*, near *Hampstead* in *Hertfordshire*, in which Country there is great Plenty of like Masses.

c. 17. Another, out of the same Mass.

c. 18. Another, likewise out of the same Mass.

c. 19. Another, variegated with red, yellow, and corneous. At *Cross of the Oak*, near *Barkhamstead*, *Hertfordshire*.

c. 20. A sort of Net-Work, yellow; in a dark grey Flint. Found near *Keston*, 2 Miles beyond *Bromly*, *Kent*,

c. 21. Flint; striped, and spotted. Near *Barkhamstead*.

c. 22. A Jasp-Achates. Near *Barkhamstead*.

c. 23. Part of an agaty Flint, that was about 2 Inches in Diameter; the whole cover'd over with a friable cretaceous Crust. Found near *Croydon*, *Surrey*.

c. 24. A brown Flint of an oblong Shape, near *Cylindric*; seeming as if compos'd of various Plates, set edgeways by each other. From a Gravel-Pit by *North-Mimms*, *Hertfordshire*.

c. 25. A Flint inviron'd with circular Striæ. Found in a Gravel-Pit near *Upminster*, in *Essex*.

c. 26. Another out of the same Gravel-pit.

c. 27. Part of a flinty Pebble, that was near as big as a Man's Head; thick set with small round Cavities, each having a Pa-

pillæ at the Bottom. Only Part of the Surface was thus mark'd. Found on the *Common* just beyond *Epsom*.

c. 28. c. 29. Two small round Flints, with a kind of reticular Work upon their Surface, found in a Gravel-pit, near *Mile-End, Middlesex*.

c. 30. Part of a flinty Pebble, lineated, and spotted, externally, in a very strange Manner. The rest, that is broken off, was black. Found in a large Gravel-pit, near *Beckenham, Kent*.

c. 31. A Flint, having somewhat of the Disposition of a *Mycetites* on it. *Greenhithe* great Chalk-pit at the West-end of the Town.

c. 32. Another, of different Shape, with a circular Work upon it. *Ibid.*

c. 33. A flinty Pebble; the Surface black, finely vein'd with yellow; found in the Field call'd *Starv'd-Acre*, near *Barkhamstead, Hertfordshire*.

c. 34. A round Flint, having on the Surface several small round Cavities. Found near *Mitcham*, in *Surrey*, in Mr. *Dubois's* Garden; where he says, Flints, not unlike these, are pretty frequently found.

c. 35. Another, globular, having in the Center a Cavity thick set with Crystals. There are of these Globules, of several Bools, whose Cavities likewise, and their contain'd Crystals, are of different Sizes. Found in *Greenhithe* great Chalk-pit, at the West-end of the Town.

c. 36. A Flint, oval, broke, so as to shew within a Cavity thick set with small Crystals. From the Coasts of *Sussex*, near -----

c. 37. A dark grey Flint, broken; with a Cavity in the Center, thick set with pentangular and hexangular Crystals. Found near *Chizelhurst*, betwixt *Bromly* and *Dartford, Kent*.

c. 38. Flint with Crystals in it. Near *Barkhamstead*.

c. 39. A common grey Flint, with Crystals on one Side of it. Found in a Chalk-pit, by *Eriffe*, near *Dartford, Kent*.

c. 40. A Cylindric Flint, semipellucid, or of a horney Constitution. The Surface is very tuberos; and frosted over with numerous shining crystalline Sparks. Found in a Chalk-pit, near *Croydon, Surrey*.

c. 41. A Flint of a Cylindric Figure, having in it a Cylindric Core. Found near *Mitcham*, in *Surrey*, in Mr. *Dubois's* Garden; where he says, Flints, not unlike these, are pretty frequently found.

c. 42. A black Flint, oblong, hollowed, and having in it a cretaceous Matter. *Greenhithe* great Chalk-pit at the West-end of the Town.

c. 43. An oblong black Flint, with a white Crust without, and a white Core within. Out of a Chalk-pit, near *Guildford, Surrey*.

c. 45. A Mass compos'd of Chalk and Flint. *Greenhithe* great Chalk-pit, at the West-end of the Town.

c. 46. A Geodes, the exterior Crust white: the interior brown. 'Tis an Agate, or corneous Flint. The central Cavity was full of Chalk. *Beddington, Surrey.*

c. 47. A Geodes, from *Southery, in Norfolk.*

c. 48. A small Geodes, from *Iflington.*

c. 49. A Geodes; being a small round black Flint, having a Cavity with a cretaceous Matter in it. This was taken out of a Chalk-pit near *Chatbam, Kent.* They are pretty common, and of several Sizes, in the Chalk-pits of *Surrey, Kent, and Essex.*

c. 50. A small *Ætites*, broke and perforated, so as to shew the *Callimus* loose within. Found near *Barkhamstead.*

c. 51. An *Ætites*, found in a Gravel-pit, near *Upminster, in Essex.*

c. 52. *Ætites.* Found in a Field near Mr. *Evelin's* House at *Wotton, Surrey.*

c. 53. A Flint, brown, with a Cast of Green, of an oblong cylindric Figure, hollow within, and having one large, and many lesser Holes, passing from the Surface into the said Hollow. This Sort seems to be nearly related to that call'd *Ætites*, of which I have seen several of this Constitution, and Complexion. All the Difference is, that these have Holes passing to the Surface: which those have not. These, when first taken forth of the Earth, have sometimes Stones, and sometimes Sand, in them; which are what rattle and make a Noise, when shook, in those. Found in a Gravel-pit on the South-side of *Marybone.*

c. 54, 55, 56. Three others of like Constitution, and Complexion: and having Holes passing into them in like manner. Found in the same Gravel-pit. These are of a triangular Form, to which this Body has a great Tendency and Disposition: and I have observ'd great Numbers of these Bodies in the Gravel-pits all round this Town.

c. 57. Another Flint, white without, but of much the same Colour with the precedent within: of the same Shape also, and having like Holes into it. Found in the same Gravel-pit.

c. 58. A yellow Flint, with 3 Prominencies, hollow. This Sort is common, and of several Sizes, and Colours, in the Gravel-pits about *London.*

c. 58^r. An oblong, whitish, hollow Flint. *Downs, near Hendon, Wiltshire.*

c. 59. Flint, flat, out of a perpendicular Fissure, in the great Chalk-pit at the East-end of *Greenhithe.* This Flint has been run, and form'd since the Settlement of the Chalk. See an Account of it drawn up in a Paper apart.

c. 60. The common Grey-Flint, broken so as to shew a Mass of a yellow shining Pyrites in the Center of it. Mr. *Rand.*

c. 61, 62. Two Flints, with Pyrites adhering to each. Found in a Heap of Stones near *Adgcomb* House, by *Croydon, Surrey.*

c.63. A Flint somewhat resembling a Horse's Hoof; found by Col. Hatley's House, near the River *Medway*, *Kent*.

c.64. A Stone of a dark brown Colour; and environ'd with a thin Crust of lighter brown. Found under *Harwich* Cliff, by Mr. *Groome*; who fancies this of the Size and Form of a Magpye's or Crow's Egg. There were more found there of like Size and Form: and he will have it, that these were antediluvian Eggs fill'd with stony Matter; observing that these Eggs are frequent in *Spring* Season, when the Deluge began.

c.65. A small black smooth Pebble. *Lowther* River, *Westmorland*. These are found there in great Numbers.

c.66. A small Mass of Stone, of a Grain very fine. 'Tis near black; and may serve for a Touch-stone. From *Portland* Beach; where are great Numbers of like Masses.

c.67. A perforated Stone; from the Shores near *Weymouth*.

TALCS striated.

d.1. White Talc, stringy or fibrous; from *Culgaith* in *Cumberland*. Lord Bishop of *Carlisle*.

d.2. A small Piece of Talc, that appears to have been flat, and contain'd in a Vein, compos'd of parallel transverse Fibres, white, of a glossy talky Constitution. From *Culgaith*, *Cumberland*.

d.3. Found likewise at *Culgaith*, with the two foregoing, but in a narrower Vein.

d.4. A Piece of fibrous Talc, found near the Surface, in Masses, ----- some near 20 Foot over, and half a Foot thick, lying in Earth horizontally, and the Fibres perpendicular. Near ---- Miles on this Side *Weymouth*.

TALCS foliated.

d.5. Spangles of the *Mica Argentea*, very thick and numerous, in a red slaty friable Stone. From the Banks of the River *Caldew*, in *Cumberland*.

d.6. Talc of a brown Colour. From *St. Colomb major*, *Cornwall*.

d.7. *Talcum argenteum*, digg'd up, in a Yard, in *Lowth* (I think) near *Stamford*.

d.8. A Mass, compos'd partly of a coarse white Spar, and partly of a black shining Talc. From - - - in *Devonshire*, Mr. *Baden*.

d.9. Part of the Eddy-Stone, on which Mr. *Winstanley's* Light-House was built. 'Tis compos'd partly of white Spar: partly of Flakes of black, and partly of silvery Talc.

d.10. *Lapis specularis*, rais'd, in great Quantity, at considerable Depth, in a Tin Mine, near *Trewithick*, *Cornwall*. Mr. *Hickes*.

d.11. *Mica rubra*. Found in vast Quantity, the Stratum 30 Foot thick, at *Ansty*, in *Devonshire*.

Ludus Helmontij.

e. 1. *Ludus Helmontij*, from the Shore of *Sheppey*, near *Minster*. There are some Shells in the Mass of the Tali of this.

Some Observations, made on the Ludus Helmontij, in this Voyage.
August 27. 1709.

There were some flat Masses of *Ludus Helmontij* 3 Foot in Diameter: and near a Foot in Thickness.

In this Voyage I observ'd some here with a Cortex or Crust investing of them; which is common in those found in other Parts, tho' I did not observe it here in my former Voyage: and I am persuaded I then saw some naked, and without any such Crust upon them, actually lying in the Cliffs, where the Crust could not be worn off, as it might be of those on the Shores, by the Agitation of the Sea.

In some the Septa do not pass directly through: but are intercepted in the Midst with a transverse Septum in manner of a Diaphragm, running thro' the Midst, horizontally, and parallel to the Flat of the Stone, so as to intercept all immediate Communication betwixt the erect Septa above, and those below.

I observ'd the *Ludus Helmontij* in various Parts, and even in the Middle, of the Isle of *Sheppey*.

e. 2, 3. *Ludus Helmontij*. Out of a Clay-pit, at the East-end of *Highgate*. They are ground and polish'd on one Side. The Workman tells me the Tali are near as hard as the white *Genoese* Marble, and the Septa rather harder than that Marble.

e. 4. Pieces * of a *Lapis Syringoides* that were incorporated with a Mass of the *Ludus Helmontij*; only the Pipes are ever in a brown fibrous Substance, much resembling Wood, and never in the common Stone; which may cause a Suspicion that this was originally Wood, perforated by *Erucae*, or other Insects, and the Perforations afterwards lin'd or fill'd with Spar, Pyrites, Grey-Sand, &c. But, if this was done, it must have been before the Wood was lodg'd in the Mass of Stone. For I have observ'd of these brown Masses, with the Pipes in them, in the very Center or Midst of a large Mass of *Ludus Helmontij*: and so invested and cover'd with a stony Mass on all Sides, as to bar any Access from without to Insects. That Wood should be incorporated with the *Ludus Helmontij*, and now found immers'd in the Substance of it; is not more strange, than that Shells should be so found; which they frequently are. Shores near *Minster*, *Sheppey*-Island.

* Here is but one; the other Pieces are recounted. e. 10. & f. 5, 6. infra.

e. 5. *Ludus Helmontij*; found in sinking a Pit for Water in the upper Part of *Epsom, Surrey*.

e. 6. *Sheppey-Island*, near *Minster*.

e. 7. A brown Stone, broke, to shew the interior Constitution of it. 'Tis of the *Ludus Helmontij* Kind; the *Tali* consisting of a brown Stone, the *Septa* of a brass-like shining *Pyrites*. From the Cliffs of *Sheppey-Island*. This is of the same sort with those in the first Part of the *Catalogue of English Fossils*, p. - - - b. 28, and 29. so that those ought to be remov'd out of the Class of *Pyrites*, to the Class of *Ludus Helmontij*. Those in that Class, p. - - - d. 17, 18 and 19. seem not to differ from these, only that the *Septa*, or thinner, terminate at the Surface of the Stone, and are not so prominent as in these.

e. 8. *Sheppey-Island*, near *Minster*.

e. 9. Broke off of a large *Ludus Helmontij*, that had the *Septa* throughout very fair and plain; of which indeed there are Remains yet upon this Body. Near *Minster, Sheppey-Island*.

e. 10. Broke off e. 4. *supra*. *Sheppey*.

e. 11. *Ludus Helmontij*, with the *Septa* much of the Colour and Constitution of the common *Belemnites*; found in sinking a Pond for Water, in a Close of Mr. *Norse*, in the Parish of *Stanstead Mount-Fitchet*, 3 Miles beyond *Bishop-Stortford, Essex*. There were found several Masses of the same.

e. 12. A Piece of *Ludus Helmontij*. Out of the Cliffs betwixt *Limington* and *Christ-Church, Hampshire*.

e. 13. A Mass of *Ludus Helmontij*, whole, but seeming to be worn by the Action of the Water, at the Departure of it at the latter End of the Deluge; which Action the sparry *Septa* appear more firmly to have withstood, than the intermediate *Tali*, which indeed are not of a stoney, but a pretty dense clayey Constitution. Found in the Stratum of Clay, in the Tile Clay-pit near *Richmond-Wells, Surrey*.

Lapis Syringoides, or the Piped Waxen-Vein.

f. 1. *Lapis Syringoides*. In these some of the Pipes have sparry Diaphragms. Shores near *Minster, Sheppey-Island*.

f. 2. Another, with like Diaphragms. *Ibid*.

f. 3. Another Piece. *Sheppey-Island*.

f. 4. *Sheppey-Island*.

f. 5, & 6. Broke off e. 4. *supra*. *Sheppey*.

f. 7. *Lapis Syringoides*. From the Cliffs of *Sheppey-Island*.

Bezoar Minerale Geodes.

g. 1. *Bezoar Minerale*. *Carshalton, Surrey*.

g. 2. *Bezoar Minerale*. Out of the great Sand-Pit, at the West-End of *Woolwich*; in which these are very numerous.

g. 3. *Bezoar Minerale*. *Kepier-Wood, near Durham*. This was flat, and somewhat larger than the Palm of a Man's Hand. 'Twas cover'd all over with the Crusts.

g. 4. *Geodes*. *Ibid*.

g. 5. Part of the exterior Crust of a *Geodes*, holding Iron, and wrought for that Metal at *Birchdon-Forge*; got out of a Hill near by, about 2 Miles from *Tunbridge-Wells*.

g. 6. A yellowish, brown, ochreous, sandy Earth, with Veins in it very thick, seeming to be of Iron. The Mass off which this was broke, must be above a Ton in Weight. It fell down from the upper Part of the great Sand-Pit at the hither End of *Woolwich*. The whole Mass had like Veins running through it; consequently it could not be a Nodule: and the Veins must have been form'd after the Matter was settled into this Stratum.

g. 7. A Mineral Substance, of the Nature of the *Bezoar Minerale*, running strangely in Veins, or Plates, to and again, so as to form Cells of various Sizes, that are fill'd commonly with an ochreous Matter, of much the same Kind also with that found in the *Bezoar Minerale*. There are Masses thus run to a vast Bulk; indeed the Stratum seems to be wholly compos'd of them, sometimes for 10 or 12 Foot in Length. Mr. *Hutchinson* says they are common in *Sussex*, near *Petworth*: and that the Body, N^o b. 77. in his *Catalogue*, p. --. was Part of one. This was taken forth of a Stratum lying over the Sand, in the great Pit at the West-End of *Woolwich*.

g. 8. An ochreous Substance, taken out of a Cell of the same Mass; i. e. of g. 7. preceding.

SELENITES.

h. 1. A *Selenites*, having in it Flaws, Lines, and Flakes of blue Clay, shewing that the Progress of the Formation of the Body was all along in a Rhomboid-Figure: and that it is every way compos'd of Plates, parallel to those of the several Planes of the exterior Surface. Tho' they seem to be separable, and dispos'd to part and split chiefly in Parallels to the broadest Planes. *Whenton, Buckinghamshire*.

h. 2. *Selenites*, either of a shatter'd Constitution originally, or brought into this broken State in Tract of Time. Many of the Parts appear to be of a Rhomboid-Figure. Out of Mr. *Watts's* Tile-Ground, call'd *Childrens-Field*, in the Parish of *Thurnham*, within 3 Miles of *Maidstone, Kent*.

h. 3. *Selenites*; found in digging the Purging-Well at *Stanford le Hope*, in *Essex*. They there suppose it to be the Mineral that impregnates that Water.

h. 4. *Selenites*; from *Wothorop-Lane*, nigh *Stamford*, a Seat belonging to the Earl of *Exeter*, where there is plenty of it.

h. 5. *Selenites*; out of the Cliffs betwixt *Limington* and *Christchurch, Hampshire*.

h. 6. Very many small *Selenites*, lodg'd in a Lump of a yellow clayey Matter. Found in a Tile Clay-pit near *Pancridge, Middlesex*.

h. 7.

b. 7. A Body, of like Substance and Matter with the *Selenites*, crystalliz'd in a very observable manner. Out of a Potters Clay-Pit at *New-Cross*, near *Deptford*, in *Kent*, on the Right-Hand of the Road from *New-Cross* to *Lewsham*.

b. 8. A Body of like Matter and Substance with the *Selenites*, but compos'd of small round Plates, crenated on the Brims, and set edgewise in various Postures. From a Brick Clay-pit on the South-Side of *Islington*.

b. 9. Another; from the same Pit.

B E L E M N I T E S.

i. 1. A *Belemnites*; found, with *Ammonita*, and various Sea-Shells, at a considerable Depth in the Earth, below 3 Strata of Stone, at *Stoke*, 24 Miles from Sea, in the Mannor of *Castle-Cary*, *Somersetshire*. Sent by Mr. *Player*. See his Letter Sept. 21, 1708.

i. 2. *Belemnites*; found in a Field near *Lillingdon-Dorill*, *Buckinghamshire*.

i. 3. A *Belemnites*, in a *Marcasite*; from the Shores of *Whitby*, in *Yorkshire*.

i. 4. *Belemnites*, the outer Cortex wholly off. Out of a Chalk-Pit near *Sturminster-Marshall*, *Dorsetshire*. This is, in Colour, tending towards Amber: and has some small degree of Diaphaneity.

i. 5. *Belemnites*. *Wotton*, *Oxfordshire*.

i. 6. A *Belemnites*, with part of the outer Cortex, which is very thin, stripp'd off. Out of a Chalk-pit near *Sturminster*, *Dorsetshire*.

i. 7. A grey Flint, with a Hollow in it, in Form of the *Belemnites*: as also a jointed Cone, like those of that Body. Found near *Bromley Church*, *Kent*.

i. 8. Another Flint with a like Cavity and Cone in it; found in *Kent*, near *Bexly*, about three Miles from *Dartford*.

i. 9. A grey Flinty-Peble; found in a Field in *Beckenham* Parish, near *Addington-Common*. 'Twas perfectly intire when found: but being broke, shews a *Belemnites*, and several Fragments of the Shells of *Echinita*, within, immers'd in the Mass of it. The Surface of the *Belemnites* is every where contiguous to the Mass of the Flint; so that it was not invested with any Shell when 'twas lodg'd in this Flint: and there is no Room or Space void betwixt them, as we ordinarily see where there are *Echinita*, or other like Bodies found in Flints, the Shell, in which they were form'd, being perish'd and gone. See the *Catalogue of the extraneous English Fossils*, b. 33. I note this, because some lately have fancy'd the *Belemnites* cast in a Shell.

C O R A L L O I D E A.

k. 1. A Piece of black Flint. Found in the great Chalk-pit at *Cross-of-the-Oak*, near *Barkhamstead*, *Hertfordshire*, with a small Sprig upon it seeming to be of a Nature mix'd, and compos'd partly

partly of a coralline, and partly of a flinty Matter. The Sprig is of a reddish Colour; and the red Coral, of which Mr. *Steel* made the Delineation, was found in this Pit. Indeed he says most of the Flints in this vast Chalk-pit have more or less of coralline Matter upon them, or incorporated with them.

k. 2. Branched coralloid Bodies, from a Quarry in *Fairford-Field*, North-east of the Town, *Gloucestershire*.

k. 3. A Coralloid, out of a Chalk-pit, *Deptford*. There are Delineations of stellar Rays on the Surface.

k. 4. A Piece of black Flint, having incorporated with it a Piece of the Shell of a *Pinna Marina*, with a small Sprig of a white porous Coralloides growing upon it. 'Tis very beautiful; and the Pores in a Quincunx-Order. Found in the great Chalk-pit at *Cross-of-the-Oak*, near *Barkhamstead*, *Hertfordshire*.

k. 5. A Mycetites concreted on part of the Shell of an *Echinus*. *Croydon* Chalk-pit. As there were Shells in the Diluvian Waters, so the coralloid Matter affix'd and concreted upon them as in the Water of the Sea.

k. 6. A Mycetites. Chalk-pit, near *Croydon*.

k. 7. A flinty Mycetites, found near *Bromley*, in *Kent*.

k. 8. A Mycetites, found upon the Banks of a Brook, call'd *El-lerbeck*, near *Torpenhow*, *Cumberland*.

k. 9. Mycetites, out of the Brook call'd the *Fairystone-Brook*, at *Strickland-Head*, *Westmorland*.

k. 10. A Mycetites, in a yellowish flinty Pebble. Found near *Bromley*, in *Kent*; on the Surface of the Earth.

k. 11. A coralloid Body, consisting of a grey Spar; but externally infected with a brown Colour, by means of the Clay in which 'twas lodg'd. There are in it several conoid Cavities, ridg'd and striated length-ways. Found in a Field, near the Road towards *Kingston*, a little beyond *Shippon*, *Berkshire*.

k. 12. A coralloid Body, of a conoid Shape; composed of a grey Spar, of like sort with that of the foregoing Body, near which this was found. It is composed of several white sparry Plates, passing, for the whole length of the Body, from the Surface to the Axis of it. These seem also to be intercepted by many conical Plates, that pass the Body in a Direction parallel to the Surface of it. This conoid Body was originally contain'd in one of the conoid Cells of a Body of the same sort with the foregoing. And I observe in the Fields of *Wolvecot*, near *Oxford*, several of the foregoing, with this latter sort actually contain'd in them. This is nearly related to that delineated by Dr. *Plot*, *Nat. Hist. of Oxfordshire*, *Tab. vi. Fig. 2.*

k. 13. A Flint, hollow'd and lineated in such manner, as if it had had in it a Mycetites, of the same sort with those about *Oxford*. This here was found in a Gravel-pit, near *Mile-End*, *Middlesex*.

k. 14. A grey Flint, having in it a conic Body much resembling that N^o k. 12. *supra*. Found upon a Hill, near *Sanderstead*, in *Surrey*.

k. 15.

k. 15. A grey Flint, part of it of the Texture of the coralloid Mycetites. Found near *Croydon, Surrey*.

k. 16. A Mycetites, in a white Pebble; found near *Bromley, Kent*.

k. 17. A Stone of an Ash-colour, very hard and dense, and capable of a good Polish*, having in it great Numbers of ramose coralloid Pori, of a sparry Constitution. Several of them, being cut, appear to be composed of white sparry Plates, running longways of the Body, and passing from the Surface to the Axis of it; as likewise of others that intercept the foregoing, and are set pretty close, transverse, like so many Diaphragms, for the whole length of the Body. The Interstices of the Plates are fill'd with a pellucid crystalline Matter. On one side, the Stone having been exposed to the Weather, is worn, and the Bodies laid bare. Some of them here are externally black, thick set with annular Ridges; and terminate in Points; in such sort that, at first view, they appear not unlike Earth-Worms. Indeed 'twas some time before I could convince Mr. *John Hutchinson*, who found this Stone, that they were not Worms petrify'd. This was taken off the brow of *Scatter-Scar-Gill*, in *Arkendale, Yorkshire*. There is in the same part of the Hill a considerable Quantity more of the same Stone, with like Bodies in it. This Piece has in it several Sea-shells and Impressions. They are chiefly Bivalves.

k. 18. A Mass of Stone found, along with great Quantity of like sort, about 600 Foot from the former, on the Surface, at the brow of that Hill. This is of a light brown Colour, approaching a yellow; and is light, porous and friable. In breaking of it, I observ'd several Bivalves in it, of the same Species with those in the foregoing. It is very thick set in all parts with small coralloid Bodies, many of them ramose; intercepted with transverse Plates within, like the former: but externally striated lengthways of the Body. They are composed of a white Spar; but are both externally tinged with the Colour of the Stone in which they are, and have also in the Interstices of the transverse Plates, a light brown Powder, seeming to be of like sort with that which composes the Mass in which they are repositied.

k. 19. A coralloid Body, found near the River *Lowther*, in *Westmorland*. The following, to k. 33. inclusive, were found in the same Place. Lord *Lonsdale*.

k. 20. <i>Ibidem</i> .	k. 21. <i>Ibidem</i> .	k. 22. <i>Ibidem</i> .
k. 23. <i>Ibidem</i> .	k. 24. <i>Ibidem</i> .	k. 25. <i>Ibidem</i> .
k. 26. <i>Ibidem</i> .	k. 27. <i>Ibidem</i> .	k. 28. <i>Ibidem</i> .
k. 29. <i>Ibidem</i> .	k. 30. <i>Ibidem</i> .	k. 31. <i>Ibidem</i> .
k. 32. <i>Ibidem</i> .	k. 33. <i>Ibidem</i> .	

* I have since caused it to be polish'd on some Parts; by which means the coralloid Bodies within are shewn. Some of them are branch'd. The Stone is of about the Hardness of the white Genoese Marble.

k. 34. Found in the Bank of a Ditch, near *Hedington*, by *Oxford*.

k. 35. *Astroites*. This and the following, to k. 39. inclusive, were found in the *Cheffels-Field*, *Coln St. Allens*, *Gloucestershire*. Where these Bodies are found in great Numbers.

k. 36. *Ibid.* This is branch'd after the manner of some coralloid Pori; as is also k. 38. and k. 39.

k. 37. *Ibid.* k. 38. *Ibid.* k. 39. *Ibid.*

k. 40. An *Asteria*. Found in the Bank of a Ditch, near *Hedington*.

k. 41. A Piece of stellar Honeycomb-stone. Found along with the former.

k. 42. Honeycomb-stone, found at the Foot of *Shotover-Hill*, near the Road to *Oxford*.

k. 43. A flat flinty Body, thick set on one side with small Cavernulæ, so placed that the edges of them make a kind of Reticular-Work. Found near *Stretham*, *Surrey*.

k. 44. A starr'd Agate very beautiful; it is chanel'd on that part of the Outfides which is remaining, exactly after the manner of a starr'd Honeycomb-stone: and I have seen several others, that have had Stars on the Outside [as indeed this has in one part, tho' not so fair as some I have seen] like those of the Honeycomb-stone exactly. This was found, amongst several others, lying on Floors, like the common black Flints, amongst Chalk; and indeed like the Honeycomb-stone about *Oxford*. Underneath these Floors of starred Flints lay Strata of Sand-stone, in a Quarry in *Tisbury-Parish*, about five Miles from *Shaftesbury*. I observ'd some of the Flints from this Place had but very few Stars in them: and those in Spots; part of the Flints being free, and without any Stars at all.

k. 45. Another from the same Place. The starr'd Columns in this terminate at the part of the original Surface that is remaining, in porous Stars, after the manner of sparry *Astroitæ*; found about *Oxford*, and elsewhere.

k. 46. A Flint, or rather an Agate, on one side shot into coralloid cylindric Stems, having their Surfaces beset with very small Tubercles, in an elegant manner. Found near *Limington*, *Hampshire*.

Crystals, Spars, Incrustations.

l. 1. A Crystal Column hexangular, terminating in a Point at each end. From *Cornwall*. This is properly a Nodule; and was form'd in the Water of the Deluge, when the *Selenitæ* and other like angular Nodules were. Vid. *Natural History of the Earth*, Part iv. Conf. 2. These crystalline Nodules are very rare.

l. 2. An hexagonal Shoot, Sprig, or Column of Crystal. From the Duke of *Somerset's* Mine, near *Keswick*, in *Cumberland*.

l. 3. An hexagonal Shoot of Crystal, or Spar, out of *Shillforth-Groove*, *Northumberland*.

l. 4.

l. 4. Part of a Sprig or Shoot of Crystal, in which there is a Vein, of a purple or amethystine Colour, running parallel to the Axis of the Body. From *Alston-Moor*, in *Cumberland*. Some of the Crystals of the same Fissure were tinged throughout with an amethystine Hue.

l. 5. Purple Spar, with a Crust of Lead-Ore upon it, a Crust of Mock-Lead upon that, and a Crust of white crystalliz'd Spar without all. From the *Yew-Tree Grove*, two Miles South of *Stanhope*, *Durham*.

l. 6, 7, 8. Out of the same Mine.

l. 9. Blend, or Mock-Lead, with crystalliz'd Spar; from *Cwmystwith Mine*, *Cardiganshire*.

l. 10. A Tubercle of a pale brown Spar, having the exterior Surface cover'd with small polyhedrous Crystals, pellucid, with a Cast of yellow. This was broke off a large Mass, composed of various Tubercles and Bunches; found in the sinking for Lead at *Overton*, *Scarsdale*.

l. 11. Spar of a pale brown Colour, near white; breaking naturally into Angles and Inequalities; or, as they speak in the Country, Snaggs, in such manner as in their Fancy, to resemble the Teeth of a Dog; for which reason they call it *Dog-Tooth-Spar*. 'Tis mention'd by Dr. Merret, in his *Pinax*, p. ---. *Overton*, *Scarsdale*.

l. 12. White Spar, discover'd in sinking a Cellar, in *St. Martins*, in *Stamford*.

l. 13. A Piece of Stone, having upon it two Orders of Spar; the first clear and crystalliz'd; the other with an undulated Surface, incrustated afterwards upon the former, by means of Water gently trickling over and depositing the sparry Particles it carry'd upon it; of which I have seen various Instances in the Quarries of the same Country. From the South-side of *Ebworth-Wood*, near *Painswick*, *Gloucestershire*.

l. 14. A white sparry Incrustation consisting of several Crusts. From *Yew-Tree Grove*, two Miles South of *Stanhope*, *Durham*.

l. 15. A white sparry Incrustation. *Pools-Hole*, in the *Peak*.

l. 16. Spar, white, glossy, and breaking into oblique rhomboid Squares. Out of a Vein of Lead-Ore, in a Mine in the Parish of *Ashover*, *Scarsdale*.

l. 17. Spar, white, and pretty clear; breaking obliquely like that of the Lead-Mines in the *Peak* of *Derbyshire*. From the Duke of *Somerset's* Mines, near *Keswick*, in *Cumberland*.

l. 18. Spar, out of the Mine of *Comb-Martin*, *Devonshire*. The Vein of Spar and Lead, or, as it is call'd, Silver-Ore, is about 8 Inches wide; perpendicular, but shelving, and declines one Foot in three towards the South; it runs near East and West. 'Tis found from near the Day, to 84 Foot in depth. How far further is not known. *Conf. u. 15. infra*.

l. 19. Spar, striated and fistulose; out of a Quarry upon *Strickland*, *Westmorland*. 'Tis found very commonly, and in great Masses, in the Fissures of the Quarries there.

l. 20.

l. 20. A coarse brown stoney Matter; concreted after the manner of Spar, near the top of the Cliff, 50 Fathom above the Sea. *Caldy-Island*.

l. 21. Fragments of Stone cemented together by the Intervention of sparry Matter. *Portland-Island*. 'Tis not uncommon, both here and elsewhere, to see Fragments of Stone, of all sizes, to the bigness of a Horse's Head, cemented thus together. But the most that ever I saw was in the Cliffs at *Piran-Sands, Cornwall*. I observ'd the like also in *Caldy-Island*. These Stones seem to have been shatter'd antiently, probably at the Deluge; and to have been cemented since.

l. 22. Triangular Spar; from a Lime-stone Quarry, near *Hafswell*, not far from *Easington, Durham*.

l. 23. Spar, shot into small triangular Shoots; out of the Quarry in *Lowther-Garden, Westmorland*.

l. 24. A talky Spar; from the Silver-Mine in *Muggleswick-Park, Durham*.

l. 25. A talky Spar; from a Lime-stone Quarry, near *Sedgfield, Durham*.

l. 26. Moss, incrusted over with Spar; from the Petrefying-Well at *Knaresborough*, in *Yorkshire*.

l. 27. White Spar, form'd by the dropping of Water, so as somewhat to resemble one sort of Coral. From a Grotto in *Charford-Bottom*, about two Miles from *Stroud*, in *Gloucestershire*.

l. 28. A coarse, grey, sparry Incrustation; taken up near the *Warm-Bath*, at *Matlock* in the *Peak*. This *Bath* is near the River *Derwent*; is of much the same Tenor of Heat as the *Bath* at *Buxtons*: and began to be used and frequented about the Year 1702. There are Lead-Mines all round that Town.

l. 29. Found in great plenty, by *Stretton-Ardely*, near *Bissiter*, in *Oxfordshire*.

l. 30. A Bunch of Rushes, incrusted over with a coarse brown Spar. This Incrustation was made in a running Spring, in the Lordship of *Pitchley*, near that Town, in the Foot-Road to *Kettering*. The Source is pretty large, and the Stream quick. Mr. *Daniel Markes*, who communicated this to me, put it, with Sticks and several other Bodies, into the Rill, at the distance of 200 Yards from the Source, Jan. 3. 1704. The very next day he observ'd a slight Precipitation upon the Sticks, over the whole Surface of so much of them as the Water cover'd. July the 25th following, he took this Bunch of Rushes forth, so that it had lain in the Spring near seven Months. When first he took it forth, it had a strong lixivious Smell, not unlike that of Lime flaked; which it retain'd for some days. He flung it, with his whole strength, against an hard Stone twice or thrice, without being able to break it. The Rushes being several of them broke, the interior Texture of them appear; and the Laminæ and Shells shew themselves as in the natural Constitution of this Plant.

S A L T S.

m. 1. Vitriol, native; of a pale brown Colour. From *Wales*. Mr. *Baden*.

m. 2. Native Vitriol, green and crySTALLIZ'd; affix'd and concreted on bits of Coal, in an Hollow of a Cannel Coal-pit, at *Haigh* in *Lancashire*. 'Tis compos'd of parallel Fibres, running cross the small Fissures of the Coal. There was a considerable Quantity of it.

m. 3. A bit of *Bast*, a blackish Stone, that lies above and below the Cannel-Coal. It continually attends the Cannel; and the Stratum above and below are each about half a Foot thick. The recent *Bast* has never any the least appearance of Vitriol in it. But this, which they work for Vitriol, is only the Refuse or loose Rubble of the old-wrought Pits. They are dry, and without Water, excepting a slight Humidity, Winter or Summer. *Haigh, Lancashire*. They boil the *Bast*, just as raised out of the Pit, about an hour and half, in Leaden Vessels, with River-Water. Drawing it off, they boil it a second time 24 hours, after which they draw it off into Leaden Cisterns, to stand to cool and crySTALLIZE to the sides of the Cisterns, and upon Sticks. The *Bast* yields about $\frac{1}{30}$ or $\frac{1}{30}$ Vitriol.

m. 4. Alum-Rock, the Mineral out of which Alum is extracted. The browner sort. From Mr. *Squire's* Works, at *Block-head*, near *Whitby, Yorkshire*.

m. 5. Alum-Rock, the grey sort, which I take to abound more in that Mineral than the foregoing. From Mr. *Cholmley's* Works, in the same Neighbourhood.

P Y R I T Æ.

n. 1. An echinated Pyrites, in shape approaching the echinated crySTALLINE Balls; only the pyramidal Shoots are quadrangular. See that described by Dr. *Scheuchzer, Iter Alpinum*, I. p. 2, 3. Tab. 1. Fig. 1. From a Chalk-pit near *Deptford*, on the South-West-side of the Road to *Black-Heath*, near the Foot of the *Heath*. They are very rare.

n. 2. Two, somewhat less, join'd. Out of the same Pit. Breaking another of these Bodies, 'twas striated within like the common Pyrites.

n. 3. Another larger. Out of a Chalk-pit about half a Mile South-West of *Croydon, Surrey*.

n. 4. Another, not round, having a kind of flat Basis. Out of the same Chalk-pit.

n. 5. Pyrites having the Surface set thick over with quadrilateral pyramidal Shoots; excepting only on one side, to which was conjoin'd a large Agaty-Flint. Chalk-pit on the South-East-side of *Deptford*.

n. 6. A Pyrites, the Surface set thick with quadrilateral pyramidal Shoots. 'Tis of a Rust-colour without, but shining and yellow

low within; and striated. *Sutton, Surrey.* There is in the Center of it a small Mass of Selenites.

n. 7. A Pyrites, beset with quadrilateral Pyramids. From the great Chalk-pit, on the South-side of the Road, just beyond *Deptford.*

n. 8. Another. Found with the foregoing.

n. 9. A Pyrites, found at *Melbury-Abbas*, near *Shaftesbury*, in *Dorsetshire*; where Pyritæ are pretty plentiful at and near the Surface. I broke one of these Pyritæ, and found it brassy and shining within; with Striæ all tending to a Center. On the Shores, somewhere about *Limington*, they collect like Pyritæ; and make Copperas out of them.

n. 10. A Pyrites, with various observable Efflorescencies, and some Crystallizations. Out of Chalk, near *Croydon, Surrey.*

n. 11. Another given me by Mr. *Steel*, who takes the Plate in the middle to be part of a *Pinna Marina*. Found upon plough'd Lands in a Field in *Beckenham-Parish*, near *Langley*, in *Kent.*

n. 12. A Pyrites, hollow; from the great Chalk-pit at the West-end of *Greenhithe.*

n. 13. Another. This has a Mass of black Flint concreted along with it. Breaking of it, I found in the Center a Pyrites moulded in the Shell of an *Echinus cordatus*. The Shell is perish'd; but there remains the Room where the Shell originally was. From the same Chalk-pit.

n. 14. Part of a Pyrites that seems to hold a considerable Quantity of Iron; found amongst some others of like sort in the Road betwixt *Petworth* and *Marlborough*, as I remember, near *Alsford.*

n. 15. Small Pyritæ; found in the Mud of a Rill at *Brinkhill*, near *Alford.*

n. 16. A slatey Stone, grey, with a Cast of Green; having in it a cubic Pyrites. From *Rydale*, in *Westmorland.*

n. 17. A cubic Pyrites, struck forth of another Piece of the same Stone.

n. 18. *Pyrites aureus tessellatus*, of various sizes, immersed in a sort of Slate, grey, with a Cast of green. There runs thro' it a Vein of white Spar, with an Intermixture of Marcasite, of like Constitution with the Pyrites. From *Kentmire*, in *Westmorland.* Lord Bishop of *Carlisle.*

n. 19. Part of a Pyrites very elegantly crystalliz'd; from the Sea-shore near *Lime*, in *Dorsetshire.*

MARCASITES.

o. 1. A Marcasite, left by the *Old-Men*. That is the Term they give the antient Miners. This was taken out of *Orchard-Mine*, *Comartin, Devonshire.*

o. 2. A Marcasite, very curiously crystalliz'd; from *Gamp, Cornwall.* Mr. *Hutchinson.*

o. 3. A grey Stone, having in it numerous small Spangles of a white silvery Talc; and on one Surface are CrySTALLIZATIONS of a yellow golden Marcasite. *Stubbin-Edge, near Ashover, Scarsdale.*

o. 4. A Marcasite, holding a little Copper, out of a Vein or Load. *St. Columb-major, Cornwall.* Deeper in the same Vein was found Lead-Ore.

o. 5. A Piece of Marcasite, out of the Sea-Cliffs near *Cheal*, in the *Isle of Wight*; where there are vast Quantities of it.

o. 6. Mundick, of a bright yellow Colour, and the most shining metallic Complexion of any I ever saw. It is concreted upon a white Spar. *Poldice Tin-Mine, Cornwall.*

o. 7. A Marcasite; from a Vein in the Mine of *Comb-Martin, Devonshire.*

MOCK-LEAD.

p. 1. Mock-Lead, or Blend, found in small Quantities in the Veins of Lead, at *Eskergallid*, in *Montgomeryshire*. Mr. *Harley's* Lead-Mine. They call it *black Jack*. Mock-Lead appears to be a sort of Talc, or talky Spar.

p. 2. Black Talc, from the Strings in *Breay, Cornwall.*

p. 3. Blend, or Mock-Lead. Out of a Vein or Load, *St. Colomb-major, Cornwall.*

MANGANESE.

q. 1. Manganese, out of a Vein in *Charterhouse-Liberty, Mendip.* 'Tis found from within two Fathoms of the Surface, down to 28 Fathom. The Vein is from half a Foot to two Foot over. It lies in the manner of the Lead-Ore; of which there is sometimes some found amongst it. Sinking deeper, they now and then light of a Vein of Lead. It has some small Admixture of Iron. Being wash'd, calcin'd, and ground, the Glass-makers run it down with the Ingredients to clear their Glass, by taking off the green Colour; and the Potters use it for the glazing their earthen Ware black: as they do Zaffer for their blue Glazing.

CALAMIN.

r. 1. Calamin, out of a Vein. It lies from two to about eight Fathom deep. The Veins from half a Foot to three Foot in Diameter. Underneath they frequently find a Vein of Lead. *Mendip.*

r. 2. Another Sample of the same Vein. This is of Texture very porous and lax; not unlike that of the Pumice, and of some of the *Cornish* Vein-stones. See the *English Catalogue, Part. 1. f. 5. & seq.* This Body frequently holds Lead; but I could never obtain any Copper out of it. This has in it some vitriolic Salts, which begin to shoot.

SPELTER-ORE.

f. 1. Spelter-Ore, from *Merwin*, near *Padstow*. Mr. *Heydon.* Confer. 2. 8. *infra.*

C O P P E R - O R E S.

- t. 1. Copper, native, very fine, in thin Plates, amongst white Spar, and a blackish stoney Substance. From --- in *Cornwall*.
- t. 2. Copper-Ore. *Cheshire*. Mr. Brown.
- t. 3. Blue Copper-Ore. *Red-Castle, Shropshire*. Mr. Tenison.
- t. 4. Another sort, gritty, with blue Spar. Mr. Tenison.
- t. 5. Copper-Ore, probably the richest in *England*. Found at *Dodington*, on *Quantock-Hills*, in *Somersetshire*. It is said to yield half Copper. The Mine is but newly open'd, and none discover'd there before.
- t. 6. A Piece of Copper-Ore, appearing to be pretty good. 'Tis of a dusky Copper-Colour, with Veins of green and blue. 'Tis pretty thick set with small Caverns, cross'd by Fibres of a talky Spar, of a bright green Colour. To one Side of it adheres a Mass of blue Lead-Ore. *Eckstone, Staffordshire*. Sir Thomas Aston.
- t. 7. Copper-Ore. *Cheshire*. Mr. Brown.
- t. 8. Green Copper-Ore. *Red-Castle, Shropshire*. Mr. Tenison.
- t. 9. Copper-Ore. *Cheshire*. Mr. Brown.
- t. 10. An Efflorescence of Copper, green; from --- *Austlin-Moor, Cumberland*.
- t. 11. Poor Copper. From *Tolvern, Cornwall*. The Spar tinged green.
- t. 12. Spar, very curious; variegated with White, Green, and Blue. The Blue, which is a deep Cyaneus, is crystalliz'd: and the Shoots very nearly approach the Sapphire. There is also a brownish stoney Matter in the Mass; and some Metal, as may be collected by the Weight of the Body. By the blue and green Colours 'tis manifest, that Metal is Copper. From the Duke of *Somerset's* Iron-Mine, near *Egremont*, in *Cumberland*.
- t. 13. Copper-Ore, black, seeming to be very rich. *Chefwater*, not far from *Truro, Cornwall*. Mr. *Hugh Boscawen's* Mine.
- t. 14. Copper-Ore. *North-Moulton, Devonshire*. 'Tis of the sulphurous Marcasite Kind.
- t. 15. Copper-Ore, holding about $\frac{2}{3}$ Copper. *Broadwayes-Down*, near *Mendip*.
- t. 16. Copper-Ore. *St. Blazey, Cornwall*.
- t. 17. Lead, and Copper. *Caldbeck, Cumberland*.
- t. 18. Tin, and Copper. *Marsh-Mine*, near *Ashburnham, Devonshire*.
- t. 19. Copper-Ore, yellow, and shining. *Chefwater*, not far from *Truro, Cornwall*. Mr. *Hugh Boscawen's* Mine.

L E A D - O R E S.

- u. 1. White, capillary Lead-Ore. From Sir *Chris. Musgrave's* Lead-Mine at *Hartley*, in *Westmorland*.
- u. 2. Lead-Ore, tuberos, and unequal. It seems to be of that sort that is call'd in *Yorkshire* *Boose-Work*. From a Mine near *Castleton*, in the *Peak*.

u. 3. Lead-Ore; from *Bonsal Mines*, in the *Peak*, *Derbyshire*, betwixt *Bakewell* and *Worksworth*.

u. 4. Lead-Ore; from *Castleton* in the *Peak*.

u. 5. Blue Lead-Ore, very clean: but glossy, and appearing to be of difficult Fusion. *Ekston*, *Staffordshire*. *Sir Thomas Aston*.

u. 6. Cross-grain'd Lead-Ore. *Keninogg Mine*, in *Cardiganshire*. *Mr. Shears* says it yields $\frac{1}{2}\frac{3}{4}$ of Lead.

u. 7. Lead-Ore. *Guarnick*, *Cornwall*.

u. 8. Lead-Ore; from *Canninogg*, *Cardiganshire*. The Vein pretended to be 7 Foot and $\frac{1}{2}$ in Diameter, and 60 Foot deep.

u. 9. The best Potters Lead-Ore of the *Mine-Adventure*, *Wales*. 'Tis of the cross-grain'd Kind: and, in some Parts, has a Gloss of Purple.

u. 10. Broad-grain'd Lead-Ore; from *Sir Humphry Mackworth's Mine*, *North-Wales*. There are in some parts of it Specks of Purple; and of blue, like a sort of Lead-Ore in the *Foreign Catalogue*, p. --- From --- in *Germany*. Lead-Ore with these glaring Colours, is sometimes met with in considerable Quantity in the Mines in the North of *Yorkshire*. It runs difficultly in the Fire; and does not yield so much Lead as other like Ore without these Colours, which probably arise from *Arsenick*.

u. 11. Fine-grain'd, streak'd Lead-Ore. *Peneraigddy Mine*, *Cardiganshire*. *Mr. Shears* says it yields $\frac{1}{2}\frac{3}{4}$ of Lead; and a Ton of that, 44 Ounces of Silver.

u. 12. Lead-Ore of the Steel-grain'd Kind, striated, and seeming to hold Antimony. From a Mine near *Mam-Tor*, in the *Peak*.

u. 13. Steel-grain'd Lead-Ore, having in several Parts a Gloss of Yellow, and of Purple. From an ancient *Roman Work*, as 'tis commonly believ'd, at *Newton St. Cyres*, near *Exeter*, *Devonshire*. 'Tis now not wrought. This Ore is of difficult Fusion; but holds eighteen Grains of Silver in a Pound of Lead.

u. 14. Steel-grain'd Lead-Ore, very bright, and sparkling. From *Bwlchyr-Eskyrhyr Mine*, *Cardiganshire*. *Mr. Shears* says it holds 13 Ounces in the Ton.

u. 15. *Killus*, with a Vein of Spar, and Silver-Ore affix'd to it. From the Mine of *Comb-Martin*, *Devonshire*. Conf. l. 18. supra.

u. 16. *Comfomluck Ore*, *Cardiganshire*, an ancient *Roman Work*. It yields $\frac{1}{2}\frac{3}{4}$ Lead, of which a Ton yields 74 Ounces of Silver.

u. 17. Lead-Ore. *Bwlchyr-Eskyrhyr*, in *Cardiganshire*. This is the grand Mine, formerly *Sir Carbery Price's*.

u. 18. Steel-grain'd Lead-Ore. *Comfomluck Mine*, *Cardiganshire*. *Mr. Shears* says this yields $\frac{1}{2}\frac{3}{4}$ of Lead; and the Lead yields 72 Ounces of Silver per Ton. This is much more than I have extracted, or heard of from any other Mine: and yet he avers all the Ore of this Vein yields so much Silver one with another. The Lead run out of the Ore got at --- in *Northumberland*, brought to *Newcastle upon Tyne*, and work'd there, yields betwixt 20 or 30 Ounces of Silver in the Ton; which is the richest that I know of in *England*.

u. 19. Grey Lead-Ore, with small Sparks, and some white Spar concreted with it. *Comb-Marten, Devonshire.*

u. 20. Lead-Ore, with larger Sparks, or rather Flakes, seeming to be of talky Constitution. From another Shaft in the same Place.

u. 21. Lead-Ore, very fine, ponderous, and so rich, that in some parts it will cut like Lead. It has a Gloss somewhat resembling that of Talc in some parts: in others, there are Sparks not unlike those in some sorts of native Antimony. The Vein of it is very large. 'Tis in Sir *H. Northcote's* Estate, in the Parish of *Newton*, about three Miles West of *Exeter*. The *Bristol* Smelters give 16*l.* per Ton for it.

u. 22. Lead-Ore. *Blanchland-Fells, Northumberland.*

u. 23. Lead-Ore; from the *Yew-Tree-Grove*, 2 Miles South of *Stanhop, Durham.*

u. 24. A Piece of Stone, having in it Veins of Lead-Ore. Out of a Limestone-Quarry, near *Kello, Durham.*

u. 25. Stone, with Lead-Ore concreted upon it, and Spar upon that. From *Shildon*, near *Blanchland, Northumberland.*

u. 26. Lead-Ore, with Spar; also from *Shildon.*

u. 27. Lead-Ore, holding Silver, incorporated with Spar, white, with a Cast of Green. *Comartin, Devonshire.*

u. 28. A Mass of Lead-Ore. Out of *Ekstone-Mine, Staffordshire.* Sir *Thomas Aston*. 'Tis compos'd partly of blue Lead-Ore, and partly of Copper-Ore. The latter appears, in some parts, like the piped Waxen-Vein, and is yellow and shining: in others 'tis vein'd with green, and with a blue, very bright, and not inferior to that of the *Lapis Lazuli*. On one part is a Mass of a pale brown Spar, somewhat like *Lapis Calaminaris*: and, in Texture, cavernous, fibrous, and much resembling some Sea-Coralline Masses. There seems to be Calamine upon it; and that too very good, and fine.

u. 29. Another Mass, compos'd of Lead-Ore, with Spar, and a stoney Copper-Ore, with Veins of Marcasite. From the same Mine.

u. 30. Lead-Ore, with Mock-Lead, or Blende, and a greenish Marcasite incorporated along with it. From *Caerlion, Monmouthshire.*

u. 31. Lead-Ore, with Marcasite and Blende; out of the Mine *Haugh*, in *K. Christ-Ryshen*, in the *Isle of Man*; near the Cliffs out of which the Lead-Ore, and the Copper, *English Catalogue*, l. 45. & seq. was got.

T I N - O R E S.

w. 1. Tin-Ore, with several Tin-Grains in it; from Mr. *Boscawen's* Mine, near *Truro, Cornwall.*

w. 2. Tin-Ore, of the best sort; from *Polgooth, Cornwall.* There are in it several hexangular Crystals, small, but, otherwise, of the

same Constitutions with those commonly call'd in that Country
Cornish-Diamonds.

w. 3. Tin-Ore. *Comartin, Devonshire.*

w. 4. Tin-Ore; from Mr. Coster's Work, near *North Moulton, Devonshire.* 'Tis of that sort that, in *Cornwall*, they burn [roast] to drive off the Sulphur.

IRON-ORES.

x. 1. *Lapis Hamatites.* From the Duke of *Somerset's* Iron-Mine, near *Egremont*, in *Cumberland.*

x. 2. Iron-Ore, yielding $\frac{1}{3}$ Iron. *Titchcut, Devonshire.*

x. 3. Iron-Stone. *Hunwich-Moor*, near *Bishop-Aukland, Com. Dunelm.*

x. 4. Iron-Stone; from Mr. Pitt's Works, by *Bridgnorth, Shropshire.* It lies in a Strata: some over, but chiefly under Strata of Coal.

x. 5. A Piece of the richest Iron-stone, part of a Stratum, half a Foot in thickness, lying immediately under a Stratum of Coal; of which there are, of one flat, some *Vestigia.* 'Tis of a very dark grey Colour, near black. *Dudley, Staffordshire.*

x. 6. Another Piece of the same Stratum, with a small Nodule, little different in Colour, or Constitution, immers'd in it.

x. 7. Part of a Nodule of somewhat darker Colour, thick set with Veins of white; from the same Mine. This is of the richest of this Ore, which seems to be of the Frame and Constitution of the *Ludus Helmontij*, tho' the Partitions be not so regular as is sometimes observ'd in this Body.

x. 8. Iron-Ore, compos'd of parallel Plates; which, where broken, are very glossy and shining. From ----- near *Truro, Cornwall.*

x. 9. Iron-stone, of a light brown Colour. From Mr. Baker's Work, near *Fair-Crouch, Suffex.* It yields $\frac{1}{3}$ Iron. There is a poorer sort that yields about $\frac{1}{5}$. This they mingle with the former, to promote its Fusion; and, besides, to absorb the Sulphur, and separate the Slag, they usually put in Lime made of the grey Rag-stone. They run the Ore with Charcoal, in a common Blast-Furnace.

x. 10. A small flat Nodule, of a dusky red Colour, ponderous, and seeming to hold Iron. Found on a plough'd Land near *Brelsford, Scarfsdale.* There are of this sort found, plentifully, of all Sizes, to the Bigness of a Man's Fist, betwixt *Higham* and *Sherland*, in *Scarfsdale.* Those likewise are commonly of a flat Figure: and are call'd there *Loadstones.* Is there not Mercury in this?

Dubita Incognita.

y. 1. Impression on a Flint. *Barkhamstead.*

y. 2. An Impression on a Flint. Near *Barkhamstead.*

y. 3. A flinty Pebble, having in it an Hollow, thick set with small Stubs; found near Mr. Styles's House at *Langley*, in *Beckenham-Parish,*

Parish, *Kent*. There were several other like Impressions on other Pebbles.

y. 4. Out of a Bed of Chalk, in a Pit on *Barkhamstead-Common*, *Hertfordshire*.

y. 5. Out of the same Chalk-pit.

y. 6. A reticular Work, very curious, upon Chalk. Out of a Chalk-pit near *Guildford*, *Surrey*. This seems to be made either by Part of a Sea-Fan, or some other like Coralline Body.

y. 6^x. A Conical Body, somewhat inflected, having the Surface every where thick set with small *Foramina*: in each of which is placed a small white *Papilla*. At the larger End of it is a conical Cavity, plain and smooth, of about half the Length of the Stone. The Stone is three Inches and a half in Length, and one Inch and a half in Diameter at the larger End. This is parted from another Body that cover'd the Apex, or smaller End of it; the interior Cavity whereof is set with Studs, that seem to have been continuous with those of the exterior. It appears to have been bigger, and perhaps to have cover'd the whole; it being broken, and only a Piece. They were found in a Lime-Kiln of Mr. *Hart*'s of *Lullingstone*, in *Kent*: and having passed the Fire, each is a little vitrify'd.

y. 7. A Conic Body, thick set with small Cavities, in a Quincunx Order, but not very regular. 'Tis of Chalk. From a Chalk-pit, near *Guildford*. Dr. *Sheppard*.

y. 8. A Piece of Chalk that was contiguous to the precedent, and has taken the Impression of part of it.

y. 9. Another Body of the same with that y. 7. *supra*. From the same Pit. Dr. *Sheppard*.

y. 9^x. Another, from a Chalk-pit near *Croydon*, *Surrey*. This, and all the foregoing, y. 6^x. y. 7. and y. 9. are all inflected a little near the Apex.

y. 9†. A Body of a pale brown Colour, near white, soft and friable, but harder than Chalk, thick set on one side with small Tubercles. Out of a Limestone-Quarry, at *Tunstall*, four Miles from *Sunderland*. Sent by Dr. *Hunter*, who supposes it to be *Astroites Congener Radularia cretacea*, *Luidij*, N^o 176.

y. 10. A flat flinty Body, thick set with small Studs, placed in a Quincunx Order. Found within 2 Miles of *Uxbridge*, in the Garden at *Denham-Court*.

y. 11. A Body striated externally, and not unlike what is commonly call'd *Petrified Wood*. It is channel'd, and seems to be related to the *Lapis Syringoides*. Found on the Bank of a Pit, near *Wheatly-Bridge*, five Miles from *Oxford*.

y. 12. A Flint, grey, with a Cast of yellow, found in a Field in *Beckenham-Parish*, near *Addington-Common*. There are several Bodies in it, cylindric, but inflected, and flakey or scaley, about $\frac{1}{4}$ of an Inch in Diameter. Mr. *Steel*, who broke the Stone, which was near as big as a Man's Head, thinks them only parts of the same Body, which he imagines to have been spiral, or in Form

of a Screw. There are also in it Impressions of Fragments of the Shell of the *Pinna-Marina*.

y. 13. A spiral Body, lodg'd in a yellowish Clay-Stone. There were others found in great Numbers; some both larger in Diameter, and likewise of greater Length. There were some above a Foot long. Found amongst the Clay flung forth of a Pit at the *Half-way House* to *Hampstead*, in *Middlesex*. Mr. Steel.

y. 14. A Piece of the same Clay-Stone, in which was lodg'd one of the foremention'd Spires, having in it a Vein of talky Spar, after the manner of the *Ludus Helmontij*; of which Kind this Stone is, as I saw by several other Samples of it. *Ibidem*.

y. 15. A Mass of grey Stone, having, in one part, a Cavity in which are several round, long, slender Bodies, appearing not unlike Earth-Worms, lying in several Postures, and being all of them twisted, or inflected. These probably are the *Lapides Vermiculares* of Dr. Plot, *Oxfordshire*, p. 126. Tab. vi. Fig. 13. In the same Cavity are four small oval Bodies, of much the Figure and Bigness of *Luca Olives*. Both these, and the vermicular Bodies, are of much the same Substance and Constitution with that of the Stone in which they are. From a Stone-Pit near *Oxford*; I think, on *Cowley-Common*.

y. 16. An oval Body; from the same Stone-pit, and of the same sort with those in the precedent Stone, but somewhat larger. This lessens gradually at one End, terminating in a kind of Stalk, and has in some Parts of its Surface Ridges, and Striæ, drawn in an irregular manner, and seeming to be form'd after the Body of the Stone, and to be only Accretions upon it.

y. 17. A Stone, having in it like oval Bodies, and a Shell, seeming to be a sort of a *Balanus*. Found in a Stone-pit, at the Bottom of *Shot-over-Hill*, near *Oxford*.

Bodies that have pass'd the Fire; viz. Slags, Regulus's, Glasses.

z. 1. Iron-Slag. From the *Forest of Dean*, near *Staunton*. Of this sort there are incredible Quantities, in various parts of the *Forest*. They are Remains of the ancient Works; and hold so much Iron, that they melt them again to good Profit, mixing them only with $\frac{1}{4}$ of the Iron-stone. Consequently there is, thro' this whole Tract, run down three times as much of these Slags, or Cynders, as they are here call'd, as there is of Iron-Ore. Having been once run before, they melt down again very freely and easily.

z. 2. The Iron as first run, and fit for the Hammering-Forge. From Major *Hanbury's Works*, near *Pontipool, Wales*.

z. 3. Iron, struck off the outer Gate of the Castle of *St. Michael's-Mount, Cornwall*. 'Tis friable, and very light, its specific Gravity being only $3 \frac{12}{13}$. 'Twas brought into this Condition by Lightning, 30 or 40 Years ago. Given me by Mr. *Stampeel*, who tells me there is much Iron-Work about the Gate; and most of it in this State.

- z. 4. Bottom-Tin, a *Regulus* of Tin, with Iron.
- z. 5. A *Regulus* of Tin, with Copper.
- z. 6. A porous, friable Body, of a green Colour, like *Erugo*. 'Twas found adhering to the Sides of the Flewes of the Copper Cupoloes, at *Redbrook*.
- z. 7. A Lead-Slag, with a Piece of Charcoal in it. From *New-ton St. Cyres, Devonshire*. That Ore is a small-grain'd steely Ore. Reduced to Lead, a Pound yields 16 Grains of Silver. The Ore has much Sulphur in it: and, without previous roasting to carry off the Sulphur, or some other Method to absorb it, the Lead will not quit the Slag. Of which this Slag is a Proof; and an Instance of the Unskilfulness of those that run it; it holding, upon tryal, $\frac{1}{2}$ Lead. The Ore yields $\frac{2}{3}$ Lead.
- z. 8. Part of a *Regulus* of the Ore of Spelter, [*f. 1. supra.*] From *Mervin, Cornwall*. Mr. Heydon.
- z. 9. A *Regulus* like that of Tin-Glass. Given me by Mr. ---- a Sharer in the Antimony-Mines at *Endellion*, who said it was run from a Piece of this *Endellion* Ore.
- z. 10. Glass, pretty opaque, blue, and streak'd with Sky-Colour, in such manner as to resemble the Constitution of the crufted Agats. This Glass, in a Month or two, the Pots seldom lasting longer, sets down to the Bottom of the Pot, used for running the Glass that makes the common green Glass-Bottles: and proceeds only from the Fern-Ashes, employ'd in the making this Glass; for where Straw, or Wood-Ashes are used, what sets to the Bottom is of a green Colour.
- z. 11. Glass made thus, by turning the Punty round as many times as there are Cortices.
- z. 12. Iron-Slag, vitrified, having in it Veins, or rather Cortices incompassing one another, like those in some Parts of Agats. From Mr. Gott's Iron-Furnaces at *Horseman-Dean, Kent*. The Agreement in Constitution betwixt the Glasses and Agats, shew there was at least as perfect and thorough a Solution of the Parts of the Agats, before their Formation, as there was of the Glass.
- z. 13. A Slag of *Sussex* Iron-Ore, variegated like the *Lamellar* Agats. From a Forge betwixt *Penshurst* and *Tunbridge-Wells*.
- z. 14. Slag, of a pale blue Colour. From an Iron-Forge in the *Forest of Dean, Gloucestershire*.

Miscellanea Artificialia.

- aa. 1. A coarse, talky, stoney Spar, adhering to the sides of a Tea-Boyley. *Bridge's Coffee-House, Cornhill*.
- aa. 2. Spar of various Kinds, from the Tea-Boylers of *St. Dunstan's Coffee-House, Fleetstreet*. Mr. George informs me that *Hare-Court-Water* will cast a Crust of half an Inch, in Thickness, upon the Sides of the Boyley, in a Month; whereas the *Thames* and *New-River-Water* will hardly yield any Crust at all.
- aa. 3. A Body, black, round, with small Grain-like Tubercles on the Surface: and not very unlike a Mulberry. It was affix'd to the

the Extremity of one of the Branches of a Sea-Shrub, upon the Top of the Coffee-Room, in *Brown's Coffee-House in Kingstreet, Westminster*. There were several other Bodies, of much the same Shape, and Size, affix'd, in like manner, to the Extremities of several of the other Branches. I took them at first for natural Fruits of that Shrub, till the Coffee-Man assur'd me that, when they were first put up, there were none of them upon it, and that they were all form'd since. Being laid in a Window in Wet-Weather, this began to liquate and run; which has somewhat lessen'd it, and alter'd the Shape of it. It has a fuliginous Taste, with a considerable Pungency. This Coffee-Room is much frequented: and there are generally several Pots and Boylers before the Fire. Out of the Dust that arises, the Steams of the Coffee, and other Liquors, Smoak of Tobacco, and the Halitus from the Breath of the People, these Bodies are form'd. This sets forth something of the Constitution of the Air of a Coffee-House. It may also serve to illustrate the Manner of the Formation of Corals, and other like Bodies, that owe their Origin to a Mechanism, that is accidental, and not to Seed.

aa. 4. Water out of the Hollow of a Canal Coal-pit, at *Haigh, in Lancashire*. 'Tis of a green Colour, with a slight Cast of yellow: and has a pretty strong sour Taste, with an atramentous Smatch. Both the Colour and Taste arise from the Vitriol it has taken up into it. I dissolved some of this very Vitriol in common Spring-Water: and it gave it exactly the same Colour and Taste. This may serve to determine the Controversy betwixt Dr. *Lister* and Dr. *Leigh*, concerning this Vitriol, and this Water. This vitriolic Water comes out of an Aperture of about 2 Inches in Diameter.

aa. 5. Vitriol drawn out of the Pyrites, brought from the Lime-Shores in the Copperas-House at *Rotherhith, Surrey*.

aa. 6. *English* Allum, crystalliz'd after a Solution of it in Water, and boiling. All the Parts shot into Figures like these.

aa. 7. The *Cheshire* Rock-Salt, with a little Nitre, Allum, and Pot-Ash, is the common Flux used for the running the Plate-Glass, or Looking-Glass. Dissolving some of this Flux in Water, boiling, and setting it into Lead-Vessels to shoot, all the Crystals were form'd into angular Figures, placed in Layers one upon another, in such sort, that the upper being gradually less, the whole attain'd a Figure with four equal Sides, pyramidal, and like these two Bodies.

aa. 8. A Piece of Bone, found, on the Surface, in the Current of an Adit of the Copper-Mine, call'd *Gold-Scalp*, in *Newlands, Cumberland*. This may serve to illustrate the Origin of the Turcois Stone. See the *Catalogue of the additional extraneous foreign Fossils*, N^o 7. 2. 7. 3.

Marble, wrongly judg'd factitious.

bb. 1. Part of one of those round Pillars that are commonly suppos'd to be full Marble: but not truly; this being of the common *Sussex* Marble, full of Sea-Shells. Broke off a Pillar that was fallen down in the Choir of the Cathedral Church of *Rochester*, and given me by Monsieur *Misson*.

bb. 2. Part of another, of the same sort of Stone, but more decay'd, and impair'd by Time. Monsieur *Misson*.

bb. 3. A Piece of Marble, thick set with small Shells; broke off a Pillar in *Ely* Minster. The People there suppose it to be factitious.

Cornish Sea-Sand used for Manure.

cc. 1. Fragments of Shells, reduced, by the Agitation of the Sea, to Powder, and used for the manuring of Land. Sent by the Name of *Sea-Sand*, from the Shores by *Truro*, *Cornwall*.



*A CATALOGUE of the Second Addition
of English extraneous Fossils; viz. Parts
of Vegetables, and of Animals, digg'd up
out of the Earth.*

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<i>Vegetable Bodies</i> , a. 1. &c.	<i>Crustacea</i> , e. 1.
<i>Turbinata</i> , b. 1. &c.	<i>Piscium Partes</i> . f. 1.
<i>Bivalvia</i> , c. 1.	<i>Conchylia Massa Saxea indita</i> ,
<i>Echini</i> & <i>Corpora affinia</i> , d. 1,	g. 1. &c.
2, 3, &c.	

1. VEGETABLE BODIES.

a. 1. **F**ir-Wood, from the Turf-Grounds, nigh Northholm,
Northamptonshire.

a. 2. Pine Cones, some young, of the current, others mature,
of the past Year, in such manner as I have observ'd them on the
Pine-Tree at the End of May. Out of a Moss, or Peat-Marsh,
Delamere Forest in *Cheshire*.

a. 3. Found in a Coal-Grove, near *Witton-Gilbert*; and sent by
Dr. *Hunter*, with the Inscription, *Abietis, aut Pini Ramulus,*
cum Foliorum Vestigiis.

a. 4. Hazle-Nuts, found in digging in a Moss-pit, near *Beer-*
ton-Castle, Cheshire. The Deluge came forth at the End of May,
when Nuts are not ripe. These are in that State. I broke several,
that were the best preserv'd, and most sound, but found no
Remains of a Kernel in any: and yet these were somewhat
larger, and firmer than several of the rest sent. There are frequently
digg'd up, in the Moss-pits, in *Cheshire*, on *Tylston-Heath*, in the
Forest of *Delamere*, and elsewhere, Oak, Fir, and Birch-Trees,
Pine-Apples, and Hazle-Nuts, tho' there be no Hazle-Nut-Trees
growing near. Mr. *Farrell*.

a. 5. This found, with other like round jointed Bodies, in the
Rocks, on the Shore, about 6 Miles from *Tinmouth, Northum-*
berland.

a. 6.

a. 6. Slate with an *Equisetum* in it. *Broughton Coal-pits, Durham.* Sir George Wheeler.

a. 7. A Cylindric Body, thick set with Hollows, in a quincunx Order; found in the River *Brown*, near *Lancaster*; I think in the County of *Durham*.

a. 8. A dark gritty Stone, full of Talc, having on one Side Remains seeming to be of some Leaf, or vegetable Body, ribb'd; the Ribs thick set with Tubercles; found in the River *Derwent*, at *Shotly-Bridge, Durham*.

a. 9. These 3 fulcated Bodies, from *Brunton Colliery*, about 3 Miles from *Newcastle*. They lie in a sort of black brittle Slate, over the Coal. There are commonly found Leaves of Fern, and of some other Plants, along with these fulcated Bodies, in the same Slate.

a. 10. From Sir Roger Bradshaigh's Coal-pits at *Haigh*, in *Lancashire*.

2. TURBINATA.

b. 1. Ammonites out of a Stone-pit, near *Elsborough, Buckinghamshire*.

b. 2. An Impression of an Ammonita, from *Keynsham* betwixt *Bath* and *Bristol*. There are found, of these Bodies, hereabouts, great Numbers, of various, Kinds, and Sizes. I saw one above 2 Foot in Diameter.

b. 3. An Ammonita, in Stone. *Ibid.*

b. 4. A Segment of an Ammonita. *Ibid.*

b. 5. An Ammonita, found on the plow'd Lands, on the Edge of *Lansdown*, near *Bath*.

b. 6. A Nautilus, *Keddington*, near *Luton, Bedfordshire*, out of a Chalk-pit. 'Twas 22 Inches in Diameter, when whole. There were found various other Shells, chiefly Bivalves: and several other Nautili, in this Chalk-pit.

b. 7. An Impression of the external Surface of a *Cornu Ammonis*, found in *Town Sutton*, 6 Miles from *Maidstone, Kent*.

b. 8. An Impression of a *Cornu Ammonis*, Part of the Shell seeming to be yet remaining. Out of a Clay-pit, at *Boxley*, near *Maidstone, Kent*.

b. 9. A Cylindric Body environ'd with circular Ridges and Furrows alternately. *Ibid.*

b. 10. Two Cylindric Bodies, with annular Sulci, found, with Sharks-Teeth, Ammonitæ, and other Shells, in a light-colour'd Clay, near *Laughton*, in *Bedfordshire*.

b. 11. Ammonites. *Ibid.*

b. 12. A Nautiloides, with the Partitions of the Shell, yet remaining, of a fine pearly Colour. Out of a Clay-pit at *Boxley*, near *Maidstone, Kent*.

b. 13. A Fragment of a Nautilus, digg'd up with the Brick-Clay near *Islington*, along with the Sharks-Teeth.

b. 14. A piece of Stone cast in a very elegant Nautilus; the Shell appearing to have been compress'd by some external Force, before the Stone was harden'd. *Witney, Oxfordshire.*

b. 15. A turbinated Shell, *Richmond, Surrey.*

b. 16. Another. Great Clay-pit, *Richmond, Surrey.*

b. 17. Two vitriolic Pyritæ, cast in Shells, not unlike those in the Catalogue of the English extraneous Fossils, e. 112. Out of the Cliffs of *Sheppey, Kent.*

b. 18. Another of different Shape. *Ibid.*

b. 19. Another of still a different Shape. *Ibid.*

b. 20. *Richmond Clay-pit, Surrey.*

BIVALVIA.

c. 1. A large Bivalve, found, on the plow'd Lands, in *Weston Fields*, about a Mile from *Bath*. There are, as usual in the Sea, other lesser Shells, seeming to be of *Balani*, affix'd to this.

c. 2. A Pecten out of a Stone Quarry at *Melbury-Abbas, Dorsetshire.*

c. 3. Stone cast and moulded in another like Pecten. 'Tis of the same sort with that of the common Mass of the Stratum in which it was found. Out of the same Quarry with the precedent.

c. 4. A Mass of Stone thick set with Ova of Fishes, Fragments of Shells, and having on it a Pecten very fair, intire, and perfect. *Witney Fields, Oxfordshire.*

c. 5. A Pecten. Out of a Chalk-pit, near *Croydon, Surrey.*

c. 6. A Pair of Oyster-Shells; from *Reading, Berkshire.*

c. 7. A Pair of Oyster-Shells, with Part of a *Balanus* adhering to each. From the Sand-pit, beyond *Woolwich.*

c. 8. A Tree-Oyster. *Witney, Oxfordshire.*

c. 9. *Concha rugosa*. Out of a large Stone-pit, near *Bath*. These are found in great Numbers, in the Stone there.

c. 10. A rostrated Bivalve. Found, along with the Nautiloides, b. 12. *supra*, in a Clay-pit, at *Boxley*, near *Maidstone*, in *Kent*.

c. 11. Another. Out of a Clay-pit, near *Maidstone, Kent*. Mr. *Drayton*.

c. 12. Four others, found at ----- near *Wilton, Wiltshire*. Lord *Pembroke*.

c. 13. *Conch. Anomia lavis*. Chalk-pit near *Gravesend*.

c. 14. Another. Found on the plow'd Lands on the Edge of *Lansdown*, near *Bath*.

c. 15. Another. *Witney, Oxfordshire.*

c. 16. Another; out of a Quarry, near *Melbury-Abbas, Dorsetshire.*

c. 17. *Concha Anomia sulcata*; *Witney, Oxfordshire.*

c. 18. One of this kind from *Mynehead, Somersetshire.*

c. 19. Another, from *Gravesend*.

c. 20. Another, from the Chalk-pit, near *Croydon, Surrey.*

c. 21. Another, from a Chalk-hill, by *Melbury-Abbas*, *Dorsetshire*.

c. 21^x. Three, found near *Barton*, *Durham*.

c. 22. Two uncommon *Concha Anomia striata*. *Low-Barns*, *Durham*.

c. 23. A single Shell. Out of a Clay-pit, at *Boxley*, near *Maidstone*, *Kent*.

c. 23^x. Found with *b. 10. supra*.

c. 24. This was found at the Entry of the Grotto, call'd *the Devil's Arse in the Peak*.

c. 25. Two others. *Ibid*.

c. 26. Two. Found in a Quarry, at *Low-Barns*, *Durham*.

c. 27. This Shell, found, among many others, moulder'd out of the Sides of the Grotto, beyond the first Rivulet, in *the Devil's Arse of the Peak*, *Derbyshire*.

c. 28. A Bivalve; found near *Barton*, *Yorkshire*.

c. 29. Another, out of the same Quarry.

c. 30. Another, *Low-Barns*, *Durham*.

c. 31. This was found with *c. 27. supra*.

c. 32. A Stone cast in a Bivalve; *Witney*, *Oxfordshire*.

c. 33. Conchites. Found on the Brow of *Yenson Hill*, in *Hinkstridge Parish*, about 3 Miles from *Milbourn*, *Somersetshire*.

c. 34, 35. Two cast in Bivalves. Found with the preceding.

c. 36. Conchitæ, out of a Slate Quarry, near *Hutton Locris*, about a Mile from *Gisborow*, *Yorkshire*.

c. 37. A Stone, cast in a Bivalve. *Whitby Alum-Works*, *Yorkshire*.

c. 38. Another. *Maidstone*, *Kent*.

c. 39. Three common Cockle-Shells. Out of a Gravel-pit, by *Peakirk*, *Northamptonshire*.

c. 40. A Stone, form'd in a Bivalve. *Wincanton*, *Somersetshire*.

c. 41. Another. *Witney*, *Oxfordshire*.

c. 42. Two Stones, form'd in a sort of Bivalve. Found with *b. 12. supra*.

c. 43. A Stone, form'd in species of that sort of *Pectunculus*, that passes by the Name of *Cuneus*. Out of the same Clay-pit, with *b. 12. supra*.

c. 44. A Bivalve from the Coast of *Yorkshire*, near the Mouth of the River *Tees*.

c. 45. A *Cuneus*, from *Bossal*, *Yorkshire*.

c. 46. A Stone form'd in a Bivalve. *Witney*. 'Tis of that kind call'd by *Dr. Plot*, *Hippocephaloides*.

c. 47. Two Pair of small Muscle Shells; found in a Limestone Quarry, near *Tunstal*, 3 Miles from *Sunderland*.

Echini: & Corpora affinia.

d. 1, 2, 3. Three *Echini galeati*. *Greenhithe*.

d. 4. A *Vermiculus*, adhering to the Shell of an *Echinus galeatus*. *Northfleet*.

d. 5. A flinty galeated Echinites. *Downs, near Epsom.* The Shell in which it was form'd, is disappear'd; but, in the room of Part of it, is a kind of a femidiaphanous flinty Matter, that succeeded the Shell, and concreted upon the Stone.

d. 6. *Echinus pileatus*; Chalk-pit near *Gravesend*.

d. 7. A cordated Echinites, with, either, Part of the Shell remaining, or a flinty Matter concreted in lieu of it. Found among Gravel in the Town of *Harrow, Middlesex*.

d. 8. A Species of *Echinus spatagus*, very uncommon. *Witney, Oxfordshire*. This has not the Fissure, or Sulcus, that those have in the *Catalogue of the English extraneous Fossils*, Class 5.

d. 9. An *Echinus Ovarius*. *Witney, Oxfordshire*.

d. 10. Aculei of some sort of *Echini Ovarij*. *Ibid*.

d. 11. Others, larger. *Ibid*.

d. 12. Entrochi; *Holy-Island*, on the Coast near *Berwick*; found on the Shores, wash'd out by the Sea. *Sir George Wheeler*.

d. 13. Entrochi: some of them found on the Shores near *Holy Island*, others near *Bossal*, in *Yorkshire*; call'd there, *St. Cuthbert's-Beads*.

d. 14. *Asteriæ*; found in the Brook *Nipton*, about $\frac{1}{2}$ a Quarter of a Mile from a Town of the same Name, and 40 Yards below the Bridge. The Place is about a Mile South of *Belvoir Castle, Lincolnshire*.

d. 15. Others. *Bossal, Yorkshire*, 6 Miles from *York*.

CRUSTACEA.

e. 1. These Bodies, appearing to be Fragments of the Shell of some crustaceous Fish, found in a bluish Clay, about 30 Foot deep, in the Tile-Clay-pit, near *Islington*.

PISCUM PARTES.

f. 1. A Vertebre of a Fish. Found with b. 12. *supra*.

Conchyliæ Massa Saxea indita.

g. 1. *Pectines* in Stone. From the Top of an Hill, near 1000 Foot in perpendicular Height, in *Oneberry-Parish*, not far from *Ludlow*, in *Shropshire*. The Stone is commonly burnt for Lime; and all of it abounds with these Shells.

g. 2. A Muscle, *Pectines*, and other Shells, in a Mass of Stone, not fair and plain, but as usually in this Country, immediately under the Surface at *Hutton-Locris*, near *Gisborough, Yorkshire*. There is Alum-stone about 20 Foot underneath.

g. 3. Bivalves in Sand. *Wiltshire, Lord Pembroke*.

g. 4. A sort of friable Stone, having in it various Shells, very numerous and thick, chiefly Bivalves. Out of *Oxendon Gravel-pit, Northamptonshire*.

g. 5. Stone thick set with *Concha Anomie striata*, that have been bruised and compressed. *Witney, Oxfordshire*.

g. 6.

g. 6. A Stone having on it a large Piece of *Corallina reticulata* or Sea-Fan. Out of a Lime-stone Quarry at *Low-Barns*, near *Sunderland*.

g. 7. A Piece of Stone having in it several Pieces of the Sea-Fan, and small Sea-Shells of the Bivalve Kind; out of the same Quarry near *Low-Barns*.

g. 8. Vast Numbers of Shells in Marl. *Hordel-Cliffs, Hampshire*.



*A CATALOGUE of the third Addition
of English Native Fossils.*

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Earths, and Earthy Substances.

- a. 1. **E**arth, native, and as taken up. Lancashire, Sir R. Bradshaw.*
- a. 2. The same sort depurated.*
- a. 3. Potters-Earth found in great Quantity on the East-Banks of the River Medway, betwixt Maidstone and Rochester; used at Fox-Hall for making the common white Pots.*
- a. 4. The Clay made use of for the Gally-pots at Fox-Hall. 'Tis brought from the Banks of the River Medway, on this side Maidstone, Kent.*
- a. 5. Earth of a deep Ash-colour; from the Brow of an Hill near Green-House-Lane, by Painswick, Gloucestershire.*
- a. 6. Fullers-Earth; out of a Coal-pit, on Broad-Moor-Green, near Little-Dean, Forest of Dean, Gloucestershire.*
- a. 7. Earth; from an Iron-Mine on the North-side of Little-Dean-Forest.*
- a. 8. A brownish Earth; from an Iron-Mine on the North-side of Little-Dean-Forest.*

a. 9. Earth of a light brown Colour; from the Brow of an Hill near *Green-House-Lane*, by *Painswick*, *Gloucestershire*.

a. 10. A yellowish Earth; from an Hollow-way on the North-side of the *Mine*, near *Little-Dean*, *Forest of Dean*.

a. 11. A whitish Earth; from the same Hollow-way. *Forest of Dean*.

a. 12. Earth of a paleish Colour, near white; from the Top of an Hill near *Little-Dean*, *Forest*.

a. 13. A reddish Earth; from an Iron-Mine on the North-side of *Little-Dean*, *Forest*.

a. 14. Earth of a reddish brown Colour; from the Top of an Hill near *Little-Dean*, *Forest*.

a. 15. The Clay of which the Tiles are made at *Richmond*. It was got on the Hill near the Medical Wells there, by the *Thames-side*. This sort of Clay is found from 3 to 14 or 15 Foot deep, in the Place where they were working. Oct. 15. 1725.

a. 16. This Clay, part brown, and part grey, was taken up about 20 Foot deep, in *Lambs-Conduit-Fields*. 'Tis used by the Brewers for stopping up the Bungs of their Barrels.

a. 17. A dusky, yellowish, ochreous Earth; out of *Yellow-Shroft-Hole*, near *Little-Dean*, *Forest*.

a. 18. Yellow ochreous Earth; *Isle of Man*, Lord *Derby*.

a. 19. Yellowish ochreous Earth; *Isle of Wight*.

a. 20. Ochreous Earth, of a red Colour, somewhat approaching a Pink; *Isle of Wight*.

a. 21. *Elven-Clay*, *Cornwall*.

a. 22. Found in a small Cavity, in the middle of a grey Flint, in Major General *Pepper's* Garden, *Enfield-Chace*. There were in this Flint three other like Cavities, with like Matter in them. The Cavities had no Communication with each other, nor Passage out.

a. 23. Clay-Stone; from *Twiford*, near *Shaftesbury*, *Dorsetshire*: taken up about 80 Foot deep in sinking for Coal. It burns, tho' slowly, and emits a strong sulphurous Smell.

a. 24. Chiver; from the Coal-pits on *Broad-Moor-Green*, near *Little-Dean*, *Forest*.

a. 25. Chalk; out of a Chalk-pit, near *Pharey*, betwixt *Newberry* and *Hungerford*.

S A N D S.

a. 26. Sand, white; *Berstead*, *Kent*.

a. 27. Sand, pale, near white; *Goonlace*, *St. Agnes*, *Cornwall*.

a. 28. Sand, of a very pale brown Colour; *Hollingbourn*, *Kent*.

a. 29. Sand, grey, with a Cast of green; *St. Stephen's*, near *Canterbury*.

a. 30. Sand; out of a Sand-pit near *Fale*, betwixt *Newberry* and *Reading*.

a. 31. Sand, out of a Pit on *Knowl-Hill*, about two Miles on this side *Twiford*, *Berkshire*.

a. 32. Sand, of a bright brown Colour, with Sparks of Talc among it; from a Gravel-pit near the Bowling-Green, *Hampstead-Heath*. April 2. 1716.

a. 33. Reddish Sand, found, for near two Miles an end, in a waved Layer of about an Inch thick, in *Moreham's-Court-Hill*, near *Seven-Oak, Kent*. It lies so shallow, that the Carriages turn up and discover it.

a. 34. A reddish gritty Sand; from the same Hollow with the Earth, a. 10. *supra*. *Forest of Dean, Gloucestershire*.

a. 35. Sand, of a pale red Colour, approaching a Pink; *Isle of Wight*.

a. 36. A reddish brown Sand; from the *Isle of Wight*.

a. 37. This, and the 16 Samples of Sand that follow, to N^o a. 53. inclusive, some coarser, others finer, of very different Colours, and shewing in them some extremely fine Fragments of a white silvery Talc, and others of Spar, were taken out of several Layers of a large Bank near *Sandling* in *Boxley-Parish, Kent*. Mr. *Drayton*. At the Departure of the Water, at the end of the Deluge, great Quantities of the uppermost parts of the Globe, were born off, and with it sometimes a very great way; and in the Hurry and Agitation of the Water, Bodies, hard, were wash'd, clear'd and separated from the soft Sand and Pebles, from Clay and Earth: and so projected and cast into Layers, as the Water, becoming more quiet, deserted them. 'Twas owing to this Action of the Water that the Sand and Gravel, now found near the Surface of the Earth, were clear'd, separated and cast into Layers, as we now find them; these shewing plainly that they owe their Compilation to such an Hurry and Action of the Water, and not to a regular Settlement made, according to the Laws of Gravity, from a Water quiet and stagnant, as the regular original Strata all round the Globe did. The Force of the Water departing was so great in some parts, as to tear up even the Strata of the most firm and solid Stone, bear away vast Masses of it, beat them to pieces, and sometimes reduce them even to a very small Grit; such as is a great deal of that which we now call Sand, and find thus cast into Layers. Other sorts of Sands there are that consist, some of broken Marble, others of Spar, Talc, and the like. Much of the Sand about *London* consists entirely of extremely small Pebles. But of this Action of the Water, more in its place.

a. 38. *Sandling, Kent*.

a. 39. *Ibid.*

a. 40. *Ibid.*

a. 41. *Ibid.*

a. 42. *Ibid.*

a. 43. *Ibid.*

a. 44. *Ibid.*

a. 45. *Ibid.*

a. 46. *Ibid.*

a. 47. *Ibid.*

a. 48. *Ibid.*

a. 49. *Ibid.*

a. 50. *Ibid.*

a. 51. *Ibid.*

a. 52. *Ibid.*

a. 53. *Ibid.*

Stone of Strata.

b. 1. *Elvin-Stone. Stithians, Cornwall.*

b. 2. Stone, having in it small Pebles, part of a Stratum; out of a Stone-pit by *Sandy-Lane*, midway betwixt *Bath* and *Marlborough*.

Some

Some Strata that I observ'd here, were made up of extreme small Pebles, such as pass ordinarily by the Name of Sand; and of such Strata, dissolv'd, the Sand in the *Lane* consists.

b. 3. Part of one of the thin Strata of Iron-stone; found in the Cliffs near the *Hot-Well, Bristol*. This is mention'd in the Account of those Cliffs.

b. 4, 5, 6, 7. Plates, or thin Strata of Stone, used as Slate, for covering the Houses at and about *Bath*. These were taken out of the Slate-Quarries, in *Charlwood*, in the Parish of *Box*, about five Miles from *Bath*, and about a Mile from *London Road*. They lay each under other, in the Order as they are number'd here, the thinnest uppermost.

b. 8. Slate of the same sort, out of a Quarry near the former. This has a thin Crust of reddish Spar on its Surface.

b. 9. Slate out of the side of a deep Hollow'd-Way, in *Bath Road*, betwixt *Box* and *Causum*. This has concreted on one Surface a thin Crust of a brownish Spar.

b. 10. Part of a thin Stratum, found on the plough'd Lands by *Clarken-Down*. I observ'd the uppermost Strata in several parts of these *Downs*, and of *Lansdown*, and other Places about *Bath*, were thus thin, and of much the like Constitution with this.

b. 11. A grey Stone with efflorescent Tubera, seeming to have been originally in a Cavity of it. From - - - - - near *Maidstone*, in *Kent*.

b. 12. Callus. *Goonlace, St. Agnes, Cornwall*.

b. 13. Blue Slate. *St. Germans, Cornwall*.

b. 14. Stone, in thin Plates, of a dusky blackish Colour, out of a Coal-pit on *Broad-More-Green*, near *Little-Dean, Forest*.

b. 15. Red Slate. *St. Agnes, Goonlace, Cornwall*.

b. 16. A Stone, purple, spotted with small Masses of white Spar interposed; from the Shores of *Sunderland*. This, tho' in the form of a Peble, is not one, having no exterior investient Crust; but a Fragment broken off a Stratum, worn round and smooth'd, by the Water of the Deluge, departing, and hastening to the Sea, and the Apertures of the great Abyss at the bottom of it. *Conf. a. 37. supra.*

b. 17. Another. *Ibid.*

b. 18. A kind of Marble Mass, beat off, rounded, and smooth'd in like manner; found on the plough'd Lands near *Warwick*, where such are common.

b. 19. A sparry Mass, somewhat transparent, so rounded. This sort is call'd a Water-Peble. *Witney, Oxfordshire*.

Pebles, Flints.

c. 1. A grey Peble plated and striped. *Beckenham, Kent*.

c. 2. Another; East-side of *Hyde-Park*. This has a Hole bored through it; and perhaps has been worn as a Jewel.

c. 3. Another, brown, plated and striped. Gravel-pit, *St. James's Park*.

- c. 4. A flinty Pebble variegated. Top of *Shooters-Hill, Kent*.
- c. 5. A flinty Pebble, incircled with two Ridges, and two Furrows. Found in Gravel, in the Road a little beyond *Lewisham, in Kent*.
- c. 6. A coarse Flint, with circular Ridges and Channels alternately; from the Shores, near - - - - *Cornwall*.
- c. 7. A flinty Pebble; found at *Stratford, near Bow, Essex*. Mr. *Clarke*, who gave it me, fancy'd it to resemble a Walnut.
- c. 8. A small Flint with an Hollow, having in it various Ridges, tending all from the Center of it to the Circumference. *Lullingstone-Park, near Ainsford, in Kent*.
- c. 9. Flint with an Armature on it, but much faded by long Carriage; from a Rivulet near *Hoxney, in Norfolk*. All the Flints in the Rivulet are so gilded.
- c. 10. A grey Flint; found near *Beckenham in Kent*. There jets out of one side of it a conical Body, of about an Inch in length, resembling a small Belemnites; but of a different Constitution, it consisting of the same Sort of Matter with the Flint: and being indeed continuous with it. There is all round the whole Beginning, or Rise of it, an hollow betwixt the Body and the Flint, seeming to shew that it was form'd in a Conic Shell.
- c. 11. A grey Flint having the Surface unequal, and appearing as chipp'd. *Witney, Oxfordshire*.
- c. 12. Another. *Ibid*.
- c. 13. A Body, soft, cretaceous, and that easily cuts with a Knife; found in a blueish Clay, about 30 Foot deep, in the Tile-Clay-pit, near *Islington, Middlesex*. It seems to be only an harder Sort of Chalk born off, and rounded by the Water of the Deluge departing [*Confer. a. 37. supra.*] It has no investient Coat, which is the Case of many of those commonly call'd *Pebbles*; but is externally rough'd, exactly in manner of some of them.
- c. 14. Another. *Ibid*.
- c. 15. A Nodule, found on the Shores of *Sheppey, Kent*, greenish, and seeming to have been, only a Bit of broken Glass; but with the Surface roughed, after the Manner of some Pebbles; which raises a Suspicion in me, that some of them were only Fragments of hard Strata, broke off, and rough'd on their Surfaces by the Motion of the Water, returning towards the Sea, and the Apertures of the Abyss, in the Conclusion of the Deluge. *Confer. a. 37. supra.*

ÆTITES GEODES.

- d. 1. A small flinty Ætites, found in a Gravel-pit, at *Bealing, near Woodbridge, Suffolk*.
- d. 2. A Geodes, of an orbicular Shape, near 3 Inches in Diameter, the exterior Crust of Flint, fill'd with a pale brown cretaceous Powder, Part of it concreted in a Calimus, from *Elsborough, Buckinghamshire*.

d. 3. Another, larger, and of somewhat more compres'd Shape. The Crust is of Iron Stone, with which there are small Pebbles, and Grit, incorporated. 'Twas fill'd with the like, and a little yellow Ochre. From *Moosal-Hill*, near *Norwich*.

TALKY BODIES.

e. 1. *Mica Argentea*, a white flakey Talc, out of *Newcastle Coal*. It has pass'd the Fire.

e. 2. *Mica*, or Spangles of a white silvery Talc, in a yellowish Sand-stone, from a Gravel-pit on *Hampstead-Heath*.

e. 3. A white sparry Stone, thick set, partly with a black, partly with a white silvery Mica or Talc. 'Tis commonly call'd *Moor-Stone*. From ----- *Cornwall*.

e. 4. Another, with like Talc in it. From the River *Derwent*, *Durham*.

e. 5. A brown Stone, thick set with small Spangles of a yellow or golden Talc. *Miller Parish*, *Cornwall*.

e. 6. Asbestos, *Anglesey*.

Mr. Gadlis's Account of the Asbestos in Anglesey.

The Asbestos in *Anglesey*, stands like a small Skin or Rib between two Rocks of Marble of various Colours, chiefly light and dark green, interspers'd with small Streaks of white. The thickest Rib of it, we ever saw, was between $\frac{3}{10}$ and $\frac{4}{10}$ of an Inch broad, and the Length of the Wool or Thread, is the cross-way of the Vein or Rib, no more than $\frac{4}{10}$ of an Inch long any where, and much the greatest Part of it not above half that Length. So that we found it too difficult for us, either to draw; as the Flatters do their Furrs, or to spin it like Flax. The best Use we make of it is in coarse sort of Paper; which I believe with proper Application, might be brought to a tolerable Perfection. This Asbestos seems to be of a different sort from that mention'd by *A. Kircher*, in his Description of *China*, which he says, put into Water, moulders like Clay, and is suddenly consum'd, and that it is a fibrous small Excrescence, like Hairs growing upon the Stones, and for the hatchelling, spinning, and weaving it, he refers to his *Mundus subterraneus*, Lib. 12.

e. 7. *Linum Asbestinum*, pick'd out of Cliffs of Rocks, in *Anglesey*.

e. 8. White, striated, or fibrous Talc. *Witney*, *Oxfordshire*.

Ludus Helmontij.

f. 1. *Ludus Helmontij*, found in digging for the purging Spring, on *Shooters Hill*, *Kent*. There was found also the *Selenites rhomboidalis*; and the Workmen ascribe the purging Quality of the Waters to these. But both are likewise found, plentifully, in the Tile Clay-pits in several Parts of the Hill.

f. 2. *Ludus Helmontij*. *Hordel Cliffs*, *Hampshire*.

f. 3. *Ludus Helmontij*, soft as Clay, when first taken up; with Partitions of a Talky Spar. Out of the great Tile-Clay-pit, *Richmond, Surrey*.

Lapis Syringoides.

g. 1. *Lapis Syringoides*. Great Gravel-pit, beyond *Wholwich, Kent*.

g. 2. Another. *Maidstone, Kent*.

RHOMBOIDAL SELENITÆ.

h. 1. Many small rhomboidal Selenitæ, found in Clay, near *Long Crendon, Buckinghamshire*.

h. 2. Two small rhomboidal Selenitæ, found, with others in great Numbers, in a Marl-pit, at *Bittenden*, in the *Wild of Kent*. Mr. Drayton.

h. 3. Talc, of the Nature of the Selenites. Brick-Clay-pit, near *Islington, Middlesex*.

BELEMNITÆ.

i. 1. A Belemnites, with the Alum Mineral in the Hollow of it. *Whitby Alum Works, Yorkshire*.

i. 2. *Belemnita fusiformes*; some of them near transparent. Found in a Bed of Clay, of a pale Colour, near *Laughton, Bedfordshire*.

i. 3. Two other Bodies, tapering, and somewhat inflected, found, as were also Sea-Shells, and Sharks-Teeth, in the same Clay.

FOSSIL CORALLOID BODIES.

k. 1. A white sparry coralloid Body more branch'd than the Fossil Corals usually are. Chalk-pit near *Croydon, Surrey*.

k. 2. *Lapides ramosi coralloides*; out of a Quarry near *Witney, Oxfordshire*.

k. 3. A Mass of Stone having in it numerous coralloid Bodies of that sort, call'd by the Writers of Fossils, *Stelichites*; found in the River *Tees*, near *Blackwell, Durham*.

k. 4. A Mycetites of a conoid Form, but somewhat inflected, out of a Lime-stone Quarry, near *Middleton Fryars, Yorkshire*. Sent by Dr. Hunter, with the Name of *Branchiali congener columellus striatus*. S. *Bryonia Radix lapidea* Plotij, *Luidij, Lythophylac.* N^o 120. p. 7.

k. 4^x. A coralloid Fungus, having *Astroitæ*, on the Surface, at the Top of it. Found in a Gravel-pit, near *Curbridge, by Witney, Oxfordshire*.

k. 5. An *Astroites*, consisting of a very firm close Spar. *Witney, Oxfordshire*.

k. 6. Another. *Ibid.*

Fluores, or Spars: and Crystals.

l. 1. A coarse Concretion, partly sparry, but chiefly earthy. Out of *Rosamond's-Well*, in *Woodstock Park, Oxfordshire*.

l. 2. Spar, found adhering to the Stone on one Side of a Fissure in a Stone-pit, near *Witney, Oxfordshire*. 'Twas wetted, by Water gliding over it, by which the sparry Matter was brought, and successively cast and incrustated on the Stone.

l. 3. Spar, white, with a Cast of Yellow. It consists of a Crust, from which several fistulose Stalactitæ proceed. Out of a Quarry, near *Witney, Oxfordshire*. This Crust adhered to the Stone, at the Top of a small Grotto, in the Side of a Fissure. From the Crust the Stalactitæ were depending, and Water continually dropping.

l. 4. A Stalactites, with a Cavity perforating it at the Axis. Found in the first Rivulet in the Grotto call'd *The Devil's Arse in the Peak*.

l. 5. A yellowish Spar, run into Tubercles, having their Surface thick set all over with very small Crystals. Out of the Fissure of a Rock near *Easington, Durham*. *Dr. Hunter*.

l. 6. Spar, clear, transparent, and crystalliz'd into hexangular Shoots. *Lead-Mine, Durham*.

l. 7. Crystal Shoots, hexagonal, and very fair, but white and not so pellucid as the finest Crystal. *Goonlace Tin-Work, St. Agnes Parish, Cornwall*.

l. 8. Crystals, hexagonal, but brown, dusky, and not transparent. Found in a Tin-Vein at *Carrack-Gloose, Cornwall*.

l. 9. An echinated crystalline Ball, or small Nodule, close set, all round, with hexagonal crystalline pyramidal Shoots, pellucid, but with a Cast of yellow. *King's Weston, Gloucestershire*. *Sir Robert Southwell*.

BITUMINOUS BODIES.

m. 1. Coal, out of *Seridge Coal-pits, Gloucestershire*.

m. 2. Coal, from the Pits of *Broad-Moor-Green*, near *Little Dean*. Forest of *Dean*.

m. 3. Petroleum, or Stone-pitch, from off the Well at *Pitchford* in *Shropshire*.

m. 4. Stone, resembling charr'd Coal, found in the River *Brown*, near *Lanchester, Durham*.

m. 5. Earth inflammable, emitting an Electric-Smell. 'Tis us'd instead of Candles, for Light, and lies near the Surface, on the Side of a Peat Marsh, in *Lady Mohun's Estate*, near *Ormskirk, Lancashire*. There are, as in other Peat-Earth, numerous vegetable Bodies in it.

m. 6. Amber, from the Shores of *Norfolk*.

m. 7. Amber, Fossil, from *Islington, Mr. Scot's Ground*; found 30 Foot deep. 'Tis found commonly in Form of a Cake, lessening towards the Edges. 'Tis strongly electric.

PYRITÆ, MARCASITÆ.

- n. 1. A Pyrites, found on the Chalk-Hills, 2 Mile above New-haven, in *Sussex*.
 n. 2. A Pyrites of a cylindric Form, hollow, and having in it a soft light-black Powder. Cliffs of *Sheppey, Kent*.
 n. 3. Part of the black Powder taken out of it.
 n. 4. Marcasite. Out of the Cliffs of *Sheppey Island, Kent*.
 n. 5. Another. Out of the Cliffs of *Severn*, near *Westbury, Gloucestershire*.
 n. 6. Mundick, *Cheswater, Kenwyn, Cornwall*.

Lapis Calaminaris.

- o. 1. *Lapis Calaminaris*; from a New-work, at *East Hartrey, Mendip, Somersetshire*.
 o. 2. Calamin. found, in Quantity, betwixt *Criche* and *Worksworth*, in the *Peak*. 'Tis rather better than that of *Mendip*.
 o. 3. Calamin. with some Sparks of Lead incorporated with it. From *Derbyshire*. Mr. *Aston*.
 o. 4. *Lapis Calaminaris*. *Peak of Derbyshire*. Mr. *Robinson*.
 o. 5. *Lapis Calaminaris*. *Ibid.* o. 6. *Ibid.*
 o. 7. *Ibidem.* o. 8. *Ibidem.*
 o. 9. *Ibidem.* o. 10. *Ibidem.*

COPPER ORES.

- p. 1. Sulphurous Copper-Ore, *Kenwyn, Cheswater, Cornwall*.
 p. 2. Copper-Ore. From *St. Just, Cornwall*. Mr. *Ustick*.
 p. 3. A crystalliz'd Marcasite, found in an Hollow of a Piece of Copper-Ore, partly green, partly sulphurous. Such are frequent in this Ore. *Isle of Man*. Lord *Derby*.
 p. 4. Like Copper-Ore, with a Cubic Marcasite in it. Out of the same Mine. *Isle of Man*. Lord *Derby*.
 p. 5. A dusky green Copper-Ore. *Blue-Work, Redruth, Cornwall*.
 p. 6. A dusky green Copper-Ore, out of a Mine, near *Overstoey*, on *Quantock-Hills, Somersetshire*.
 p. 7. Copper-Ore, partly blue, partly of a dusky sulphurous. Said to be rich. Mr. *Towen's-Work*, by *Redruth, Cornwall*.
 p. 8. Copper-Ore very sparkling; having in it native Copper. *Poldice, Cornwall*.
 p. 9. Copper-Ore, with some little native Copper, flexible, and malleable: Copper crystalliz'd; with small Chips of a grey Stone, a little white Spar: and some things very like small Concretions of Iron. *Wheel-Wedden-Key, Cornwall*.
 p. 10. Native Copper, *Poldice, Gwenup, Cornwall*.
 p. 11. Native Copper; *Isle of Man*.

T I N - O R E S.

- q. 1. Tin-Ore. *Bessø, Wheal-fatt, Gwenup, Cornwall.*
- q. 2. Tin-Ore. *Cheswater, Kenwyn, Cornwall.*
- q. 3. Tin-Ore, rich. *Gwenup, Lannar, Cornwall.*
- q. 4. Tin-Ore, very rich. *St. Agnes, Cornwall.*
- q. 5. Tin-Ore. *Pelbreen, St. Agnes, Cornwall.*
- q. 6. Tin-Ore. *Wheal-Vean, Gwenup, Cornwall.*
- q. 7. Tin-Ore. *St. Agnes, Cornwall.*
- q. 8. Tin-Ore, with crySTALLIZ'd Spar. *Gwenup, Minear, Cornwall.*
- q. 9. Tin-Grains, and Spar, form'd on the [Country, or] common Stone, on the side of the Vein. *Wal, near Guinear, Cornwall.*
- q. 10. Tin-Ore, with several Cavities in it; wherein are crySTALLIZ'd Spar, 2 or 3 very small *Cornish* Diamonds, and very numerous small Tin-Grains. Out of a Vein of a Cliff, to the Sea, *St. Agnes, Cornwall.*
- q. 11. Tin-Grains. *Cambron, Cornwall.*
- q. 12. Tin-Grains. They yield $\frac{2}{3}$ Tin. *St. Agnes, Cornwall.*
There is white Spar incorporated with the Tin-Grains.
- q. 13. Tin-Grains. *Cleggo, Perran-Sands.*
- q. 14. Tin-Ore, dress'd, for smelting; the Tinnery call it *Black-Tin.* *Cornwall.*
- q. 15. Another sort, not so sparkling as the precedent. *Ibid.*
- q. 16. Another sort, of a reddish brown. *Ibid.*
- q. 17. Another sort, of a lighter Colour. *Ibid.*

L E A D - O R E S.

- r. 1. Blue, or Potters Lead-Ore, with a little white Spar intermix'd. The two opposite Flats, or Sides, are smooth and unbroke; so that this Piece pass'd from side to side of the Vein: and shews its Breadth to be above two Inches. *Isle of Man.* Lord Derby.
- r. 2. Lead-Ore. *Trevascus, Gwinyr, Cornwall.*
- r. 3. Lead-Ore. *Gwinyr, Relistian, Cornwall.*
- r. 4. Lead-Ore, sparkling. The opposite Flats shew the Breadth of the Vein. *Isle of Man.* Lord Derby.
- r. 5. Lead-Ore, more sparkling. *Perran-Sands, Cornwall.*
- r. 6. A Piece of a grey talky Stone, being the Side of a perpendicular Fissure, having on it a Vein of Lead-Ore, and of a white Spar, shot into very small Crystals. From a Lead-Mine near *Blanchland, Northumberland.*
- r. 7. Spar, crySTALLIZ'd, with a Mass of Lead-Ore incorporated with it. *Ibid.*
- r. 8. Spar, crySTALLIZ'd, of a yellowish Colour, holding in it likewise Masses of a purple Spar, and two small Masses of Lead-Ore. *Bishoprick of Durham.*

IRON-ORES.

f. 1. Samples of a Stratum of Iron-stone Ore, thick set with Entrochi, and Sea-Shells, and rich in Iron. 'Tis somewhat above two Foot thick: and crops out, at the Day, on the North-side of *Little-Dean*. From this Cropping, it dips into the Hill a great Depth. There is on one Piece of it, a Sample of the Spar, rich in Iron. This Spar was found on the Side of a Fissure.

f. 2. Iron-Ore, very rich, found, in great Quantity, over the Coal, at *Broseley*, in *Shropshire*.

f. 3. Iron-Ore. *Perran-Sands*, *Cornwall*.

f. 4. Iron-Ore, found, at the Surface, on *Quantock-Hills*, near *Upper-Stoey*, about 6 Miles West of *Bridgwater*, *Somersetshire*. 'Tis found in great Quantities, tho' there be no Mine wrought, or Forge.

A Third Addition of English Extraneous FOSSILS.

a. 1. A large Bone, found among Rubble, about 14 Foot deep, above the Slate, in a Quarry near *Stunsfield*, *Oxfordshire*.

a. 2. Two Pieces of Bone, out of the Rubble of another Quarry, near the former.

a. 3. Another Piece, from a neighbouring Quarry. The outer Part of this is now Spar. There are numerous Bones found in the Rubble over several of these Quarries.

a. 4. *Siliquastra*, and four other Bodies; found in the Substance of the Rubble-Stones*, over the Slate of the same Quarries. *Stunsfield*. The *Bufonita* are found in the same Stones; as also the *Plectronita*.

a. 5. Two *Plectronita*, lying in Pieces of Rubble-Stone that lay over another of these Slate Quarries. *Stunsfield*.

a. 6. This Body seems to be Part of a Jaw paved with grinder Teeth, related to the *Bufonita*. Out of the Rubble-Stone, over a Slate-Quarry. *Stunsfield*.

* These thin Strata of Slate were, doubtless, the Top of the original stoney Subsidence at the Deluge. There might be earthy, chalky, or other lighter Matter above, that might be washed away, and carried thence by the departing Water of the Deluge: But the Rubble-Stones, in which these *Siliquastra*, and other Marine Bodies are found, many of which Stones are very large and of great weight, were brought from elsewhere, and cast and left here by the same Water departing; which, from many Observations that I have made, appears to have made great Changes and Transpositions of the first Settlement at and near the Surface of the Earth.

a. 7. *Strombites*, very thick, and numerous, in Stone. Out of the Quarry near *Witney Town End*, *Oxfordshire*.

a. 8. A Piece of common Slate, out of a Quarry near *Stunsfield*. There are in it Impressions of Bivalves, chiefly in Pairs, opened and expanded. These are chiefly of one Species; but I observ'd of other Species in the same Slate.

a. 9. An *Ammonites*, with its Impression on part of the Mass of Stone in which it was found, in *Hassleford Quarry*, near *Barrington*, *Oxfordshire*.

a. 10. *Echinites*, found, in sinking a Well, in *Witney*, *Oxfordshire*.

a. 11. Two *Concha Anomia*, found in a Quarry by *Hamborow*, near *Woodstock*, *Oxfordshire*.

a. 12. Two Scales, said to be of the Sword-Fish, found in the midst of a large Piece of hard Rubble-Stone, about 12 Foot deep, over a Slate-Quarry, near *Stunsfield*. Mr. *Smith*. He never saw any of these in any other Place. I saw the Piece off which these were broke. 'Twas extended, in a Plane, for near a Foot every way.

a. 13. A Piece of Rubble-stone, out of the same Quarry, having on it the Impression of the Skin, cover'd with Scales, of a Fish of the same kind.

a. 14. The upper Jaw of some Marine Animal, found 24 Foot deep, in a Quarry in the Estate of Sir *Thomas Read*, at *Shipton*, in *Oxfordshire*. 'Twas, when first found, near 2 Foot 2 Inches long. 'Tis now in two Pieces; and there was a third, which was the Snout or Termination, and is lost. It was not acute as commonly the Beak of a Bird is, but obtuse, like the Snout of an Hog.

a. 15. Two Pieces of the under Jaw of the same Animal, found together with the other. As along each side of that is a Row of Teeth, so is there likewise in the lower Jaw corresponding to those. The Quarry-Man, who found the Jaws, foolishly broke the Teeth off both. But, by some Remains yet behind in the lower Jaw, it appears that they were of that sort call'd *Plectronites*; which indeed I observ'd to be a boney Substance, and always judg'd they serv'd for Teeth.

a. 16. An *Echinus Spatagus Cordiformis*. *Darkin*, *Kent*.

a. 17. An *Echinus*, found on the Side of an Hollow-Way, near *Fulbrook*, *Oxfordshire*. See Dr. *Plot's* Account of this Body, *Nat. Hist. Oxfordshire*, Cap. 5. §. 30, 31, 32. He has an Icon of it, *ibid.* Tab. 2. Fig. 9, 10.

a. 18. Shells, in Stone, some few turbinated, but chiefly Bivalves, very numerous and thick, of the same sort with those found in Stone, at *Stifford*, in *Essex*; at *Woolwich*, in *Kent*; and on various parts of *Black Heath*. Found in *Moor-Park*, on occasion of digging for making the Level near Mr. *Stiles's* House.

a. 19. Sand, having in it great Numbers of the *Cochlea vivipara fluviatilis Listeri*. Digg'd out of *Hordel-Cliffs*, *Hampshire*.

a. 20. Numerous other Shells, chiefly Bivalves, in Marl; from the same Cliffs.

a. 21. Others, chiefly turbinated, in Clay; from the same Cliff.

a. 22. A Pair of Scallop-Shells, somewhat distanc'd, with the common black Flint interpos'd in such sort, as to hold them together. Found at *Reads-Rest*, near *Banstead*, *Surrey*.

a. 23. A galeated Echinite, of Flint, very fair, and perfect; found in a Field near *Woodstock-Park*, *Oxfordshire*.

a. 24. A small *Nautilus Gracorum*, Part of the exterior *Voluta* remaining, and the Edges of the Diaphragms, or Partitions, all of a fine shining pearly Hue, and Constitution. The Intervals of the Partitions are fill'd with the *Pyrites*. Out of the great Clay-Pit, near *Richmond*, *Surrey*.



A
CATALOGUE
OF THE
FOREIGN FOSSILS

In the COLLECTION of

J. WOODWARD M. D.

Brought as well from several Parts of *Asia*,
Africa, and *America*; as from *Sweden*,
Germany, *Hungary*, and other Parts of
Europe.

With a Characteristick Description, and Historical
Account of each; as also various Experiments,
Observations, and Reflections, in order to the set-
ting forth the Natural History, and the Medicinal,
Mechanical, and other Uses of them.

PART I.

Exhibiting the Fossils that are real, and natural, Earths,
Stones, Marbles, Talcs, Coralloids, Spars, Crytals,
Gems, Bitumens, Salts, Marcasites, Minerals, and
Metals.

CATALOGUE

OF THE

FOREIGN POSSES

In the Collection of

J. WOODWARD M.D.

Brought as well from several Parts of Asia,
Africa, and America; as from Sweden,
Germany, Hungary, and other Parts of
Europe.

With a *Charakteristik* Description, and Historical
Account of each of the various Experiments,
Observations, and Medicines, in order to the
knowing the Nature, Effects, and the Medical
Mechanical, and other Uses of them.

PART I.

Exhibiting the Posses that are root, and natural, Earthen,
Stones, Metals, Fossils, Corals, Shells, Crystals,
Gems, Minerals, Salts, Medicines, Minerals, and
Metals.

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N.B. There are some flight Irregularities, in the Order here observ'd, which may be easily corrected by comparing this Index with that of the native *English* Fossils, or with that of the additional native foreign Fossils, in the Catalogues of those Fossils.



Terræ,

Terræ, & Terris Affinia.

Earths, and Earthy Substances.

α. 1. **E**ARTH, of a light brown Colour, found about 6 Foot deep, at *Fort St. George*, and sent to me by Mr. *Edward Bulkley*, an inquisitive Surgeon in the *East-Indies*.

α. 2. A blackish Earth, looking as if burnt. From the Island of *Ascension*. Almost the whole Island consists of this sort of Earth. Mr. *Cunningham*, Surgeon.

α. 3. *Marga grysei coloris, in Saxo arenario, prope Lithopolin.* D. *Scheuchzer*, M. D. *Tigurinus*.

α. 4. Earth, with *Mica* in it. From *Connimere*, about 50 Miles from *Fort St. George*. 'Tis found at the Surface of the Ground; and used by Potters to make *Gurgalets*, or Water Vessels, to drink out of. Mr. *Bulkley*.

α. 5. Earth, found near the Surface; and used by the Goldsmiths for Cuppels. *Fort St. George*. Mr. *Bulkley*.

α. 6. The Earth of which the *China Ware* is made. Mr. *Cunningham*.

α. 7. *Medulla Saxi alba, Fribergæ in Saxonia.* *Steinmark*, *Stonemarrow*. This was sent me by *Monsieur de Schonberg*, *Berghauptman*, or Superintendent of all the Mines in *Saxony*, and free Baron of the Empire. [*Marga, Marrow, Medulla Saxi, Plinij.*]

α. 8. *Terra Lemnia*, native, and just as it was dug up in *Lemnos*, from whence it was brought by Mr. *Neighbour*.

α. 9. *Terra Lemnia*, dress'd and wash'd.

α. 10. *Terra Lemnia, rubicunda.*

α. 11. *Terra Oreana, Wormij Musæum*, p. 15. D. *Kisner*.

α. 12. *Terra sigillata Laubacensis*, D. *Scheuchzer*.

α. 13. *Terra flava Stregoniensis, ex Silesia*, D. *Kisner*.

α. 14. *Terra Goldbergensis*, D. *Kisner*.

α. 15. *Terra Labacensis alba*, D. *Kisner*.

α. 16. *Terra Silesiaca ex candido lutescens.* Vid. D. *Charleton de Fossilibus*, p. 6.

α. 18. *Terra Samia, candida.*

α. 19. *Bolus Armena*. This is the true Bole from *Armenia*; and in all respects like a Sample of it, that Dr. *Ball* procured from that Country.

α. 20. *Venetian Bole.*

α. 21. A native Earth, stiptick, and of the Bole-kind, extremely fine, of a Pink-Colour, with some small Variegations of Red and Yellow. From *Carolina*.

α. 22. Another Sample of the same, not different, only 'tis vein'd with white, and has small Spangles of a white silvery Talc in it.

α. 23. A sort of greyish Earth, seeming to be of the Fullers-kind. *Virginia*.

α. 24. Sent by the Name of Fullers-Earth, from *Fort St. George*. Mr. Bulkley.

α. 25. Umbre, native; from *Cyprus*, found in great Quantity.

α. 26. Umbre. *Scandaroon*, in *Turkey*.

α. 27. Earth, of a pale brown Colour, compos'd of several very thin Strata; sent by the Name of Umbre, found 15 Foot deep. *Fort St. George*. Mr. Bulkley.

α. 28. *Giallolino*, an Earth of the brightest Gold Colour of any we have. Indeed it surpasses Orpiment, and all the other Yellows, both for lasting, and the Beauty of the Colour. 'Tis native, and just as it was taken forth of the Earth, at ----- in the Kingdom of *Naples*. The whole, ground down upon the Stone with Oil, is ready for Use.

α. 29. *Ochra Romana*. This is wash'd, and freed by that means from the Sand that is found amongst it. It makes a deep or brown Yellow, carries a good Body, and mixes well with other Colours. It is got in great Quantity at ----- near *Rome*.

α. 30. *French Ochre*, yellow.

α. 31. Sent by the Name of Ochre. *Fort St. George*. Mr. Bulkley.

α. 32. *Terra Verde*, native, and in the very Condition wherein it is found in considerable Quantity, in the Mountain ----- in the Pope's Dominions, not far from *Rome*. It is somewhat unctuous, and adheres slightly to the Tongue. When scrap'd, and the finer Parts separated, and broken in a Mortar, 'tis ready to be made up with Oil for the Use of Painters, and makes the most true and lasting Green of any simple Body they use.

α. 33. Another Sample; from the same Place. This has a slight Cast of Blue in it. Mr. Howard.

α. 34. *Berg-Grün Germanis*, i. e. Mineral-Green. The Water that proceeds thorough the Drains forth of the Copper-Mines, near *Newsol*, in *Hungary*, abounds in Vitriol. This they frequently separate and crystallize, by putting Iron into the Water: and after the Vitriol is crystalliz'd, this *Berg-Grün* settles to the Bottom of the Vessels. Mr. Weber. This appears to be little different from the common *Terre Verte*.

α. 35. A reddish, brown, crusty Earth, used to colour the Walls of their Houses at *Fort St. George*. Mr. Bulkley.

α. 36. *East-Indian* red Earth, with Mica of white Talc in it for Painters.

α. 37. Red Earth, used by Painters. *East-Indies*. Mr. Edward Tarry informs me that this Earth is got, in great Quantities, in the Island of *Ormuz* in the *Persian Gulf*; and carry'd thence, in great Quan-

Quantities, to *Surat*, *Bengala*, and other Parts of *India*; where 'tis used in painting of Houses, Ships, &c. He observ'd frequently of this Earth adhering to the *Sal Gemma* brought from *Ormuz*: and therefore concludes they lay together in the Earth.

α. 38. Stone Colour: the finest red Earth from the *East Indies*.

α. 39. Red French Chalk, got at ----- in the *French-Flanders*.

α. 40. Another Sample more unctuous, and seeming to consist of Parts somewhat finer, from the same Place.

α. 41. White Tripely. *France*.

α. 42^x. Tripely, white with a Blush of Red, from the *Streights*.

α. 42. Tripely, white; brought with the former.

α. 43. Tripely. *Virginia*.

α. 44. Tripely. *Venice*.

α. 45. A soft, friable, talky Mass, glossy, grey with a Cast of Green. Out of the Lead-Mine, near *Widstahta* in *Sweden*. Mr. *Lethalier*.

α. 46. French Chalk. *Morocthus Dioscoridis*. *Meroctes Plinij*. 'Tis Grey, with a Cast of Green.

α. 47. Another Sample, paler.

α. 48. Another with a Brown Cast.

α. 49. *Lac Luna*. *Hamburgh*.

A R E N Æ.

Various Kinds of Sand: and other like Bodies

† α. 1. Brown Sand from the Isle of *St. Thomas*, near *Guinea*.

† α. 2. A yellowish Sand from the Shores of the Sea. *Guinea*.

† α. 3. Sand of a dark red Colour, near black. From *Newfoundland*. Mr. *Newman*.

† α. 4. Sand of a pale brown Colour. *Maryland*, Mr. *Vernon*. There were found in the Stratum of this Sand, a great Variety of Sea-Shells, several whereof are exhibited in the other Part of this Catalogue, *vid. § 121*. and there are some small Fragments of Shells among this Sand.

† α. 5. Very small Pebbles, Fragments of Coral, and of Shells, smooth'd and worn, by the Agitation of the Sea. Sent by Mr. *Cunningham*, under the Title of *Sand from the Isle of Ascension*.

† α. 6. A sandy Mass, found at the Surface of the Earth. *Fort St. George*. Mr. *Bulkley*.

S A X A.

Stones found in large Masses.

℄. 1. A Mass of Stone very close, firm, and compact, sent by the Baron de *Schonberg*, with the Inscription, *Silex durissimus luteus, cornuus Lapis dictus. Fribergæ in Saxonia. Gelber Hornstein*, i. e. yellow Hornstone. [It lies in Strata, as I am inform'd by Mr. *Weber*, who is a Native of *Hungary*, and has been long conversant in the Mines there, as likewise in those of *Saxony*.]

℄. 2. *Lapis Altenbergicus violas olens, in calore conspersus vina. Vialstein*. M. de *Scornberg*.

- C. 3. *Cryfocolla lapidea, ex Suitensium Alpibus.* D. Scheuchzer.
 C. 4. Oil-Stone, from *Luneburgh, Germany.*
 C. 5. Polishing Stone. *Luneburgh.*
 C. 6. Touch-stone.

M A R M O R A.

Various Kinds of Marble.

γ. 1. *Marmor atro-Gryseum, rubenti, carneo, & albo pulcherrimè variegatum.*

γ. 2. *Marmor nitidissimum, atro, candido, & viridi intus collucido insigniter variegatum.*

γ. 3. Marble, very hard, variegated with black and white. *Fort St. George.* Mr. Bulkley.

γ. 4. Porphyry, found, by *Henry Worsley*, in *Arabia Petraea*, at about 2 Miles Distance from the Granite, γ 5. and 6. There were many vast Strata; and indeed whole Rocks intirely of this Porphyry.

γ. 5. Granite, the Ground white, with a Cast of Red, spotted with Black. Found in *Arabia Petraea*, about 50 Miles from Mount Sinai, by Mr. *Henry Worsley*. There were many vast Rocks of this and the following Granite. He observ'd Strata of it, about 2 Yards in Thickness, lying one upon another. This is the true oriental Granite; and the two Obelisks at *Alexandria*, and that near *Grand Cairo*, are all of this sort of Stone: as are also the Obelisks at *Rome*, and all the rest he ever saw. The Tomb, or sepulchral Chest (of which he has a Piece) in the great Pyramid in *Egypt*, is of the same. He was told there were Quarries of it in the Upper *Egypt*.

γ. 6. Granite, the Ground white, spotted with a bright shining Black. From *Arabia Petraea*. Mr. *Henry Worsley*.

ALABASTRITES: & LAPIS-GYPSEUS.

Alabaster. All-Plaister.

δ. 1. *Alabastrites, ex Monte Legerio, Comitatus Badensis.* Helveti pro Gypso utuntur. D. Scheuchzer.

δ. 2. *Lapis Gypseus, ex fodinis Osterodensibus, Ducatus Hannoveriensis.* Dr. Leopold of Lubeck.

CALCULI: & SILICES.

Pebles and Flints.

ε. 1. Several Pebles, black, white, grey, and brown, cemented together into the same Mass, by means of Sand that is interposed betwixt them. There is of like sort in several Parts of *England*. This was sent me by M. *Valkenier*, from *Switzerland*, where there are many very vast Mountains constituted intirely of the like: as there are also in this Island.

- ε. 2. A Peble from the Shores of *Messina* in *Sicily*, grey, with small Holes in it, as if eroded by some Insect.
- ε. 3. A Peble, White and Brick-Colour. *Newfoundland*.
- ε. 4. A Piece of a greyish white Peble, sent by the Name of a *Firestone*, from *Fort St. George*. Mr. *Bulkley*.
- ε. 5. A white Peble, *Guinea*.
- ε. 6. Another from the same Place in *Guinea*. 'Tis wont to be powder'd and us'd there instead of Emery.
- ε. 7. A small brown plated Peble, brought from some Part of the *East Indies*.
- ε. 8. A brown Peble, *Fort St. George*.
- ε. 9. Small white Pebles, from the very Top of the Table-Mountain, at the Cape of *Good Hope*. Mr. *Cunningham*.
- ε. 10. A grey Peble with sparry parallel Veins. *Newfoundland*. Mr. *Newman*. [This is no Peble; it seems to have been worn and ground into this Form by the Motion of Water.]
- ε. 11. A semipellucid Peble, found (with many more) near *Hecla, Islandia*. Sir *Thomas Brown*.
- †ε. 1. A Piece of a crystallin Flint. *Virginia*.
- †ε. 2. A blackish grey Flint, little different from the *English*, sent for petrified Wood, from *Virginia*. Mr. *Bird*.
- †ε. 3. A brown Flint sent by Dr. *Kisner*, with the Inscription, *Lignum petrefactum ex Sylva Budingensi*.

TALCUM FIBROSUM.

§ 1. The fibrous talky Bodies.

ζ. 1. *Gypsum Striatum*. Mr. *Weber*, who is an *Hungarian* and has been long conversant in the Mines of that Country, and of *Saxony*, assures me, that this Kind is commonly found in the perpendicular Fissures of the Strata: and that it is the true white *Spaad* of the *Germans*. The same Sort is found in several Parts of *England*, and is used by our Silver-Smiths for casting. They likewise call it *Spaad*. This Specimen was sent by the Baron *de Schonberg*, with the Inscription, *Marmor metallicum album pellucidum. Mariebergæ in Saxonia. Weiser durchsichtiger Spaad, i. e. White transparent Spaad*.

ζ. 2. Another Sample, not differing from the former. Sent me from *Lubeck* by the very learned M. *a Mellen*, by the Name of *Spatum*.

ζ. 3. A fibrous talky Body sent by Dr. *Scheuchzer* of *Zurich*, with the Inscription, *Amianthus subviridis ex Rupibus Clavenna*.

ζ. 4. *Alumen Plumosum*. *Hamburgh*.

ζ. 5. *Lapis Amianthus, seu Asbestos, una cum Lino Asbesti, ex Cypro Insula*. There are 3 Samples of the Stone, with the *Linum* in it; that were all brought from *Cyprus*, and presented me by three several Hands.

ζ. 6. *Amianthus Hungaricus*. *Stein Flacks, i. e. Stone Flax*. M. *de Schonberg*. [It lies in small Veins, generally in the Iron Mines. Mr. *Weber*].

§. 2. The flakey or plated TALKY BODIES.

Talcum squamosum, seu foliaceum.

xz. 1. *Lapis specularis Plinii*. Isinglass, or Muscovy Glass; from *Russia*.

xz. 2. Another Specimen of the same Sort, from *Schneeberg*. Sent by the Baron *Schonberg*, with the Inscription, *Talcum Kalg, i. e. Kauk*.

xz. 3. Another of still the same Sort, from *East India*. Sent by Mr. *Bulkley*, with the following Account. *Tella Aburra-cum*. It is found by the Sea-Shore, and is a Sort of Selenites, and us'd commonly for such Purposes, as we do that.

xz. 4. *Lapis Specularis*. *Annaberga* in *Saxonia*. *Katzen Silber, i. e. Cat-Silver*. M. de *Schonberg*. [It is not quite so clean as the former.]

xz. 5. Talc, white with a Cast of Green, from *Carinthia*. Dr. *Edward Brown*.

xz. 6. *Talcum Veretum, foliatum, ex candido Viridescens*.

xz. 7. *Talcum album, foliaceum, in fluore siliceo candido à Gotinburga Suecia*.

xz. 8. *Talcum album foliaceum, in fluore candido*. *Virginia*. Mr. *Bird*. There adheres to it Fragments of the Pyrites.

xz. 9. *Talcum ejusdem omnino generis*. Hoc transmissit Dominus *Leopold*, sub nomine *Micæ Aschaffenburgicæ*, quinque Milliaribus *Francofurto* ad Mænum. *Glimmer, i. e. Cat-Silver*.

xz. 10. Talc, grey. Sent by the Name of petrified Wallnut-Tree from *Virginia*.

xz. 11. Talky, grey; found in Mount *St. Thomas*, *Fort St. George*, and call'd there *Collinara*.

xz. 12. *Lapis Talciformis, cinerej coloris propè Tigurim*. D. *Scheuchzer*.

xz. 13. Talc, sparkling; of a grey Complexion, in a reddish Stone. There is a Vein of a white striated, or fibrous talky Spar in it. From the *Rechen Mountain*, near *Franzendorf*, in *Bohemia*.

xz. 14. A brown Stone, thick set with small Spangles of silvery Talc. This is *Emery*, of the softer kind, us'd chiefly in grinding the Looking-Glass Plates: as likewise by Lapidaries, for setting and cutting Crystal, and the softer Stones.

xz. 15. A Talky Stone, flakey: and of a grey, glossy, Complexion. This is the *Emery* of the harder kind; us'd for polishing of Iron.

xz. 16. *Emery*, from *Smyrna*.

xz. 17. *Nella Corivindum* is found in Fields where the Rice grows. It is commonly thrown up by Field Rats, and us'd as we do *Emery*, to polish Iron.

xz. 18. *Lapis odore Violarum*. Vom. *Reifengeburge Viol-Stein, i. e. Violet Stone*, of the Giant Mountains. M. de *Schonberg*.

x 7. 19. A black foliaceous Talc, found at the Bottoms of Rivers. Fort St. George. Call'd there, *Abbara Com.* Mr. Bulkley.

x 7. 20. A foliaceous Talc, very black. The *Gentoo's* call it *Kistana Aburracum.* Fort St. George. Mr. Bulkley.

x 7. 21. A black, shining, stringy Talc; with one large Vein, and several lesser, of white Spar in it. Maryland. Mr. Vernon.

x 7. 22. *Mica Nigra*, found in a River near Fort St. George. Mr. Bulkley.

x 7. 23. *Mica nigra.* Found in *Arabia Deserta.* Mr. Worsely. Indeed the Granite found in this Country is a *Mica*, vid. γ. 5. and 6. *supra.*

x 7. 24. A brown sparry Body, thick set with Flakes of black Talc. From ----- in France. 'Tis used for the casting the Brass Plates of which the Wire is made: and abides the Fire better than any other Stone yet applied to that Purpose. 'Tis Part of a Stratum: and much resembles the Granite Marble.

x 7. 25. *Hema Aburracum.* 'Tis a Copper-Colour'd shivery Talc. It is variously prepar'd and us'd in Vertigos and Arthritick Pains. They dig 15 or 16 Foot deep for it. Mr. Bulkley. Fort. St. George.

x 7. 26. A yellow flakey Talc. Norway.

x 7. 27. Another like Sort, from a Hill above the Freshes of St. James's River in Virginia. 'Tis found in vast Quantity underneath a Bed of white Clay. Mr. Wafer.

x 7. 28. Another harder. Dr. Leopold. *Lapis Mica non multum dissimilis, Grunstein incolis dictus, non procul ab officinis ferrarijs Hasebyensibus in silva effoditur, & ad depurandam Venam Martis pistiformem incolis inservit.* Glimmer.

x 7. 29. A pale yellow Talc. Virginia. Mr. Bird.

x 7. 30. Grey Talc, with a Cast of yellow. From the Shores of Messina, Sicily.

x 7. 31. *Mica in Silice arenario, ex Sila Fluvio.* Dr. Scheuchzer.

x 7. 32. A shining foliaceous yellow Talc. Virginia.

x 7. 33. A yellow massy Talc, very ponderous. Fort St. George. Mr. Bulkley.

APPENDIX.

Selenites, & Affinia.

Talky plated Bodies, somewhat approaching the Constitution of the Lapis Specularis.

+ 7. 1. *Lapis Specularis Luneburgicus.* Dr. Kifner.

+ 7. 2. Another like Body. Out of the Grisons Country. M. Valkenier.

+ 7. 3. *Excrescentia Fribergæ in Saxonia.* M. de Schonberg. [Mr. Weber assures me, this is one sort of that Body that the Germans call *Spaat* or *Spaad.*]

§. 3. The Rhomboid Selenites.

+ 7. 1. A Mass compos'd of transparent parallel Plates, exactly of the Constitution of the *Selenites*: and breaking into Rhomboid

boid Plates. Found in Clay near the Surface of the Earth. *Fort St. George*. Mr. *Bulkley*; and call'd there *Corpore Salustii*.

†. & 2. A *Rhomboid-Selenites*. *Newfoundland*. Mr. *Newman*.

LUDUS HELMONTII.

The Waxen-Vein.

n. 1. A piece of the true *Ludus Helmontij*, found in the Place mention'd by that Author *, near *Antwerp*: and brought thence by his Son, *Fr. Merc. Van Helmont*, into *England*. He gave it to - - - and he to Mr. *Kemp*: of whom I had this Piece. 'Tis of the Colour mention'd by *Wormius* †; viz. a dusky brown. The Colour of it is somewhat darker than that of those found in *England* ordinarily is; otherwise the Stone is exactly of the same Constitution: and parted into *Tali*, by means of *Septa*, as ours are. Those *Septa* also consist of a talky Spar: and are compos'd of Plates striated across, like those of *England*. See the *Catalogue of the English Fossils*, Vol. I. Class IV. Part III.

n. 2. Another Piece, not different from the former; only the *Tali* are of a grey Colour: and the *Septa* of a paler talky Spar; so that this is in all respects exactly like those we commonly find in *England*. 'Twas found at - - - in *Germany*: brought over by *Fr. M. Van Helmont*: and given as his Father's *Ludus*, to Mr. *Foxcraft*, Fellow of King's-College in *Cambridge*. The latter gave it to Sir *Isaac Newton*, and he to me.

BELEMNITES.

The Thunder-Stone.

0. 1. *Belemnita ex Agro prope pagum Bleistorp in Districtu Neostadiensi*. Dr. *Leopold* of *Lubeck*.

0. 2. Fragments of the jointed Cones forth of the Conic Cavities of two *Belemnita*, sent by Dr. *Scheuchzer*, with the Inscription *Alveoli ex Comitatu Neosastrensi*. Confer. *Lithographiam Helveticam*. L. 7. p. 10. 8°.

0. 3. *Belemnites in Hammita ferrea, ex Raurica Valle*. Dr. *Scheuchzer*. Vide *Specimen Lithographia Helvetica*, p. 42.

0. 4. Two conic *Belemnita*, with *Stria* tending from the Surface to the Axis of the Body, of the same Constitution, and in all other respects like those of *England*. See the 1st Vol. of the *Catalogue of the English Fossils*, p. - - - & seqq.

0. 5. Three medullar, jointed Cones of *Belemnita*, exactly like those of *England*. See the *Catalogue of English Fossils*, Vol. I. § * 25. & seqq.

LAPIDES CRUSTATI.

The various Kinds of coated Stones.

1. 1. *Ætites Ochreo-ferreus*. 'Tis of a pale brown Colour. From *Basil*, *Switzerland*. M. *Valkenier*.

* *De Lithiasi*, C. 3. Sect. 28. p. 700.

† *Colore fuligineo, ad flavum vergente*. *Musæum*, p. 39.

1. 2. *Ætites Ochreo-ferrens*. 'Tis of a dusky brown Colour, near black. From - - - in France.

1. 3. Geodes, found near *Ferrara*, in *Italy*. *Agostino Scilla* sent it me.

1. 4. Geodes. From - - - in *Germany*.

1. 5. This is of the very same Kind and Constitution with that commonly found about *London*, lodged in the Clay us'd for making of Bricks. The Workmen call it *Race* or *Rance*. See the 1st Vol. of the *Catalogue of the English Fossils*, + o. 18. 'Twas sent by Dr. *Kisner* with the Inscription, *Osteocolia, ex Agro Hambergensi, duobus circiter milliaribus à Francofurto*. *Germanicæ Erdmannngen*, i.e. *Terra homunculus*.

1. 6. Geodes found in Clay, by *Sellbold*, a Town near *Hanover*. It differs not from the *Rance* found in the Brick-Clay-Pits about *London*: only 'tis somewhat more white, and of a finer Constitution. Dr. *Kisner*.

1. 7. A Cylindrick Body, externally of a pale brown Colour, compos'd of numerous very thin Crusts, alternately of a paler and deeper Brown. In the middle is a Cylinder of a coarse cretaceous Matter, white, with a blush of red. This is the *Phallus* or *Priapus Lapidens* of the Germans. Mr. *Doody*.

CORALLOIDEA.

Fossil Coralloid-Bodies.

κ. 1. Several Joints of a Coralloid-Body, having its Surface thick set with *Striae* running all parallel and longways. Sent by *Agostino Scilla* from *Sicily*, with this Inscription, *Corallo articulato, copiosissimo, per tutte le Rocche e Colline di Messina*. He has publish'd an Icon of it in his *Lettera circa i Corpi marini petrificati*, 4^o. Tab. 21. Fig. 1. 'Tis the same with that delineated by *S. Ferrante Imperato*. *Histor. Natural.* pag. 628. under the Title of *Corallo articulato*; which he procur'd from the Island *Majorca*.

κ. 2. A large Piece of the same sort, appearing like the Base or Root of a Coral. *Agostino Scilla*, Tab. 21. Fig. 2.

κ. 3. *Corallo fistoloso, che in Abondanza si vede nella Colline di Messina*. *Agostino Scilla*, Tab. 20. Fig. 2. 'Tis a Coral of the *Porus* kind: and seems to be describ'd by *J. Bauhin* under the Name of *Corallium geniculatum album*, L. 39. l. 24. Vide *S. Ferrante Imperato*, p. 628.

κ. 4. *Porus coralloides Fossilis*. From *Maryland*.

κ. 5. *Porus coralloides Fossilis*, somewhat different. From *Maryland*.

κ. 6. *Porus coralloides Fossilis*. Another Species having the starr'd Pori larger, more cavernous, and standing closer together. *Maryland*.

κ. 7. Sent by *Agostino Scilla*, with the Inscription, *Milleporus petrificati delle quale si fa Pietre Stellarie*. 'Tis not describ'd in his Book, he having not found this Body, till after that was printed.

κ. 8. The Honey-Comb-Stone. Dug up in the Island of *Barbadoes*, and given me by *Benjamin Middleton*.

κ. 9. *Milleporo*, trovati con infiniti altri corpi di Mare fra Terra nel Capo della Città di *Millazzo*. *Agostino Scilla*, Tab. 17. β.

κ. 10. This beautiful *Corallin Astroites* was sent me by *Agostino Scilla*, with the Inscription, *Milleporo trovato nella Colline di Messina*. This was found since he wrote his Book: and is not described there.

κ. 11. Pieces of a sort of *Coralloid Porus* in a soft Stone. Found in the Rocks near *Messina*, Sicily. By - - - Surgeon.

κ. 12. Another, from the same Rocks. By - - - Surgeon.

κ. 13. Sent by *Dr. Scheuchzer*, with the Inscription, *Rhizoides, seu Radicem referens Lapis nondum descriptus ex Comitatu Neocesarensi*.

κ. 14. A *Mycitites*, round, flat, near three Inches in Diameter; with a sharp Peduncle arising out of the middle of it. Found near *Schaffhuse*, Switzerland. *M. Valkenier*.

κ. 15. *Branchiali congener Columellus striatus: sive Bryonia lapidea Plotij*. *Dr. Scheuchzer*. Vide *Lithologia Helvetica Specimen*. p. 43. f. 58. ex *Birsa flumine*.

κ. 16. *Alcyonium Fossile ex Monte Randio Scaphusianorum*. *Dr. Scheuchzer*.

κ. 17. *Alcyonium Stupposum Imperati*. *Dr. Scheuchzer*. *Lithographiæ*, p. 15. f. 19.

κ. 18. *Corallij Fossilis cortex reticulatus, ex Monte Legerio*. *Dr. Scheuchzer*, *Lithographiæ*, p. 14. f. 17.

κ. 19. *Mycitites*. Sent me by *Agostino Scilla*, it is not describ'd in his Book.

κ. 20. *Mycitites ex Agro Mantuano Italiae*.

κ. 21. *Mycitites ex Agro Bononiensi*. 'Tis the *Fungites* of *Dr. Plot*, in his *Natural History of Staffordshire*. Tab. 12. f. 4.

κ. 22. This curious mineral *Mycitites* was sent me by *Agostino Scilla*. It seems to be his 2d *Poro*. Tab. 14.

CRYSTALLI & FLUORES.

Incrustations, Stalactitæ, Stalagmitæ, Crystals, and Spars.

λ. 1. A sparry Incrustation made by the Water of the Baths of *Eisenback*, near *Schemnitz*, in *Hungary*, upon the wooden Planks on the Sides of the Baths. It grows so fast, that they are constrain'd to change and renew the Planks yearly.

λ. 2. A sparry Incrustation, somewhat coarser than the former; ex *Thermis Badensibus*. *Dr. Kifner*.

λ. 3. An Incrustation, out of the Pipes that convey the Water into the Baths of *Buda*, brought thence by *Dr. E. Brown*.

λ. 4. White Spar, from the Sweating-Bath at *Glaßfitten*, in *Hungary*. *Dr. Brown*.

λ. 5. *Fluores Selenitici, octaedri, & hendecaedri, lentibus ferè similes, quorum hedra tres in Pyramides oppositas coeunt, reliqua latera claudunt.* In marmore nigro ad *Thermas Fabarias*, Dr. *Scheuchzer*.

λ. 6. In Marmore nigro *Fabariano, Frumentalis Lapidis, Imperati Vestigia.* Dr. *Scheuchzer*.

λ. 7. *Silex rutilus in vena cinerea, Fribergæ in Saxonia.* *Rothur Hornstein*, i. e. Red Hornstone. M. de *Schonberg*.

λ. 8. A white Spar, like that of the Lead-Mines near *Worksworth*, in the *Peak*. See the *Catalogue of English Fossils*, f. N^o ----- It breaking into Rhomboid Figures. From the *Grifons Country*. M. *Valkenier*.

λ. 9. A Spar sent by Dr. *Scheuchzer*, with the Inscription *Selenites Rhomboidalis cujus fundo ascendit nebula*, *Lithographiæ Helveticæ*, p. 49, 53. Fig. 73. *Ex Crypta Montis Gamor*. This, and the following, are of the same sort of Spar; and 'tis common also in the *Peak*, and in the *Yorkshire Lead-Mines*. They call it *Spiegel Spah*.

λ. 10. *Selenites Rhomboidalis venis nigricantibus.* Dr. *Scheuchzer*, *Lithographiæ Helveticæ*, p. 49. f. 71, 72.

λ. 11. *Selenites Rhomboidalis, in Lapide calcario juxta Moguntium reperiundus.* Dr. *Kisner*.

λ. 12. A Spar, in some parts flakey, in others stringy; white, with a Cast of yellow. From a Mountain in the Territory of *Zurich*. M. *Valkenier*.

λ. 13. *Tella Convindum.* *Fort St. George.* Mr. *Bulkley*. 'Tis a talky Spar, grey, with a Cast of green. It is used to polish Rubies and Diamonds.

λ. 14. *Lapis Bononiensis Phosphorus.* It seems to be a grey talky Spar. Being broke lengthways, it is fibrous; but, when broke across, the Fibres smooth and plain. From the Place where this Body is commonly found, viz. in a River, at the Foot of the *Appennine Mountains*, about 3 Miles from *Bononia* towards *Fierenza*. *Lap. Bonon. ejusq; Vires lucida, primo detecta à Vinc. Casciorolo Chymico, in Monte Palerno, circa Bononiam post Pluvias ingentes, reperitur.* Chr. *Menkelij Lap. Bonon.* 12^o. p. 31. *De Fig. Magnit. & Constitutione Lap. Bon.* ib. 49. *De Preparandi modo,* p. 59. *Conf. Chymie de M. Lemery* ----- & *Epist. Marsiglij, Act. Erud. An. 97.* p. 404.

λ. 14^x. Part of another *Bononian-Stone*, that was round, and composed of Fibres passing from the Surface to the Center, much like some of the vitriolick *Pyritæ*. From the same River.

λ. 14[†]. Another, glossy and shining, as the two former are, but not seeming to be so fibrous. Out of the same River, and indeed it seems to have been worn by the Agitation of the Water.

λ. 15. *Coppoora Sillagitto*, is good against the Stone, Gravel, and stoppage of Urine; but it must first pass a difficult and tedious Preparation. Mr. *Bulkley*. 'Tis only a white talky Spar.

λ. 16. *Stalactites ex albo rubens, è Metallifodinis Rhetia, Sinter Fossoribus Germanis vocatur.* Dr. *Scheuchzer*.

λ. 17. A white sparry Stalactites, compos'd of Crusts one upon another; *ex agro Tigurino*. *M. Valkenier*. 'Tis in Constitution, and all other respects, exactly like ours in *England*. See the *Catalogue of English Fossils*, f. N° --- *Dropstein*.

λ. 18. Stalactites. 'Tis of the Colour and Constitution of the Pumices, as they are call'd, that are very common all over the Island of *Tenarisse*, where this was found hanging down from the Vault of a Grotto.

λ. 19. *Un Sasso, che un tempo fu stanza di Vermine marine di Calabria*, *Agostino Scilla*, Tab. 15. This Gentleman was very fond of having almost all the figured Fossils he met with of Marine Origin. This he thinks a Cluster of marine *Vermiculi*. 'Tis certain it is not such; nor are there any *Vermiculi* that resemble these. Indeed 'tis apparently no testaceous, but a stoney or coarse sparry Substance, not unlike the former; and seems to have hung or grown sideways to a Rock, like the *Stalactitæ*, and other analogous Bodies.

λ. 20. A Stalactites, consisting of several Incrustations of a coarse white Spar. Found, with many more, hanging down from an Arch of a Cloyster lately built in *Lisbon*. *Mr. Francis Taylour*. There are frequently found like Bodies hanging down from Arches of Stone-Bridges all over *England*.

λ. 21. A sparry Incrustation upon some vegetable Stems, sent by *Dr. Leopold*, with the Inscription, *Osteocolla Hassiaca, prope Giessam, Academiam celebrem, reperitur*.

λ. 22. A florid, sparry Incrustation upon some vegetable Bodies. Sent by *Dr. Leopold*, with the Inscription, *Stalactites ex specu Baumanniana in Ducatu Lunenburgensi*.

λ. 23. A white sparry Incrustation upon Moss, with *Stalactitæ*, very fine, hanging down from it. *Ex agro Tigurino*. *Mr. Valkenier*.

λ. 24. *Musculus petrifactus prope Braubacum reperiundus, non procul à Thermis Emesensibus*. *Dr. Kistner*.

λ. 25. A sparry Incrustation upon Moss, very much like that found in the Dropping-Well at *Knaresborough* in *Yorkshire*, in the Springs in some Parts of *Oxfordshire*, *Northamptonshire*, &c. Sent by *Dr. Leopold*, with the Inscription, *Musculus Lapideus prope Jenam repertus in Rivulo qui ex fonte Principis vulgo dicto derivatur, Germanicè der Furstenbrunnen*.

λ. 26. A sparry Incrustation upon Leaves, sent by *Dr. Scheuchzer*, with the Inscription, *Tofus cui folia Quercus, Fagi, Alni, &c. sunt impressa, à Pago Stallicon, Ditionis Tigurina. Vide Miscellanea curiosa, An. 1697. Append. p. 66.*

λ. 27. Another like Incrustation. From the same Place. *M. Valkenier*.

λ. 28. *Osteocolla Officinarum*. From *Hamburgh*. All the *Osteocolla* of the Shops is fistulous, and a mere marley Incrustation.

λ. 29. Sent by *Agostino Scilla*, with the Inscription, *Animale marino curiosissime petrificato. Messina*. It is not described in his Book.

λ. 30. Sent by *Agostino Scilla*. 'Tis an Incrustation upon a tur-
binated Shell; the like frequently happens upon Shells, Sticks, &c.
in petrifying Springs, Rivulets, &c. Vide The Natural History of
the Earth, p. ---

λ. 31. *Stalagmita*. From a Spring in ----- one of the
Canary Islands.

λ. 32. *Confetti di Tivoli*.

λ. 33. *Argentum nigrum in Silice candido*. *Fribergæ in Saxonia*.
Schwartz. Silber Ertz in weissen Quartz; i. e. Black Silver-Ore in
white Quartz. M. de Schonberg.

λ. 34. *Fluor Crystallinus trigonus*. Vid. *Specimen Lithographia*
Helvetica, p. 29. *Saccharum candidum referens*. Ex *Lapidina*
Oeningensi. Dr. Scheuchzer.

λ. 35. *Fluor Crystallinus trigonus*. Ex eadem *Lapidina*. Dr.
Scheuchzer.

λ. 36. Sent by Dr. Scheuchzer, with the Inscription, *Fluor crys-*
tallinus trigonus, striis lateribus pyramidis cujusq; parallelis pulchre
notatus. Repertus prope *Lithopolim*. Vid. *Specimen Lithographia*
Helvetica, p. 29. f. 41.

λ. 37. *Excrecentia*, *Fribergæ in Saxonia*. M. de Schonberg.

λ. 38. Crystals, small, growing in the Inside of a concave flinty
Nodule, sent by *Agostino Scilla*, with the Inscription, *Ingemma-*
mento in un Diaspro cavato nelle Miniere di Trapani in Sicilia.

λ. 39. *Excrecentia*. *Fribergæ in Saxonia*. M. de Schonberg.

λ. 40. *Excrecentia multangularis*, *Ehrenfreiderdorff in Saxonia*.
M. de Schonberg. *Vieleckigtes Quartz gewachse*, i. e. Multangular
Quartz-Excrecence.

λ. 41. A white crystalliz'd Spar. *Virginia*. Mr. Bird.

λ. 42. *Crystallus, ex Alpibus Tigurinis*, Sprig-Crystal. Dr. Scheuch-
zer.

λ. 43. *Crystalli candida*, *Eibenstock in Saxonia*. *Dursichtige Weise*
Quartz Strahlen; i. e. transparent, white, radiated Quartz. M. de
Schonberg.

λ. 44. *Crystallus marmore Metallico albo circumdata*. *Ehrenfrie-*
derdorff, in Saxonia. *Strahlichter Quartz Crystall mit umbwach-*
senen weissen Spad; i. e. radiated Quartz-Crystal, environ'd with
white Spad. M. de Schonberg.

λ. 45. Crystals in a Cluster, as arising from the Stone of a Fis-
sure, in which they grew. One of the Shoots has a mossy Ap-
pearance in it. *Newfoundland*. Mr. Newman.

λ. 46. Crystals in a Cluster, but less. *New-England*. Mr. Bridger.

λ. 47. *Adamantes Pribornenses Silesia*. *Reperiuntur in loco are-*
noso. Dr. Kifner.

λ. 48. Two small transparent Crystal Shoots. One of them has
a slight Cast of green. From *Newfoundland*. Mr. Newman.

λ. 49. Four small Crystal Sprigs. *New-England*. Mr. Noyes.

λ. 50. An hexangular Column of Crystal, 3 Inches in Length,
and $\frac{4}{10}$ of an Inch in Diameter; terminating at each end in an
hexangular Pyramid. Dug up near *Turin*. Mr. Jackson.

λ. 51. *Pseudadamantes Alpini*, διαφύκεις, *bedris lateralibus & pyramidalibus præditi*. Ex Monte Aubrig Suitensium. Dr. Scheuchzer.

λ. 52. *Crystalli exiguae, ex Alpbibus Tigurinis*. These were sent me by the learned and ingenious J. H. Hottinger, M.D. of Zurich, Author of the *Dissertatio de Crystallis*, 4^o. Tiguri 1698, which he presented me along with these.

λ. 53. *Pseudadamantes Alpini bedris lateralibus carentes, vel paucis & angustis, præditi*. Ex Monte Aubrig Suitensium. Dr. Scheuchzer.

λ. 54. *Crystalli, αμφύκεις puriores; sive Pseudadamantes, ex Albrig Monte excelsio*. Dr. Scheuchzer.

λ. 55. Four Pieces of Peble-Crystal, with mossy Appearances in them.

λ. 56. *Adamus Bohemicus, ex ipso fonte Albis*. Dr. Kifner.

APPENDIX I.

Crystals and Spars tinged with various Colours, by means of metallick and mineral Matter that is incorporated with them.

Crystalli & Fluores Coloribus tincti.

† λ. 1. *Marmor Metallicum rubicundum pellucidum. Marieburgæ in Saxonia. Rother durchsichtiger Spaad. M. de Schonberg; i.e. red transparent Spaad.* [They use both this, and the white Spaad, or common Lime, where Spaad is not to be got, as an Absorbent of Sulphurs, in running the Silver and Copper-Ores, all over Germany and Hungary, at the great Smelting-Works. It grows in Veins. This is the true red Spaad. Mr. Weber.

† λ. 2. *Lapis calcarius Luneburgicus ex albo & rubro ingemmatum.* Dr. Kifner. 'Tis a pale red Spar.

† λ. 3. *Fluor purpureus. Annabergæ in Saxonia. Brauner-Fluß, i.e. Brown Spar. M. de Schonberg.*

† λ. 4. *Fluor purpurascens. Schwarzburg, in Saxonia. Bleaun Greussen; i.e. Blue Greussen. M. de Schonberg.*

† λ. 5. *Crystallus hexagona Mica Viridi adpersa. Ex Alpbibus Uriis.* Dr. Scheuchzer.

† λ. 6. *Excrefcentia. Fribergæ in Saxonia. M. de Schonberg.*

APPENDIX II.

Crystals and Spars, having various metallick and mineral Efflorescencies concreted together with them.

Metalla & Mineralia Fluoribus & Crystallis adnata.

* λ. 1. A Spar, white, compos'd of trigonal Shoots, striated as if compos'd of other less subordinate Shoots, very glossy, arising out of a yellow brassy Marcasite, which is affix'd upon a Plate of grey Spar, that appears to be parted from the Stone of a Fissure of a Stratum. 'Tis a very wonderful beautiful Body. From Hannover. M. Valkenier.

* λ. 2. A white Spar, compos'd of parallel Plates, bright, shining and glossy, with Efflorescencies of yellow shining Marcasites upon it. 'Tis a Body extremely beautiful and fine. From *Hannover*. *M. Valkenier*.

* λ. 3. Another like Body, sent by Dr. *Kisner*, with the Title of *Flores Cupri aspersi* [*Germanis Angeflogen*] *ad Spadum ex albo rubescentem*.

* λ. 4. A white crystalliz'd Spar, with Efflorescencies of a bright, shining, brown Spar, Lead-Ore, and of Marcasite. The whole very fine. From *Hannover*. *M. Valkenier*.

* λ. 5. *Excrescentia Crystallorum parvarum rubri Coloris, cum particulis Pyritidis. Fribergæ in Saxonia. Rothe Quartz-strahlen mit Kies; i.e. red radiated Quartz, with Marcasite. M. de Schonberg.*

* λ. 6. *Excrescentia. Fribergæ in Saxonia. M. de Schonberg.*

* λ. 7. *Excrescentia Silicum, cum particulis Lapidis sulphureosi. Fribergæ in Saxonia. Quartzgewachse mit unterwachsenen gelben Kies; i.e. Quartz-Excrescence, with yellow Marcasite grown under it. M. de Schonberg.*

* λ. 8. White Spar, with Efflorescencies of a yellow shining Marcasite upon it. *Trouvé proche de la source du Rhin, dans le Rhinwalde, qu'on appelle Rhenus posterior. M. Valkenier.*

* λ. 9. *Excrescentia Quartz. Fribergæ in Saxonia. M. de Schonberg.*

* λ. 10. *Excrescentia Silicum cum Minera Arsenici, argentei Coloris. Quartzstrahlen mit eingewachsenen Arsenicalischen Kies; i.e. radiated Quartz, with Arsenical Marcasite grown in it. M. de Schonberg.*

* λ. 11. Spar, pretty transparent, and crystalliz'd, with some Fragments of Lead-Ore adhering to it; found in a perpendicular Fissure, about 300 Foot deep, in the Lead-Mine at *Clausthall, Hannover*. *Mr. Belchior*.

G E M M Æ.

Gems, and other Stones commonly ranked along with them.

μ. 1. *Lapis Lazuli. From Gomroon, in Persia. The Ground a white Spar, with Veins and Spots of a fine high ultra-marine Blue. There are in it also very numerous Micæ, of white silvery Talc; others of a yellow brassy Hue, and others of a reddish or copper Colour: these last being either a sort of golden Talc, or else a Marcasite. This was cut off of a larger Mass; the whole weigh'd near two Pounds. 'Twas of a roundish Shape, somewhat flattened: and not invested with any Crust. It had been rubb'd and smooth'd externally; the Surface, as this Sample shews, exactly resembling that of those Fragments of Marble, and other like Bodies, that have been worn round, and smooth'd, by the Agitation of the Sea and Rivers.*

μ. 2. *Lapis Lazuli. 'Tis very hard and compact, having in it, besides the Blue, Veins and Spots of Green. This was brought from Ispahan in Persia, but suppos'd to be got in Tartary.*

μ. 3. *Lapis Lazuli*. The Ground Spar, of a pale brown Colour, near white, spotted with a bright ultramarine Blue; and having in it several Grains of Marcasite, of a reddish or copper Colour.

μ. 4. *Lapis Nephriticus ex septimo Monte Rhetia*. Dr. Scheuchzer.

μ. 5. *Heliotropium*. The Blood-Stone.

μ. 6. An Agat, cut so as to shew the interior Parts, where the Ground appears to be of a fine, transparent, corneous Grey, having various white Crusts, one within another: 'Tis cover'd outwardly with a Cortex of a red Colour; the exterior Surface of which is scabrous and rough, exactly like the Surface of the Flint: of which kind this Body is. From - - - - - in the *East-Indies*.

μ. 7. A Plate of an Agate, large, and finely variegated.

μ. 8. A *Mocha*-Stone, with Delineations of Shrubs.

μ. 9. *Achatæ diversorum Colorum*. Coblentz. M. de Schonberg.

μ. 10. *Chelidonium mineralis, ex Monte Doronaz, Ditionis Bernensis*. Dr. Scheuchzer.

μ. 11. *Chalcedonium Zwickaviensis*. Chalcedon. M. de Schonberg.

μ. 12. *Aqua Marina Eubenstockensis*. *Aqua Marin*. M. Baron de Schonberg.

μ. 13. *Molochites purpurea cum Crystallis albis*. Ehrenfreidersdorff in Saxonia. Brauner Molochit mit durchwachsenen weissen Quarzstrahlen; i. e. brown Molochite, with thorough-grown white radiated Quartz. M. de Schonberg. This, in some parts, has a Cast of Green; in others, of Purple.

μ. 14. *Excrescentia Silicum cum purpurea Molochite*. Ehrenfreidersdorff in Saxonia. Durchsichtige Quarzstrahlen mit braunen Molochiten; i. e. Transparent radiated Quartz, with brown Molochite. M. de Schonberg.

μ. 15. *Molochites lutea, cum Crystallis minutis obducta*. Ehrenfreidersdorff in Saxonia. Gelber Molochit mit durwachsenen weissen Quarz-strahlen: i. e. yellow Molochite, with thorough-grown, white, radiated Quartz. M. de Schonberg. This has, on one side, a slight Cast of Green; but the greater part is Yellow.

μ. 16. *Molochites cerulea*. Ehrenfreidersdorff. Blauer Molochit: i. e. blue Molochite. M. de Schonberg. This is chiefly of a Purple-Colour; but, in some parts, has a faint Cast of Green.

μ. 17. *Molochites viridis*. Mariaberg in Saxonia. Gruner Molochit: i. e. Green Molochite. M. de Schonberg.

μ. 18. *Malachita Tyrolensis*. Dr. Scheuchzer.

μ. 19. *Topasius Altenburgicus*. Topas. M. de Schonberg.

μ. 20. *Topasius Eibenstockensis*. M. de Schonberg.

μ. 21. *Pramnion super Lapidem luteum*. Eibenstock in Saxonia. Schwartzte Crystallen über gelb gestein: i. e. Black Crystal, upon yellow Stone. M. de Schonberg.

μ. 22. An Emerald and Amethyst, in one Stone.

μ. 23. *Amethystus Walkensteinensis in Saxonia*. M. de Schonberg.

μ. 24. Oriental Amethysts, native, only drill'd.

μ. 25. Oriental Granates, native, only drill'd.

μ. 26. Granates. Mr. Colchester.

α. 27. A Granate, large, but foul, the Figure extraordinary. New-England. Mr. Bridger.

μ. 28. *Lapis Granatus*, è Bohemia. *Granaten erdte*: i. e. native Granate. M. de Schonberg.

Lapides Venarum; seu materia lapidea varia in Venis Metallicis alijsque stratorum Saxeorum Fissuris, reperta.

VEIN-STONES.

Sales, Salts.

v. 1. *Sal Ammoniacum nativum ex Solfaterra Regni Neapolitani*. D. Scheuchzer. Ejicitur etiam ex Montibus Vesuvio & Ætna. Convenit hoc Descriptioni D. Boccone Recherches Naturelles p. 47. quod coloris sit Crocei. Reperitur etiam citrini, & nonnunquam albi coloris. Hoc, cum sit volatile, nares halitu spirituofo ferit.

v. 2. *Tincal Persarum*, ex quo Borax conficitur.

v. 2^x. Tincal native, as digg'd up, in the Island of Borneo. The Indians of Bengal call the Mineral, out of which Tincal is refin'd, Swagar. There are great Quantities brought down the Ganges; but from what Country I cannot learn.

v. 3. Rock-Salt of a dusky grey Colour, dug up not far from the Euxine Sea: and brought thence by Mr. Clarke a Surgeon.

v. 4. A brown Earth, out of which Nitre is extracted by the Natives. It lies at the Surface. Fort St. George. Mr. Bulkley.

v. 5. *Flos Ferri nativi*, out of an Iron Mine in Carinthia. Dr. Edward Brown. 'Tis a Salt, very fine and white: Part of it of a flakey, and Part of a fibrous Constitution. Applied to the Tongue, it chills it like *Sal Prunella*, and has a Smatch of bitter; so that there seems to be Nitre in it.

v. 6. *Lapis fissilis ex quo Alumen, Sulphur, & Vitriolum excoquitur à Reichenbach in Saxonia*. Scieter, so Alaune, Schwefel und Vitriol gibt, i. e. Shiver that yields Alum, Sulphur and Vitriol. M. de Schonberg.

v. 7. *Lapis fissilis nigricans, Alumine pragnans*. Invenitur in Scania propè Eliarid, duo milliaria cum dimidio Ystadio distantem pagum. Rupicida illud non ex concameratis cuniculis, ut in Metallì fodinis fieri solet, sed ipsius montis lateribus, apertò undique cœlò, mucronatis ligonibus, vel alijs instrumentis, excindunt. Hæ Lapides ita excisi, ac in conicos acervos super ligna congesti valida aluminis vi subiguntur, usque dum magis friabiles reddantur. Postquam verò refrixerunt, in amplissima vasa lignea quadrata feruntur, ubi aqua frigida affusione debita eousque macerantur, donec lixivium ita quoddam ex ijs extrahatur. Hoc lixivium ita paratum ingentibus lebetibus in officinis aluminariis exstantibus infunditur, ubi magna aluminis vi ulterius castigatur donec maxi-

mè effervescat. Deinde vero per canales in hunc usum adornatos in receptacula quadam ex lignis confecta deducitur; in quibus postea in alumen minutum, quod Aluminarij Saffian vocant, congelascit & concrefcit. Ultimo vero, secunda vice hoc minutum alumen collectum lebetibus infertur, ac denuo coquitur; tandemque peracta coctione resolutum deducitur rursus per canales in ampliora vasa lignea rotunda, in quibus tandiu relinquitur frigesactum consistentiam debitam nanciscatur. Et hic est usitatus in Scania Alumen preparandi modus. Dr. Leopold.

v. 8. Lapis aluminarius calcinatus. Dr. Leopold.

v. 9. A Salt of a very pale brown Colour, near white, found in scabrous Masses, some of the Bigness of a Chesnut, others larger; having a very sharp styptick Taste, in some Parts like that of Alum, in others like that of white Vitriol. Dug up in Virginia. Mr. Byrd.

v. 10. Vitriolum album nativum, à montibus circa Sylvaniam Agri Romani. Hujus salis varias passim Massulas ex Rivulorum Aquis, solis astu elicitas observavit M. Ol. du Mont. Who gave me this.

v. 11. Vitriolum album nativum. From the East-Indies, where it is commonly call'd by the Natives, Moordar Singy. Fort St. George. Mr. Bulkley.

v. 12. Vitriolum album nativum Goslarie. Dr. Scheuchzer.

v. 13. Vitriolum nativum album striatum. From the Gold Mine of Cremnitz in Hungary. 'Tis found along with the striated Antimony and the Gold-Ore, about 300 Fathom deep. 'Tis very white when first taken forth: and the Striæ, or rather Threads, run a-cross the Veins.

v. 14. Vitriolum nativum album striatum, viridi leviter tinctum. Ex fodina Schemnitz Hungaria. M. Oliv. du Mont.

v. 15. Vitriolum nativum viride Hassiacum. Dr. Leopold.

v. 16. Vitriolum nativum viride. Ex Aurifodinis Hungaria juxta Cremnitz. 'Tis found thus in great Quantities in the Veins: sometimes shot into angular Figures: and frequently hanging down in Form of Stalactitæ. This Vitriol, that is green, is only found in those Veins where the Ore has in it Iron together with the Gold. Whereas the native white Vitriol of the Gold-Mines near Cremnitz, is found only in those Veins that contain no other Metal besides Gold. In the Copper-Mines of Neijssol in Hungary, in the Veins along with the Copper-Ore is found blue Vitriol in Form like this: and sometimes shot into angulated Figures, and into Stalactitæ; both of a fine Sapharine blue Colour.

v. 17. The Stone on which the natural Vitriol shoots in the Mines of Schemnitz in Hungary. Dr. Edward Brown. 'Tis of a dusky grey Colour: and has in some Parts, green Vitriol, in others a yellow sulphureous Efflorescence concreted upon it.

v. 18. Native green Vitriol out of the Silver-Mine of Schemnitz in Hungary. Dr. Edward Brown.

v. 19. Native green Vitriol. Brought from Goslar by M. Ol. du Mont.

v. 20. *Vitriolum ex vena juxta Lacum Tigurinum.* 'Tis green, in some Parts, in others blue; and shot into angulated Figures of different Forms. Dr. Scheuchzer.

v. 21. Native blue Vitriol. *Cyprus.* M. Ol. du Mont.

v. 22. *Vena Vitrioli, ex Alpibus in Ditione Suitensi.* Dr. Scheuchzer.

Bituminosa. The Bituminous Fossils.

§. 1. The true Bitumen of *Judea*, brought from the *Lacus Asphaltites*, or the Dead Sea, by Mr. Henry Worsely. On the Shore of the Lake Asphaltites, or the Dead Sea, we found a black Sort of Pebbles, which, held to a Candle, burns and yields a Smoak of an intolerable Stench. They lose of their Weight, but not of their Bulk, by burning. The Hills bordering on the Lake abound with this sort of sulphureous Stones. I saw Pieces of it 2 Feet square, black, and taking a Polish like Marble. The Bitumen is gather'd near the Mountains in great Plenty. It exactly resembles but has a sulphureous Smell and Taste. Maundrell's Journey from Aleppo to Jerusalem. p. 82, 83.

§. 2. The yellow Prussian Amber, having Flies in it.

§. 3. Amber with a greenish Cast, from the Shores of the Island of *Jamaica*.

§. 4. Several small Nodules of Amber, found amongst a great Number of others, and some larger, upon the Shores near *Tangier*. I remember, Sir Henry Sheers told me, that at the demolishing the Mole there, several Rocks were torn and blown up: in which he observed Pieces of Amber lodged. Mr. Robert Ball has a Piece of it; and as I remember, actually lodged in a Piece of Stone. This is an additional Proof that Amber is as much a real Fossil as Flints, and the other Nodules are: and that the Sea serves, by its Agitation, only to fetch it forth of the Cliffs, and uncover it. See *The natural History of the Earth*, 2d Edit. Part IV. p. 217. and seqq. Those of them which are cut, appear to be of a yellow Colour, with a Cast of Green. But they are invested outwardly with a Crust, scabrous, and rugged: of a dusky brown Colour externally, and red within; which makes those, that have it yet on, appear to be of a reddish Colour.

§. 5. *Carbo Petra Halæ Magdeburgensis.* Stein Kohlen, i. e. Stone Cole. [It lies in Beds, *Stratum super stratum*, in great Plenty 20 Fathom deep. They burn it commonly. There are other Coal-pits at *Isleb*, at the Distance of 4 Miles from *Hall*. Mr. Weber.] 'Twas sent me by M. de Schonberg.

Mineralia Metallis affinia, Metallick Minerals.

SEC. T. I. *Cinnabaris, seu Minium verum nativum.* Cinnabar.

o. 1. Cinnabar of a brown or tawney Colour, thick set with very small shining Sparks. From *Augsburg*. Sir Isaac Newton. It has but little Quick-Silver in it: but may hold about $\frac{1}{8}$ Silver, with a little Gold.

Mm 2

o. 2.

o. 2. Cinnabar of a black Colour, holding Quick-Silver and Silver. From *Georgenstadt* in *Saxony*.

o. 3. *Vena Mercurij Carinthiaca*. Dr. *Scheuchzer*.

o. 4. *Vena Cinnabaris, cum fluore atro-rubente*. Ex *Hungaria*. *M. de Schonberg*.

o. 5. *Cinnabaris Hungarica*. *Zinnober-Ertz*. *M. de Schonberg*.

o. 6. *Anthrax, five Vena Minnij Schemnicensis Hungarica, cum Fluore & Marcafitâ juncta*. Dr. *Leopold*. There is also in this Mass, Lead-Ore holding a little Silver. About *Rosenburg* in *Hungary*, is the most considerable Tract of all *Europe* for Cinnabar. It is found upon the Sides of great Hills. The poor People collect it after Rains, which clear and uncover it. It lies chiefly in a whitish sparry Stone: and sometimes in Sand-stone. At *Bartfeld*, and *Seben* in *Upper Hungary*, they sink Mines for Silver and Cinnabar. They are incorporated in the same Mass: and lie in Bellies, but run likewise into Strings.

o. 7. *Cinnabaris cum fluore albo juncta*. *Fryberga Misnia*. Dr. *Kisner*.

o. 8. *Minium nativum, Aurum continens, cum fluore mixtum*. Ex vena trium Regum *Fodini Schemnicensis* in *Hungaria*.

o. 9. A Body compos'd chiefly of white Spar, but having some Cinnabar, and Marcasite, along with it. Upon Trial, besides Mercury, it yields some Silver: and is a sort of *Rotgulden-Ertz*. Brought from *Hungary* by *M. Ol. du Mont*.

o. 10. *Cinnaberis atro-fusca cum Scintillis passim micantibus*. Out of the Silver-Mine at *Schemnitz*. The Silver-Ore is found in Veins: and this Cinnabar along with it. This holds some Silver in it, and a little Gold. It has little Quick-silver in it, so that they rarely extract that.

o. 11. *Rotgulden-Ertz*. Brought from *Hungary* by *M. Ol. du Mont*.

o. 12. Cinnabar, red; with small Masses of white Spar amongst it. From *Augsburg*. Sir *Isaac Newton*.

o. 13. Cinnabar red, from the same Place, more fine, clear, and sparkling. Sir *Isaac Newton*.

o. 14. *Minium nativum*. Berg *Zinöber*. Dr. *Scheuchzer*.

o. 15. *Minera Mercurij ex Bohemia*. Quicksilver oder *Zinöber-Ertz*, i. e. Quick-silver or Cinnabar-Ore.

o. 16. Cinnabar. From the *East-Indies*. 'Tis rich, yielding 7 in 8 of Mercury.

o. 17. Cinnabar. From the *East-Indies*. Mr. *Bulkley*.

o. 18. Cinnabar. Out of a River in *Hungary*. Sir *Isaac Newton*.

o. 19. *Cinnaberis Carinthia*. This is very rich, and will yield $\frac{3}{4}$ Quick-silver, or perhaps more.

o. 20. Cinnabar. From *China*, where 'tis call'd *Hiung-hoang*. Vide *Atlant. Sinic. Martinij*. p. 43. Mr. *Cunningham*.

o. 21. Another shining Sort of Cinnabar, lying in Plates. From *China*. Mr. *Cunningham*.

o. 22. Cinnabar, red, glossy, and glaring. Some few Pieces of it very much resemble the flakey Talc, the rest appears to be composed of parallel Fibres, like the filamentose Talc. *China*. M. Cunningham, Surgeon. Given to me by Mr. Matthews.

SECT. 2. Arsenicum, Arsenick.

* o. 1. Arsenick, very white. 'Tis a very deadly Poison. The *Gentous* call it *Tella Pashnum*. Held to the Fire it emits Fumes; but liquates very little.

* o. 2. *Minera Arsenici alba. Swartzburgensis. Weiser Arsenic Kies*, i. e. a white Arsenick Marcasite. M. de Schonberg.

* o. 3. *Auripigmentum*. Native yellow Arsenick, with Veins of red Arsenick, and glossy Talc-like Flakes; found near *Newsohl*, in *Hungary*, in great Quantity. They dig up Pieces as fine, and some finer than this of two and three hundred Pound Weight. 'Tis soft like *Castile Soap* when first dug up. It lies in Masses in Clay. The Flores of this being melted, become transparent, and of a fine red Colour. There is nothing else got in these Pits; nor is it usually found in any of the Mines of Metal in *Hungary* or *Saxony*, 'Tis found from 10 to 30 Fathom deep.

* o. 4. Orpiment, small, in form of Powder, otherwise not different from the precedent. 'Tis found in the same place with that: and generally above it; being mingled with Clay in the Strata, from which 'tis parted by washing.

* o. 5. Yellow Orpiment. From the *East-Indies*.

* o. 6. Oriental Orpiment, very fine, yellow, both flakey and stringy. From *Turkey*.

* o. 7. Arsenick of a duller yellow, and without any shining Flakes in it. From *Pegu*, where 'tis call'd *Hartoll* *. Being held to the Fire it burns, liquates, and emits arsenical Fumes plentifully. Mr. Bulkley.

* o. 8. Another like-sort of Arsenick from *Pegu*. The *Gentous* call it *Taulacum*. After it has several times pass'd the Fire, they give it in intermitting Fevers. Held to the Fire it fumes; and liquates, but not so freely as the precedent. It has in it glossy Flakes, like those in the *Hungarian Orpiment*.

* o. 9. *Aridullam* used in intermitting Fevers. 'Tis of a yellow Colour. It holds a small proportion of Arsenick.

* o. 10. Arsenick; held to the Fire it liquates, and emits Fumes partly arsenical, and partly sulphureous: *Hungary*. This is native; and what *Agricola*, and the other *German Mineralists* call the red Arsenick. And it is of a Colour much deeper than that of the common Orpiment, tho' not red; but of a yellow very high, with a Cast of red. Dr. Edward Brown.

* *Hartoll is the Name by which Arsenick is call'd over the greatest part of India*. Mr. Terry.

*o. 11. Arsenick of a deep yellow Colour vein'd with red and white. From *Fort St. George*, where 'tis call'd *Goury pasbnum*. 'Tis found at the bottom of a Mountain. Being calcined, they give it in Asthma's; and use it outwardly for the Itch. Mr. *Weaver* tells me he has seen some of the same sort, dug out of the same Mine with the yellow, *o. 3. *supra*.

*o. 12. Arsenick, of a paler red Colour. From *Fort St. George*, where 'tis call'd *Woolly pasbnum*.

*o. 13. *Elica pasbnum* has the same Virtues with *Munny Shella*, *o. 14. *infra*; and seems to be of the same kind. *Fort St. George, East-India*.

*o. 14. Arsenick, red, with very small glossy shining Sparks in it. From *Pegu* by the name of *Munny Shella*. They give this in Fevers after Calcination, by which means the venenate Parts are carried off. In burning it liquates, and emits arsenical Fumes plentifully. Is not this the *Σανδαράχη* of *Dioscorides*, and of the ancient Naturalists?

SECT. 3. Sulphur.

*o. 1. Native Sulphur brown, dug up thus in Lumps at - - - - - in *Hungary*.

*o. 2. Native Sulphur brown, dug up near the Gold-Mines in *Hungary*.

*o. 3. Another sort, with a Cast of Lemon-colour; from the same Place.

*o. 4. A grey hardned Earth with Veins of a bright shining Lemon-colour'd Sulphur. Sent by Dr. *Scheuchzer* under the Title of *Vena Cretacea Sulphurea Scandiana in Italia*.

*o. 5. Sulphur, native, very fine, of a paler yellow Colour. From the same Place. Dr. *Scheuchzer*.

*o. 6. *Sulphur Virgineum quod effoditur propè Bactiacum in Territorio Bernensî. Wagneri Helv. Cur. p. 334.* Dr. *Scheuchzer*. 'Tis extremely pure; of a Lemon-colour, with a faint Blush of Green: and transparent.

*o. 7. Sulphur, native, extremely pure; from *Persia*. 'Tis of the same Colour with the precedent: and transparent likewise.

*o. 8. Native Sulphur, very fine; somewhat more tender and friable, otherwise little different from the *Persian*: found on the Top of the *Pico*, in the Island of *Tenariffe*.

*o. 9. Native Sulphur of a Lemon-colour, and very fine; found in Nodules in the Gold-Mine in *Hungary*.

*o. 10. *Sulphur purum nativum à Foro Vulcanio, agri Neapolitani*. 'Tis of a Lemon-colour; and very fine.

*o. 11. *Sulphur nativum stalacticum purissimum*.

*o. 12. *Sulphur stillatitium nativum ex Monte Rammelsberg dicto, Sylvia Hercinie.* Dr. *Leopold*.

*o. 13. Striated Sulphur, and of a pale yellow Colour, near white; very light, tender and friable. From the Stone-Channels that convey the Water from the Springs to the Baths at *Aix-la-Cha-*

Chapelle. The Water precipitates a considerable Quantity of it in a little time, affixing it to the sides of the Channels. There is sometimes found common Salt concreted amongst it. These Waters are rather hotter than those of *Bath*.

* o. 14. *Minera lapidea cui Sulphur nativum scum peculiari gypseo Saxo inhaeret.* Sent by *Mich. Rheinoldus Rosinus; Munda-Saxo.*

SECT. 4. *Pyritæ.*

† o. 1. A *Pyrites*, externally partly of a pale brown, and partly of a Rust-colour. Being broken, it appears within of a yellow Colour, bright and shining like *Brass*. 'Twas, whilst whole, of a globous Form; and striated from the Surface towards the Center. It does not differ in any thing from those commonly found in the Chalk-pits of *Kent, Surrey, and Essex.* 'Twas sent me by *M. de Schonberg* with the Inscription, *Marcasita globosa, Mariebergæ in Saxonia. Kuglichter Marcasit, i. e. a globular Marcasite.*

† o. 2. *Marcasita in lapide luteo arenoso. Eribergæ in Saxonia. Marcasit in gelben Sandstein, i. e. a Marcasite upon a yellow Sandstone. M. de Schonberg.*

† o. 3. *Pyrites Metallicus Succu atramentosi parens in saxo arenario propè Lithopolim. Dr. Scheuchzer.*

† o. 4. *Lapis niger adulterinus. Eibenstock in Saxonia. Schaarl. M. de Schonberg.* A *Pyrites* holding sometimes a little Gold and Silver.

† o. 5. *Pyrita ex agro Tubigensi, juxta Metzingen, quatuor horis à Francofurto. Dr. Kifner.*

† o. 6. A *Pyrites* of an oblong cylindrick Shape; at one end tuberos, and shot into numerous angular Figures. Found near *Nieuschatel. M. Valkenier.*

† o. 7. A *Pyrites*, brownish with a Cast of green, and small shining *Brass*-like Sparks; very like the common *Pyritæ* on the shores of *Kent* and *Essex.* Found near *Nieuschatel. M. Valkenier.*

† o. 8. *Marcasita aurum in se continens. Nainburgæ in Saxonia. Guldischer Marcasit, i. e. a goldish Marcasite.*

† o. 9. Black Slate, with very small bright brassy cubick *Pyritæ* lodged in it; found by *Bern-Castle*, near the *Moselle. Dr. Kifner.*

† o. 10. A *Pyrites.* When it was intire it was large, and of a cubick figure. 'Tis in a Stone, grey with a Cast of green. These *Pyritæ* are found immersed in the Substance and Mass of the Stone when broken up in the Rocks in *Cataline's-Harbour, Newfoundland. Mr. Peighin.*

† o. 11. Two cubick *Pyritæ*, large; from *New-England. Mr. Bridger.*

† o. 12. One less, from *Hamburg*, by the name of *Marcasita aurea. Sir Isaac Newton.*

† o. 13. Another from the Gold-Mine of *Caunia*, about 60 miles East-ward of *Santa Maria*, in the *West-Indies.*

† o. 14. Tessellated or cubick *Pyritæ*, sent from *Fort St. George* by *Mr. Bulkley.* They are found in a great Hill. The *Gentous* call

them *Vimmala*. After having pass'd the Fire several times, they give the Powder in intermitting Fevers.

† o. 15. *Pyrita metallares Cubici, ex Fontibus Rheni Anterioris in Rhetia.* Dr. Scheuchzer.

† o. 16. *Pyrita exigui Cubici ex Fluvio Nolla in Rhetia.* Dr. Scheuchzer.

† o. 17. *Pyrita cubici ex Grisonensium montibus.* M. Valkenier. Water-Kis.

† o. 18. *Pyrita cubici minuti, in Lapide gryseo Talci particulis micante. Ex iisdem montibus.* M. Valkenier.

† o. 19. Irregularly polyedrous *Pyritæ*; of a dusky green Colour, with a Cast of yellow. Mr. Bulkley. Fort St. George, East India.

† o. 20. The common tessellated *Pyrites*, now of a Rust-colour. From ----- in Saxony; whence twas sent to Sir Isaac Newton, as the *Ludus Paracelsi*.

† o. 21. *Marcasita. Fribergæ.* Marcasit. M. de Schonberg.

† o. 22. *Pyrites dodecaedros, ex monte Dair vallis Pragallia in Rhetia.* Dr. Scheuchzer.

† o. 23. *Pyrites dodecaedros, ex montibus Novocastrensis Helvetia.* M. Valkenier.

† o. 24. *Pyrita dodecaedros ex Ditione Bernensi.* Dr. Scheuchzer.

† o. 25. *Marcasita tessalata Saxonica.* Dr. Kifner. 'Tis not cubick, having really 14 Sides.

† o. 26. *Vimmala.* 'Tis first calcined, then prepared with the Juice of divers Plants, and given in intermitting Fevers. Mr. Bulkley. Fort St. George.

† o. 27. *Vimmala.* Others, irregularly shot; of a shining yellow brassy Hue. Fort St. George.

† o. 28. A *Pyrites*, shot into angular Figures, very fine; from the Mountains near Nienfchatel. M. Valkenier.

SECT. 5. *Marcasita.*

† o. 1. A *Marcasite* crySTALLIZED in a very observable manner; bright and shining like Brass: from Newfoundland.

† o. 2. *Pyrita dodecaedros aureus, ex monte Dair Rhetia.* Dr. Scheuchzer.

† o. 3. A *Marcasite*, yellow, shining, and shot into cubick Figures: Mr. Bulkley sent it from Fort St. George by the name of *Vemullay*.

† o. 4. *Marcasita, Mantisburgi in Saxonia.* Glantz, i. e. Gloss, or Glitter. M. de Schonberg.

† o. 5. *Marcasita spongiosa, qua micat, mixta cum argento rubro; Fribergæ in Saxonia.* Kupfer-Ertz Druse, rothgültig Ertz eingesprenget, i. e. Copper-Ore Druse, with red goldish Ore intermixed. M. de Schonberg.

† o. 6. *Marcasite*; of this there are great Quantities at *Schwartzenberg* in Saxony. They melt it for Sulphur; and out of the *Caput Mortuum*, after it has been exposed some time to the Air, they extract Vitriol. One sort of the *Cornish* Mundick is exactly like this.

† o. 7.

- †.o. 7. A Marcasite; from *Biscay* in *Spain*.
- †.o. 8. *Lapis sulphureus in terra nigricante*; *Swartzenburga* in *Saxonia*. *Gelber Kies mit einer Schwartzte*, i. e. a Marcasite yellow, with a Blackness. *M. de Schonberg*.
- †.o. 9. *Pyrites Hungaria communis*. Brought thence by *M. Ol. du Mont*.
- †.o. 10. *Marcasita alba in medulla saxi*; *Swartzenburga* in *Saxonia*. *Weisser Marcasite in Steinmarck*, i. e. white Marcasite in Stone-marrow. *M. de Schonberg*.
- †.o. 11. *Lapis sulphureus super pellucidum silicem*; *John-Georgenstadt* in *Saxonia*. *Schwefelkies auff durchsichtiger Quartz*, i. e. a Sulphur Marcasite upon transparent Quartz, a sort of Spar. *M. de Schonberg*.
- †.o. 12. *Lapis sulphureus, a Geijer Bohemia*. *M. de Schonberg*. [’Tis work’d for Sulphur. *Mr. Weber*.]
- †.o. 13. A grey Spar, with some parts crystallized, and Grains of Marcasite yellow and shining intermixed. From the Gold-mines of *Caunia*, about 60 miles eastward of *Santa Maria*, in the *West-Indies*. It has some Gold in it.
- †.o. 14. A white Spar with Marcasite adhering to it; sent by *Dr. Leopold* with the Inscription, *Drusa S. Pyrites dipicolor Clausenthalensis*.
- †.o. 15. Stone, grey with a Cast of green; having Marcasite, and a little Spar, adhering to it. Sent from *New-England*, by *Mr. Bridger*.
- †.o. 16. *Kis*, a Marcasite brought from *Hungary*, by *M. Ol. du Mont*. [Upon Tryal this yielded only a very inconsiderable Proportion of Copper and Lead; but no Silver or Gold.]
- †.o. 17. *Excrecentia marmoris metallici super Minera*. *Mariebergæ* in *Saxonia*. *Spaaden Gewachs auff Glimmer*, i. e. Spaad Excrecence upon Glimmer. *M. de Schonberg*. [This is a Marcasite adhering to a Mica. There are upon it several small cubick Crystals, of a yellow Colour very beautiful. These owe that Colour to Lead. Also two sparry or talky Bodies, white, composed of Plates set edgeways.]
- †.o. 18. *Pyrites cavernosus, qui à Philosophis pro radice & matre metallorum judicatur*. *Fribergæ* in *Saxonia*. *Kies Druse, so von Philosophis pro radice & matre metallorum gehalten wind*, i. e. a Marcasite Druse which was taken by the Philosophers, for the Root and Mother of Metals. *M. de Schonberg*. This is what *M. Ol. du Mont* travelled so long in pursuit of. I have of this very kind of Marcasite from *Cornwall*.
- †.o. 19. *Pyrites, Tabulatus varij Coloris*. *Fribergæ* in *Saxonia*. *Bunde blätterichte Kies Druse*; i. e. a speckled foliaceous Marcasite Druse. *M. de Schonberg*.
- †.o. 20. *Cupreus Nicolaus*. *Snebergæ* in *Saxonia*. *Kupffer Nicol*; i. e. Copper-Nicol. *M. de Schonberg*.
- †.o. 21. A Copper Marcasite, sent by *M. de Schonberg*, with the Inscription, *Pyrites ex quo coquitur Cuprum & Vitriolum*. *Swartzenburgæ*

zenburga in Saxonia. Kupffern und Vitrioln Kies; i.e. a Copper and Vitriol Marcasite. It may hold about $\frac{1}{8}$ Copper.

†. o. 22. *Lapis argenti spuma splendens. Ehrenfreidersdorff in Saxonia. Misspuckle. M. de Schonberg.* [This is a Marcasite, holding a little Copper, Tin, Iron, Sulphur, and Arsenick. Mr. Weber.]

†. o. 23. A Tin Marcasite, sent by M. de Schonberg, with the Inscription, *Stannum cum Pyrite. Johann Georgenstadt in Saxonia. Kiesichter Zwitter; i.e. Marcasitish Tin-Ore.*

†. o. 24. *Galena Argenti. Friberga in Saxonia. Blende.* This is the true *Blende*, being a black, talky, sparry Marcasite. It may hold a very little Lead, and perhaps Silver. M. de Schonberg.

†. o. 25. *Wicrantum.* 'Tis a very hard Stone, and commonly found within other Stones, by breaking them; when calcined, 'tis given inwardly, and provokes Venery, as they say. Mr. Bulkley. [Tis the *Blende*, or Mock-Lead: and appears of a talky Hue.

†. o. 26. *Nelanjenum.* 'Tis found at the bottom of Rivers; prepared by Fire, and with the Juice of Herbs: 'tis used for Ulcers. 'Tis a blackish talky Body, thick set with small shining Sparks, so as to resemble the Grain of broken Steel. 'Tis very ponderous. [There is a sort of Lead-Ore very like it: but I cannot perceive any Lead in this.] Mr. Bulkley.

†. o. 27. *Poospanscum.* It grows, and is used as the former; and is also used to colour grey Hairs, and make them black. 'Tis less ponderous than the former, but more flakey, shining, and friable. Mr. Bulkley.

SECT. 6. Cobalt, Kobelt.

†. o. 1. Cobalt, from *Marienburg in Saxony*, of a yellow brass-like Appearance. There's a Mass of white Spar in it. One sort of the *Cornish Mundick*, found there in vast Quantity, exactly resembles this. This sort yields chiefly Bismuth: about 6 Parts in 10. They do not work it for Smalt, it having none of the purple Spar in it, which alone constitutes the Smalt. It lies in Veins in great Quantities, about 40 or 50 Fathom deep. These Mines are work'd for nothing else.

†. o. 2. Cobalt, more coarse, and gritty. From *Saxony*.

†. o. 3. Cobalt. *Annaberg in Misnia. M. Ol. du Mont.*

†. o. 4. *Cadmia Metallica Coloris subcarulei. Ex Monte D. Andrea. Dr. Scheuchzer.*

†. o. 5. *Cadmia Fossilis cum galena pici similis. Friberga in Saxonia. Gelber Kobold mit Schwartzzer Blende; i.e. yellow Cobalt, with black Blende. M. de Schonberg.*

†. o. 6. *Cadmia cinerea in marmore Metallico albo. Annaberga in Saxonia. Kobold in weissen Spad; i.e. Cobalt in white Spaad. M. de Schonberg.*

†. o. 7. *Cadmia cum minera Bismuthi. John-Georgenstadt in Saxonia. Grauer Kobold mit Wismut, i.e. Grey Cobalt with Bismuth. M. de Schonberg.*

†. o. 8.

†:o. 8. *Cadmia cum cupreo Nicolao. Sneberga in Saxonia.* Farben Kobold mit Kupffer Nicol, i. e. Colour Cobalt with Copper-Nicol. *M. de Schonberg.* [The greenish Cruſt is what they call *Nicol*: and abounds in Arſenick: and is very injurious to the Smelters, cauſing Contractions of their Limbs. *Mr. Weber.*

†:o. 9. Cobalt from *Seberg in Saxony.* 'Tis grey: and Part of it ſhot into Cryſtals of a Purple Colour. 'Tis found in Veins, in great Quantity, from 60 to 100 Fathom deep. Theſe Mines are only work'd for this Mineral. It holds chiefly Biſmuth.

†:o. 10. *Cadmia foſſilis ex qua preparatur Zaffera. Anna-berga.* Farben Kobold, i. e. Colour Cobalt. *M. de Schonberg.* [Cobalt is an Arſenical Marcaſite, and all of it contains more or leſs of Arſenick. *Mr. Weber.*]

†:o. 11. Zaffar, native from ----- in Germany. Us'd by the Potters and Painters.

†:o. 12. Zaffer, native, a ſmaller Sort from the ſame Place.

SECT. 7. Lapis Calaminaris, Calamin.

⊙ o. 1. *Cadmia preparata ad confectionem Orichalchi utilis.* This is of that Kind, and was ſent me alſo by *M. de Schonberg*; only it is calcin'd.

SECT. 8. Antimonium, Antimony.

† o. 1. *Antimonium, ſci: Stimmi ſœmina, Plinij, l. 33. c. 6. Ex altiffimo Monte ad Origines Rheni.* *Dr. Scheuchzer.*

† o. 2. *Antimonium nativum grifeum, cum Scintillis ſpiſſiſſimis, Hungaricum.* From *Leibſcherſuffen.* Found in Veins among Copper and Iron-Ore, in the Day downwards, in great Quantity.

† o. 3. *Minera Antimonij partim in laminas fiſſilis, partim Scintillis conſpicua. Habet inſuper in ſe Venam Fluoris Candidi. Ex----fodinis in Germania.*

† o. 4. *Minera Antimonij, à Leibſcherſuffen in Hungaria.*

† o. 5. *Minera Antimonij Hungarica à Leibſcherſuffen.* It is flat, having a thin Plate of a pale brown Spar, on each of the two oppoſite Sides: and appears to have been taken forth of a Vein. There is with it a conſiderable Mixture of Sulphur, yellow, with a Caſt of green.

† o. 6. A Body, grey, gloſſy, and ſhining; externally of a fibrous Conſtitution: and appearing to conſiſt partly of Talc, and partly of Antimony. Within, there are ſome ſmall Sparks and Grains of Lead. From the great Lead-Mine near *Widsahla* in Sweden.

† o. 7. Native Antimony; from *Iſlandia.* Sir *Tho. Brown* procured this from *Theodorus Jonas*, a very curious and learned Eccleſiaſtic in that Iſland.

† o. 8. *Antimonium Hungaricum cryſtallizatum in Terra lutea.* *Dr. Scheuchzer.*

† o. 9. *Minera Antimonij Hungarica.* Spies-Glas; i. e. Spear-Glaſs, or Antimony. *M. de Schonberg.* [It is found in Quantity in the Gold-Mines of *Cremnitz*, in Veins, 300 or 400 Fathom deep. *Mr. Weber.*]

† o. 10

† o. 10. *Minera Antimonij Hayenensis, Saxonia.* M. de Schonberg.
 † o. 11. Antimony-Ore, taken forth of a Mountain in Piedmont.
M. Ol. du Mont.

† o. 12. *Minera Antimonij. Fribergæ in Saxonia. Antimonien Ertz.* M. de Schonberg. [This may yield about $\frac{8}{10}$ of Antimony. The Ore of Antimony usually is found in Veins among the Lead: but lies generally shallow. Mr. Weber.]

† o. 13. White Spar, with a Vein of yellow, shining, brass-like Marcasite in the middle of it: and, on one Surface, Antimony, radiated, or shot into Filaments, very fine. *Ex Agro Mompelgartensi.* M. Valkenier.

† o. 14. *Minera Antimonij Hungarica, stellaris, & pulchrè striata: cum fluore etiam striato.* Dr. Kifner. à Leibscherfuffen.

† o. 15. Antimony-Ore, yellow. *Cuttembergh, in Germany.* Brought thence by *M. Ol. du Mont.* The yellow Colour is owing, probably, to an Admixture of Sulphur.

SECT. 9. Bismuthum, Tin-Glass.

† o. 1. *Minera Bismuthi, sive Plumbi cinerej, cum Fluore.* Bismut Ertz Agricola. *Snebergæ in Saxonia.* Dr. Scheuchzer.

† o. 2. *Minera Bismuthi, cum Fluore, Snebergæ in Saxonia;* where much the greatest Quantity of this Ore is got, there being little of it in any other Part of Germany. Some of it has a fine Glance of Violet: and frequently much semi-transparent Spar in it.

† o. 3. *Cadmia Metallica. Annabergæ in Saxonia. Kobold.* M. de Schonberg. [Cobalt in a white Spar; it holds a little Silver, but chiefly Bismuth, for which 'tis work'd: but never for Smalt or Blue. Mr. Weber.]

† o. 4. *Plumbi cinerei, sive Bismuthi Vena. Snebergæ in Saxonia.* Dr. Scheuchzer.

† o. 5. *Minera Bismuthi. John-Georgen-stadt, in Saxonia. Wismut Ertz.* M. de Schonberg. [This holds above $\frac{1}{2}$ Bismuth.]

† o. 6. *Minera Bismuthi; propè Snebergam, in Saxonia.* M. de Schonberg. [This is not so rich in Bismuth as the precedent.]

† o. 7. Bismuth-Ore. From *Sneberg, in Saxony.* M. Ol. du Mont. [This seems rather to be Zink.]

† o. 8. Bismuth-Ore. From *Sneberg in Saxony.* M. Ol. du Mont.

SECT. 10. Speltrum, Speltre, or Zink.

•X o. 1. Speltre, or Zink. From the *East-Indies.* Mr. Nicholson.

•X o. 2. A glossy, yellow, brass-like Body; sent by the Name of *Russgangenum*, from *Fort St. George*, by Mr. Bulkley, for an Antimony-Ore. I have seen a Talc, ponderous, and very like it in all other respects: as also a sort of Marcasite; but this has little or no Sulphur in it. It may perhaps be a Speltre-Ore. Mr. Weber is of that Opinion also.

•X o. 3. Sent by the Name of *Russgangenum.* Found in *Mount St. Thomas, Fort St. George.* Mr. Bulkley. This also Mr. Weber judges to be a native Zink.

·X. o. 4. *Argentum rude cineraceum in marmore candido Metallico* (Spaat) *ex Vena Sancti Michaelis, quæ est Saalfeldia in Thuringia.* Dr. Leopold. The Ore of this is Zink, holding some Silver.

·X. o. 5. Speltre, or Tutanag-Ore, from *China*, with Veins of Spar in it. *Tutanag* runs in the Fire: but, if kept long there, it rises wholly in Flores. Copper-Plates, held over the Fumes of it, become throughout of a yellow Brass-Colour: and indeed this is the finest Brass that is made. *Tutanag*, melted with Copper in equal Quantity, makes an Alchymy, or blanch'd Brass; but, if held so long in the Fire that part of the *Tutanag* evaporates, it attains a yellow. Many of the *Indian* Images are made of this. Some of them are cast extremely fine.

·X. o. 6. Native Speltre-Ore, got in the Province of ----- in *China*. Mr. Douglass, then at *Canton*, caus'd it to be sent for thither on purpose. In *China*, and all over the Mogul's Country, and in several other Parts of *India*, they make a sort of Brass of Speltre melted down with Copper, of which there is plenty both in *China* and *Japan*, tho' there be no Calamine. *Tutanag* is the *Chinese* Name for Speltre: and we here apply that Name erroneously to that Metal of which the Canisters are made, that are brought over with the Tea from *China*. The *Chinese* call this Mineral *Tutanag*: nor indeed has that Metal any *Tutanag* or Speltre in it, being only a coarse Pewter made with the Lead, carried by our Merchants from *England*, and Tin got in the Kingdom of *Quidday*, betwixt *Tanassary* and the Streights of *Malacca*.

·X. o. 7. Seeming to be Ore of *Tutanag*, sent by the Lord *Constantine Falcon* to Dr. *Uvedale*.

·X. o. 8. A Mineral, with numerous grey Sparks, shining, and of a metallick Appearance. Mr. *Weber* judges it to be Speltre. There is also amongst it a white Spar, with Spots of a fine bright blue, which are owing to an Admixture of Copper. From ----- in *Germany*. Mr. *Valkenier*.

SECT. II. *Nigrica Fabrilis, Black-Lead, or Wad.*

‡. o. 1. *Lapis Plumbarius sterilis, cum quo scribi potest.* *Altenberga in Saxonia.* *Wasserbley Ertz*; i. e. Black-Lead-Ore. *M. de Schonberg.* ('Tis the *Nigrica Fabrilis*, or Black-Lead.)

Auri Mineræ, Gold-Ores.

π. 1. Gold, native, from *Guinea*, and just as wash'd and freed from the Spar, Sand, and Soil. 'Tis very fine, flexible, and malleable: and so pure, that it rarely loses above 1 and $\frac{1}{2}$ or 2 Parts in 100 in Fusion. 'Tis partly in form of Dust; for which Reason this is commonly call'd *Dust-Gold*: and partly in Lumps or Nodules, of all Sizes, to the bigness of the common Field-Bean. Nay, one Lump there is at least four times that Bigness: and this was indeed the biggest in the whole Parcel. I had of the *Royal African Company*, and was inform'd they once had a Lump that weigh'd somewhat above 3 Ounces. Mr. *Charles Hayes*, in his Letter

Letter from *Cape-Coast* in *Guinea*, 9 Febr. 1704, mentions one he saw there that weigh'd 4 Ounces $\frac{1}{2}$: and that he had Accounts of much larger found in those Parts. These larger Lumps they call *Rock-Gold*. All the Gold in this Parcel is of a deep yellow Colour. Only one of the Lumps has externally a Cast of Red; which, probably, is owing to the Soil in which it lay: the Gold in that Country, according to the Account that Mr. *Hayes* obtain'd, being found in a Stratum of red Earth, that lies horizontally. The Country is seven Days Journey from *Cape-Coast*. So far Mr. *Hayes* his Account: but 'tis certain a great part of the Gold of that Country is wash'd out of the Mountains by the Falls of Rains, which there are vastly great, and fall with a mighty Force. The biggest Lump in this Parcel has 3 or 4 Grains of a white semi-pellucid Spar incorporated with it. The Surface of this, and indeed of most of the larger Lumps, is very scabrous and uneven. The *Guinea* Gold yields ordinarily 97 or 98 per Cent. Mr. *Hayes*.

π. 2. *Flammula, seu Particula Auri purissimi, reperta in Flumine Schwarza prope Rudelstadt, Civitatem Comitum ac Principum Schwarzburgicorum*. M. de *Schonberg*. 'Tis native, and found in considerable Quantity. Mr. *Weber*.

π. 3. Sand, so very fine as to be almost impalpable, of a very dark grey Colour; but shining and glittering, not much unlike the Filings of Steel. Being view'd with a Microscope, there appear in it numerous small Grains of Gold, shining, and of a yellow Colour: and indeed some of them are so large as to be discern'd by the naked Eye. This was found on the Shores of the *Danube*, between *Presburgh* and *Comorrah* in *Hungary*. The People that collect, wash, and dress it, find the greatest Quantities of it after great Rains, and melting of the Snow upon the Mountains, about *Cremnitz*, where the great Gold-Mines* are. The Rain, and Snow-Water, falls down from those Mountains by the *Waag*, *Neytra*, *Gran*, and other Rivers, with so great Rapidity, as not to suffer the Gold-Dust to settle and precipitate in them, nor till 'tis brought to the *Danube*.

π. 4. *Arena Aurifera, ex Ursâ amne*. Dr. *Scheuchzer*.

π. 5. *Aurum purum Fossile ex Hungaria*. Dr. *Scheuchzer*.

π. 6. Gold, native, yielding 98 or 99 per Cent. Got by the *Portuguese* in the Mines of *Rio Jeneiro*, in *Brazil*. 'Tis better and finer than the Gold of *Guinea*. Mr. *Hayes*.

π. 7. Gold, native, also from *Rio Jeneiro*. 'Tis of a somewhat more dusky Hue, but yields as much as the former. Mr. *Hayes*.

π. 8. Dust-Gold. From the River ----- in *Hungary*. Mr. *Chishull*.

π. 9. Virgin-Gold, very fine, only wash'd. Out of the Vein of a Mine near *Hermanstad*, [*Cibinium*] in *Hungary*. Mr. *Chishull*.

* See Dr. Edward Brown's Account of them, in his Travels, p. 62 & seq.

π. 10. A grey Stone, part of the Side of a Vein, with Spar adhering to it: as also Gold, yellow, and fine. From the same Vein.

π. 11. *Aurum, lotum, ex Fluvio Edder; Comitatus Waldeccensis.* Dr. Kifner.

π. 12. *Goldflich, ex Rivulo Katzbach, prope Goldbergam in Silesia. In hoc Rivulo reperiuntur Granati, Aurum, Argentum, Cuprum: uti & Ferrum Magnetis Ope extrahendum & separandum.* Dr. Kifner.

π. 13. *Minera Auri, cum admixta Particula Cinnaberis nativæ. Ex Fodinis Cremnizensibus, Hungariæ.* Dr. Leopold.

π. 14. *Minera Auri, ex Fodinis Schwazensibus, Comitatus Tyrolensis.* Dr. Leopold.

π. 15. *Terra Solis nigricans, ex Monte Eubro, prope Elverfeldam.* Dr. Leopold.

π. 16. Grains of Gold, in Sand-Stone, grey, variegated with a faint Green and Blue. From the Mine of *Costa-Rica*, about twenty Miles from *Guatemala*. This is not reckon'd rich: but every hundred Weight yields about an Ounce of Gold. The Gold is found in certain Parts of the Stone, lying in Tracts, which the Miners call *Veins*, in much greater Quantity. This is the common Stone. They stamp and beat it to pieces with Water-Mills, wash, and manage it after the same manner as at *Caunia*. During the Season of their great Rains, they expose the Stone to the Weather; which softens it, and renders it easier to be worked upon. This was given me by Mr. *Morgan*, --- to Capt. *Dampier*, in his last Expedition to the *South-Seas*. He tells me they find very large Grains of Gold in this Mine: sometimes to half an Ounce in weight. The Vice-Roy of *Lima* has a Mass of pure Gold, twenty-five Pounds in weight, from the Mines of *Sancta Maria*, which are the richest in all the *West-Indies*. The Gold lies there in Stone much like this: and is worked after the same manner. They have there lately discover'd a new Mine that is richer than the old.

π. 17. Grains of Gold, in Stone, of a somewhat finer Constitution, Grey, with a Cast of Green, and some Spots of Blue. From a Mine about a League from the former.

Argenti Mineræ, *Silver-Ores.*

p. 1. Silver, native, pure, flexible, and malleable; arborefcent, arising, in Form of a Shrub, out of a grey Spar. 'Tis $\frac{1}{4}$ of an Inch in Height. From the Mines of *Koningsberg*, in *Norway*.

p. 1. *. Silver, native, in white Spar. Out of the *Hercynian Forest*. Dr. *Hugo*.

p. 1. x. Silver, native, in a Vein of grey Spar. *Freyberg, Saxony*. Dr. *Arnold of Exeter*.

p. 2. *Argentum ut Gramen excrescens. Fribergia in Saxonia.* Silber Græs. M. *de Schonberg*. [It is found in small Quantities among the Spar of the Veins. 'Tis found in the like manner at *Schemnitz* in *Hungary*. Mr. *Weber*].

p. 2^x. *Argentum capillare, virgineum, in Fluore albo & crystallino.* Freyberg. Dr. Mylins.

p. 2^x. *Argent. capill. in Fluore albo. Ex Puteo S. Andrea Schneeberg.* Dr. Henckell.

p. 2. †. *Argent. capill. inter Laminas Fluoris crystallini.* Freyberg.

p. 3. *Argentum more capillorum natum Sneberga in Saxonia.* Haar Silber, i. e. Capillary Silber. M. de Schonberg. [It is tinged yellow with Sulphur. 'Tis found plentifully. Mr. Weber.]

p. 4. *Argentum more capillorum natum in albo marmore metallico & fissili cinereo.* John-Georgen-stadt in Saxonia. Haar Silber in weißem Spaad, und grauschwartzlichen Schiefer, i. e. Pure native Silver, capillary, in white Spaad and dark grey Silver. M. de Schonberg.

p. 5. *Argentum nativum capillare Hungaricum.* Schemnitz. Dr. Leopold.

p. 6. *Argentum rude purpureum Hungaria.* Schemnitz. Dr. Leopold. This is very rich.

p. 7. *Argentum capillare in lapido argentario albo cum micis sulphureosis & crystallis minutis.* John-Georgenstadt in Saxonia. Haar Silber auf weißgültigen Silber-Ertz mit etwas Schwefelkies und kleinen Quarzn Crystallen, i. e. Capillary Silver upon a fine white goldish Silver-Ore, with some sulphureous Marcasite and small Quartz-Crystals. M. de Schonberg.

p. 8. *Lapis Metallicus Argenti niger cum Argento puro capillari & minutis candidis crystallis.* Friberg in Saxonia. Schwarz Silber Ertz mit durchwachsenen gedigen Haar Silber und gar kleinen Quarzn Crystallen, i. e. Black Silver-Ore, with pure, thorough-grown capillary Silver, and very small Quartz of sparry Crystals. M. de Schonberg. The Mines of Freyberg and John-Georgenstadt are the richest in Silver of any in Germany. This holds about $\frac{2}{3}$ Silver with Sulphur.

p. 9. *Argenti puri massula Quarzo innata.* Ex Saxonia. Dr. Scheuchzer.

p. 10. *Argentum purum repertum in venis.* Gedigen-Silber Agricola, Quarzo, i. e. Fluore mistum, ex fodinis de John-Georgenstadt. Dr. Scheuchzer.

p. 11. *Argentum purum capillare Agricola.* Dr. Scheuchzer.

p. 12. *Argentum nativum super Silicem, prope Fribergam in Saxonia.* Gewachsen Silber auf strahllichten Quartz, i. e. Silver-grown upon radiated Quartz, a sort of Spar. M. de Schonberg.

p. 13. *Vena argenti dives ferruginej coloris, e qua scintilla Argenti purissima emicant.* John Georgenstadt in Saxonia, sub titulo, Hornertz. Dr. Scheuchzer. Conferatur Minera Argenti cinerea Norwegica, fertilis satis, qua quadam sui parte luteo tingitur colore, & ferme ferrugineo, in qua Argentum ipsum minutissimis granulis è minera emicat. Wormij Musaeum, p. 118.

p. 14. *Argentum purum fossile in vena rubra, prope Johann-Georgenstadt in Saxonia.* Gedigen Silber in rothen Gebürge, i. e. Native,

Native, Virgin, or pure Silver, in a red Vein-stone. *M. de Schonberg.*

p. 15. *Bracteola argenti adherentes fissili rubro. Johan-Georgenstadt in Saxonia.* Blättgen Silber uffrothen Scheiter, i. e. Flakey or foliated Silver upon red Shiver. *M. de Schonberg.*

p. 15^x. *Argentum foliatum in lapide Scissili rubro. A. Rothenkneis Saxonia. Dr. Henckell.*

p. 16. *Lapis argentarius niger in marmore metallico rubro, cui inhaerent bracteola argenti nativi. Fribergæ in Saxonia.* Schwarz Silbern Ertz in rothen Spad mit gedigenen angeflodenen Silber, i. e. Black-Silver-Ore, in red Spaad, with pure native Silver adhering to it, or intermingled with it. *M. de Schonberg.*

p. 17. *Lapis argentarius cornuus viridis & purpureus cum bracteolis argenti puri. John-Georgenstadt in Saxonia.* Reich gräulich und braun horn Ertz mit angeflogenen gedigen Silber, i. e. Rich, greyish, and brown Horney-Ore, with pure, native Silver adhering to it, or intermingled with it. *M. de Schonberg.*

p. 18. *Silex fuscus cui adhaeret color caeruleus cum minutis bracteolis argenti rudis. Fribergæ in Saxonia.* Blauer Feuernstein mit einer blauen Druse, daranf gedigen Blättgen Silber leigt, i. e. Blue Firestone, with a blue Dross or Efflorescence, upon which there lies pure, native, foliaceous Silver. *M. de Schonberg.*

p. 19. *Argentum rubrum pellucidum in vena argenti nigra. Ehrenfreiderdorff in Saxonia.* Rothgültig Ertz so durchsichtig in einer Silberhaltigen reichen Schwärtze, i. e. Red-goldish-Ore, transparent, in a Silver holding rich Schwaartz, i. e. Blackness. *M. de Schonberg.* [Found in Veins in great Quantity about 200 Fathom deep. It holds about $\frac{1}{4}$ Silver; the very Granates in it hold Silver. The red Colour is owing to the Sulphur and Arsenick].

p. 19^x. *Minera Argenti ditissima, quippe continens Argenti $\frac{3}{4}$ x. in Hb. Minera. Ex Andrea Fodina Neutang, in montibus Hercynia. Rothgulden-Ertz. Dr. Hugo.*

p. 19^{*}. *Minera Argenti ditissima, Clausthalensis. Ex Crypta Neutang dicta. Continet ultra Dimidium Argenti. Dr. Hugo.*

p. 20. *Argentum rude rubrum. Rotgolden Ertz Agricola. Quod plumbi ad instar obtegit illud, est Argentum rude nigrum. Gedigen-schwarz-silber Ertz ejusdem, alias Glas-Ertz, ex fodinis Saxonis de John-Georgenstadt. Dr. Scheuchzer.*

p. 21. *Minera Argenti ex fodinis Altsolensibus in Hungaria. Rotgulden-Ertz. Dr. Leopold.* There is Spar and Marcasite with it.

p. 22. *Argentum rude rubrum parietibus suis affixum. Roht Gulden-Ertz in Sohlbanderen de Georgiopoli Saxoniae. Dr. Scheuchzer.*

p. 23. *Rot-gulden-Ertz. John-Georgenstadt in Saxonia.* The black Parts hold Silver, perhaps $\frac{1}{2}$. The red are partly sulphureous, and partly arsenical. *M. Valkenier.*

p. 24. *Argentum rubrum purum. Johan-Georgenstadt in Saxonia. Rot-gulden-Ertz, i. e. Red-goldish-Ore. M. de Schonberg.* [It yields about $\frac{1}{4}$ and sometimes $\frac{1}{2}$ of Silver. Only Spar and Sul-

phur, no Lead. 'Tis found in great Quantity in Fissures perpendicular 200 Fathom deep. 'Tis the Sulphur and Arsenick that give it the red Colour. Mr. Weber].

p. 25. *Argentum rubrum in Cadmia metallica. Fribergæ in Saxonia.* Rothgultig Ertz in Ertzkobold, i. e. Red-goldish-Ore in Cobalt-Ore. M. de Schonberg.

p. 26. *Argentum rubrum in plumbagine. Fribergæ in Saxonia.* Rothgultig-Ertz in Bleyglantz, i. e. Red-goldish-Ore in Lead-Glitter. M. de Schonberg.

p. 27. *Argentum rubrum in lapide arario & plumbario. Fribergæ in Saxonia.* Rothgultig Ertz mit Kupffer Ertz und Bleyglantz, i. e. Red-goldish-Ore, with Copper-Ore, and Lead-Glitter. M. de Schonberg.

p. 28. *Argentum rubrum super plumbaginem in marmore metallico albo, Fribergæ in Saxonia.* Rothgultig-Ertz uff Bleyglantz in weissen spad, i. e. Red-goldish-Ore upon Lead-Glitter, in white Spaad. M. de Schonberg.

p. 29. *Argentum rubrum in vena cinerea. Fribergæ in Saxonia.* Rothgultig-Ertz in gräuen geburge, i. e. Red-goldish-Ore in a grey Veinstone. M. de Schonberg.

p. 30. *Argentum rubrum in sterili nitido cinereo. Fribergæ in Saxonia.* Rothgultig-Ertz in grauen geneifs, i. e. Red-goldish-Ore in grey Geneifs. M. de Schonberg.

p. 31. *Argentum rubrum in terra argentaria lutea. Fribergæ.* Rothgultig-Ertz in einer Gilbe, i. e. Red-Goldish-Ore in a yellow Veinstone. M. de Schonberg.

p. 32. *Excrecentia Crystallorum ex marmore metallico rubro cui insidet globulus argenti rubri. Fribergæ.* Quarzn Gewachse auff rothen Spad darinnen eine Knospen rothgultig Ertz, i. e. Quartz, a sort of Spar vegetating, or growing upon a red Spaad, wherein there is a Bud, or Germe of red-goldish Ore. M. de Schonberg.

p. 33. *Argentum albicans & rubrum super marmore subluteum. Fribergæ.* Weiss und Rothgultig Ertz auff gülblichten Spad, i. e. White and red-goldish Ore upon yellowish Spaad. M. de Schonberg.

p. 34. *Argentum rude rubrum mixtum cum Marcasita, Schemnicense Hungaricum. Dr. Leopold.*

p. 35. *Minera Argenti purissima, ex fodinis Schemnicensibus in Hungaria. Dr. Leopold.* There is Spar and Marcasite with it.

p. 36. *Minera Argenti ex Palatinatu superiori. Dr. Leopold.* This is pretty rich in Silver. There is also of this sort of Ore got at Schemnitz.

p. 37. *Argentum nigrum in marmore rutilo & Crystallis minutis, quibus adhæret Cadmia sulphurea. Fribergæ in Saxonia.* Schwarz Silber Ertz in rothlichten Spad und weissen Quartzdrusen mit eingesprenagten Ertz Kobold, i. e. Black Silver-Ore in reddish Spaad, and white Quartzdrusen, with Cobalt-Ore interspers'd. M. de Schonberg.

p. 38. *Argentum rude nigrum Schemnicense Hungaricum. Dr. Leopold.* It yields about $\frac{1}{4}$ Silver.

p. 39. *Argentum rude nigrum*. Gediegen Schwartz-Silber-Ertz. Agricolaë Sahlbergium. Dr. Scheuchzer.

p. 40. *Argentum nigrum in marmore metallico lutei coloris*. Fribergæ in Saxonia. Schwartz-Silber-Ertz in gilblichten Spad, i. e. Black Silver-Ore in yellowish Spaad. M. de Schonberg.

p. 41. *Argentum nigrum in Silici candido*. Fribergæ. Quartz Silber-Ertz in weissen Quartz, i. e. Black Silver-Ore in white Quartz, a sort of Spar. M. de Schonberg.

p. 42. *Argentum nigrum dives*. Fribergæ in Saxonia. Reich Schwartz Silber Ertz, i. e. Rich black Silver-Ore. M. de Schonberg.

p. 43. *Argentum nigrum in marmore albo metallico*. Fribergæ. Schwartz Silber Ertz in weissen Spad, i. e. Black Silver-Ore in white Spaad. M. de Schonberg.

p. 44. *Argentum nigrum in marmore metallico tessellato*. Fribergæ in Saxonia. Schwartz Silber Ertz in spigel Spad, i. e. Black Silver-Ore in Looking-Glass Spaad. M. de Schonberg.

p. 45. *Argentum nigrum molliissimum in marmore metallico rubri coloris*. Fribergæ. Schwartz Federn-Ertz in Rothnlichten Spad, i. e. Black Plumose-Ore in reddish Spaad. M. de Schonberg.

p. 46. *Argentum nigrum spongiosum. continet in se sexaginta Marcas argenti (i. e. 30 per Cent.)* Fribergæ. Schwartz durchwittert reich Silber Ertz in weissen Spad, so sechzig Marck Silber hält, i. e. Black, spongy, rich, Silver-Ore, in white Spaad, which holds 60 Merks in Silver. M. de Schonberg.

p. 47. *Argentum fuscum*. Fribergæ in Saxonia. Fahl Silber Ertz, i. e. Pale-brown Silver-Ore. M. de Schonberg.

p. 48. *Argentum albicans in plumbagine*. Fribergæ. Reich Weisgültig-Ertz in Bleyglantz, i. e. Rich white goldish-Ore in Lead-Glitter. M. de Schonberg.

p. 49. *Argentum albicans in Pyrite cavernoso cum plumbagine*. Fribergæ. Reich weisgültig Silber Ertz in durchsichtigen kies und Bleyglantz, i. e. Rich, white, goldish, Silver-Ore, in transparent Marcasite and Lead-Glitter. M. de Schonberg.

p. 50. *Argentum albicans & plumbago cum marmore metallico rutilo super venam subviridem*. Fribergæ in Saxonia. Weisgültig Ertz und Bleyglantz mit durchwachsenen rothlichten Spad uff grünlichten Geburge, i. e. White Goldish-Ore, and Lead-Glitter, with thorough-grown reddish Spaad upon greenish Veinstone. M. de Schonberg.

p. 51. *Argentum albicans & nigrum plumbagine mixtum in sterili nitido*. Fribergæ. Weiss und Schwartz Silber Ertz mit Glantz in den weisglimmrichten Geburge, i. e. White and black Silver-Ore, with Glitter, in a white glittering Vein. M. de Schonberg.

p. 52. *Argentum albicans in Lapide plumbario*. Fribergæ in Saxonia. Weisgültig Ertz mit etwas Bleyglantz, i. e. White Goldish-Ore, with something of Lead-Glitter. M. de Schonberg.

p. 53. *Argentum rude plumbei coloris*. Glas-Ertz. Ex Georgipoli Saxonia. Argenti rudi nigro innatum. Dr. Scheuchzer.

p. 54. *Argentum rude plumbej coloris.* Glafs-Ertz Agricola. *Ex fodinis Hungaria.* Dr. Scheuchzer.

p. 55. *Argentum rude plumbei coloris, Fribergæ.* Glafs-Ertz. [It yields of Silver, one with another, near an Ounce and a half per Pound. It has Lead in it. There is great Quantity of it 400 Fathom deep. Mr. Weber.] M. de Schonberg.

p. 56. *Argentum rude ex Hungaria,* Glafs-Ertz. M. de Schonberg. [Tis rich and found in Quantity in Veins at Schemnitz. Mr. Weber.] The Glafs-Ertz is always very rich in Silver. The Characteristick of it is, that it cuts with a Knife like melted Lead. That on the Top is the Glafs-Ertz; the rest is Bleyglantz, or common Lead-Ore.

p. 57. *Argentum rude plumbej coloris, quod cultello scindi potest.* John-Georgenstadt. Derb Glässn-Ertz, i. e. Glassy-Ore, tough, or tenaceous, not friable. M. de Schonberg.

p. 58. *Argentum rude plumbej coloris in lapide argentario rubro.* John-Georgenstadt in Saxonia. Glafs und rothgultig Ertz, i. e. Glassy and red-goldish-Ore, by Gultig they imply only rich. This holds about half Silver. M. de Schonberg.

p. 59. *Argentum rude plumbei coloris in marmore metallico rubro.* Fribergæ in Saxonia. Angeflogten Glässn Ertz uff rothlichten Spad, i. e. Interspers'd glassy-Ore upon reddish Spad. M. de Schonberg.

p. 60. *Argentum rude cineraceum in marmore candido metallico.* Spaat. *Ex Vena Sancti Michaelis, quæ est Saalsfeldij in Thuringia.* Dr. Leopold. The Ore in this is of Zink, holding some Silver.

p. 61. *Argentum rude cineraceum.* Gedigen graun Silber Ertz Agricola. Fribergæ in Saxonia. Dr. Scheuchzer.

p. 62. *Argentum rubrum in Silice candido.* Fribergæ. Rothgültig Ertz in weissen Quartz, i. e. Red goldish-Ore in white Quartz, a Sort of Spar. M. de Schonberg.

p. 63. *Argentum albicans in mica.* Fribergæ in Saxonia. Weisgültig Ertz in Glimmrichten Geburge, i. e. White Goldish-Ore in a glittering Vein-stone. M. de Schonberg.

p. 64. Silver-Ore out of the Silver-Mine of Schemnitz in Hungary. Dr. Edward Brown.

p. 65. Silver-Ore from the famous Mines of Clausthall in Hanover. The Ore here yields Silver, Lead, and Copper. Five Parts in Eight of the Revenue of these Works belong to the Elector: and bring him in yearly about 30000 l. Sterling. This is a Sample of the Sort of Ore that yields the most Silver. This, which is the deepest of these Mines, is betwixt 700 and 800 Feet in Perpendicular. This may hold about $\frac{2}{3}$ of Silver. M. Belchoir.

p. 66. *Argenti Vena in marmore candido Cryfocolia ex caruleo perfusa.* Ex Sessannina valle (Schams) Rhetia. Dr. Scheuchzer.

p. 67. *Argentum rude Suacense venâ Malachitica mixtum.* Dr. Scheuchzer.

p. 68. *Lapis fissilis cum Argento & Cupro caruleo. Schwartzbergæ in Saxonia.* Silber und Kupfferhaltigen Scheiffer, i. e. A Shiver holding Silver and Copper. *M. de Schonberg.*

p. 69. *Argentum albicans in Cadmia metallica sulphurea, Marienbergæ in Saxonia.* Weißgültig Ertz in Ertz Kobold, i. e. White Goldish-Ore, in Cobalt-Ore. *M. de Schonberg.*

p. 70. *Cadmia fossilis argenti ferax in Vena cineracea & alba. Fribergæ.* Kobaldiges Silber Ertz mit blewde in grau und weissen Gebürge, i. e. Cobaltish Silver-Ore with Blende, in grey and white Veinstone. *M. de Schonberg.*

p. 71. *Cadmia fossilis argenti ferax. Fribergæ in Saxonia.* Derber Silberhaltiger Ertz Kobold, i. e. Tough Silver-holding Cobalt-Ore. *M. de Schonberg.* [It differs little from our Vitriolick Pyrites in Appearance: and it shoots like it.] [This Sample dissolv'd after the manner of the Pyrites.]

p. 72. *Vena Argenti cum Caruleo & Cryfocolla. Ex Rhatia.* Dr. Scheuchzer.

p. 73. *Minera Argenti nigricans, ex fod. Freyburgo-Misnicensi.* Dr. Leopold.

p. 74. *Vena Argenti ex fodina Trium Regum sanctorum Schemnizensi, in Hungaria.* Dr. Leopold.

p. 75. *Vena Luna pura, Glas-Ertz dicta, ex fod. Regij Principis Freybergensi Misnica.* Dr. Leopold.

p. 76. *Minera Luna ex fodina Fortuna Recentis, ad oppidum Johannis Georgij, ad confinia Bohemia.* Dr. Leopold.

p. 77. *Minera Luna ex fodina St. Andrea in Hercynijs.* Dr. Leopold.

p. 78. *Vena Argenti, Cupri, & Pyritæ, in Farrera Alpe Nusserra, Rhatia.* Dr. Scheuchzer.

p. 79. *Vena Luna dives, intermicante pyrite distincta, ex fod. Sahlbergensi in Suecia.* Dr. Leopold.

p. 80. *Minera Argenti ex fodina Hellefarssen, in Suecia.* Mr. John Angerstein.

Plumbi Mineræ, Lead-Ores.

σ. 1. *Plumbago super Pyritem aureo colore. Fribergæ in Saxonia.* Silberhaltiger Bley-schweifff uff Kupffer Kies, i. e. A Silver-holding Lead-Verge upon a Copper Marcasite. *M. de Schonberg.* [This is the very finest grain'd Steel-Ore. It may hold about $\frac{3}{4}$ Lead, but is of very hard Fusion].

σ. 2. *Steel-grain'd Lead-Ore, holding Silver. Minera Argenti ex fodinis Anhaltinis.* Dr. Leopold.

σ. 3. *Vena Argenti & Plumbi necnon Cupri fecunda. Fribergæ in Saxonia.* Kleinsprischlichter Bley, i. e. Small-grain'd Lead. *M. de Schonberg.* [100 lb of this commonly yields about 30 lb of Lead and 12 Ounces of Silver. It lies about 300 Fathom deep, in a Vein, in great Quantity. Mr. Weber].

σ. 4. *Vena plumbi; effoditur prope Davosum in Rhatia.* Dr. Scheuchzer.

σ. 5. *Minera plumbi cum Fluore albo, ex Sylva Sessana.* Dr. Kiser.

σ. 6. Lead-Ore, lying in Sparks or Grains amongst white Spar, with a small Admixture of a yellow shining Marcasite. It hardly holds $\frac{1}{2}$ Lead. From a Mine in Sweden.

σ. 7. *Plumbago in Talco cinereo. Snerberga in Saxonia.* Bleyglantz in grauen Talc, i. e. Lead-Glitter in grey Talc. M. de Schonberg.

σ. 8. *Plumbago cum are feracissima. Friberga in Saxonia.* Bleyglantz mit Kupffer Ertz, i. e. Lead-Glitter with Copper-Ore. M. de Schonberg.

σ. 9. *Flos aris in Galena argenti nigra. Friberga in Saxonia.* Kupfferblumen in schwarzen Silber blende, i. e. Copper Flowers in black Silver Blende. M. de Schonberg. [*Galena* or *Blende*, holds a little Lead; which is apt to run into a Slag.]

σ. 10. *Minera plumbi ex fodinis Fallunensibus in Suecia.* Dr. Leopold.

σ. 11. Sparkling Lead-Ore, the Sparks small: very poor and stony. From *Clausthall, Hannover.*

σ. 12. A stony Lead-Ore of a dark grey Colour; the Lead lying in Sparks with an Admixture of Sulphur. It may hold about $\frac{1}{4}$ Lead. From Sweden.

σ. 13. *Minera plumbi ex Sylva Hercynia.* Dr. Kifner.

σ. 14. *Vena plumbi, cupri, & argenti, effoditur in Rhatia supra Zillis in Monte Despin.* Dr. Scheuchzer.

σ. 15. *Fibra plumbaginis in marmore metallico albo. Friberga in Saxonia.* Eine durch weissen Spad setzende Bleyglantz Klufft, i. e. Lead-Glitter fix'd upon a thorough-white Spaad Klufft. M. de Schonberg.

σ. 16. *Minera Argenti Goslarieusis.* Brought thence by M. Ol. du Mont.

σ. 17. Lead-Ore, with white Spar. This Ore, when freed from the Spar, yields upon Trial, 61 lb in 100 of Lead, and 6 Drachms of Silver. From *New-England.* Mr. Bridger.

σ. 18. Lead-Ore, with a Spar, from *Clausthall, Hannover.* Mr. Belchoir. These Lead-Mines are very considerable.

σ. 19. Sparkling Lead-Ore, the Sparks large, with white Spar incorporated with it: as also a sort of Veinstone, of a grey Colour, and fine Constitution. *Clausthall, Hannover.*

σ. 20. Cross-grain'd Lead-Ore with Spar, white and semipellucid, crystalliz'd upon it. *Clausthall, Hannover.*

σ. 21. Sparkling Lead-Ore, the Sparks large; vein'd with white Spar, and a yellow brassy Marcasite. *Clausthall, Hannover.*

σ. 22. *Plumbago cum Pyrite. Friberga in Saxonia.* Bley und Kupffer Ertz, i. e. Lead and Copper-Ore. M. de Schonberg. [It may hold $\frac{3}{4}$ Lead.]

σ. 23. *Plumbago cum lapide sulphureoso. Friberga.* Bleyglantz mit Schwefelkies, i. e. Lead-Glitter, with a sulphureous Marcasite. M. de Schonberg.

σ. 24. *Minera plumbi ad pagum Kleeberg, prope Urbem Butisbachum.* Dr. Kifner.

σ. 25. *Galena plumbifera, ex vena Gratia Dej Clausthalensis five Vallis Nicolaitana, in Hercynijs Luneburgicis.* Dr. Leopold.

σ. 26. Lead-Ore. From *Swartzburg*. There is a little Calamine incorporated with it.

σ. 27. A Piece of Lead-Ore, flakey, glossy and shining, with some small Proportion of Sulphur or Marcasite. It seems to hold about $\frac{1}{2}$ Lead. From *Sweden*.

σ. 28. *Lapillus niger plumbi candidi. Marienburga in Saxonia.* Zinne Graune. M. de *Schonberg*.

σ. 29. Lead-Ore, holding Antimony, sent by the Name of *Neelangenium*, from *Fort St. George*. Mr. *Bulkley*.

σ. 30. *Minera plumbi ex fodinis Rhodensibus Hassia.* Dr. *Leopold*. There is white Spar intermingled with it: and a little Marcasite.

σ. 31. Silber Ertz. *Igla Moravia.* M. *Ol du Mont*. [Tis a cross-grain'd Lead-Ore, with Tubera upon it like those of the *Hæmatites*, along with it. It does not appear to hold much Silver].

σ. 32. *Galena, plumbi vena dives.* Bley-Glantz. Dr. *Scheuchzer*.

σ. 33. Lead-Ore, sent by Dr. *Kisner*, with the Inscription, *Minera Argenti ex Suecia*. [It appears to hold very little Silver: but is rich in Lead. This Ore is whiter and more glossy than usual].

σ. 34. Lead-Ore, of a fine Violet Colour; found, but rarely, in the Mines of *Schwartzenburg* in *Saxony*. Mr. *Melmoth*, who says that there's a considerable Quantity of common Potters-Ore got in these Mines. The Potters-Ore at *St. Iffy* in *Cornwall*, being expos'd for some time on the Surface to the Air, attains a violaceous Cast. This Colour is probably owing to an Admixture of Sulphur: and Marcasites that abound in that Mineral, have frequently a glossy red, purple, or violet Cast; particularly those from *Devonshire* and *Cornwall*. (See the *Catalogue of the English Fossils*. 1. 10. 11. 50. 51. 52.)

σ. 35. *Vena argenti & plumbi facunda. Fribergæ in Saxonia.* Silberhaltiger kleinspissiger Bleyglantz, i.e. Silver holding small pointed Lead-Glitter.

σ. 36. Broad-grain'd Lead-Ore with Marcasite, and Spar, adhering to it, from *Freyburg* in *Saxony*.

σ. 37. Lead-Ore, the finest and cleanest I ever saw: and carrying somewhat of a Gloss and Resemblance of Silver. From the Mines at *Clausthall, Hannover*.

σ. 38. A Mass of Lead-Ore, having amongst it a grey Spar, and a small Proportion of a yellow shining Marcasite. The Ore is of that Sort call'd the *Blue-Ore*: and breaks into small Squares. From the great Mine near *Widtfahla* in *Sweden*. It seems to hold about $\frac{1}{2}$ Lead. Some Part of the Lead of these Mines, which are the only considerable Lead-Mines of that Country, yields Sil-

ver; but in so small a Proportion, that 'tis hardly worth working. Mr. Lathalier.

σ. 39. *Plumbago tessellata*. *Fribergæ in Saxonia*. Wurflicht Glantz-Ertz, i. e. Diced Glitter-Ore. M. de Schonberg.

σ. 40. A Nodule of Lead from a Mine at - - - - - in Hungary. M. Ol. du Mont. He had several other like Nodules from the same Mine.

σ. 41. White Lead-Ore. *Clausthall, Hannover*.

σ. 42. *Lapis plumbarius fluoribus candidis similis*. *Fribergæ in Saxonia*. Weisbley Ertz, i. e. White Lead-Ore. M. de Schonberg. [It is found dispersedly among the other common Lead-Ore in the Veins, in small Quantity. It yields about $\frac{1}{2}$ Lead. Mr. Weber].

σ. 43. *Lapis plumbarius luteus & viridis*. *Fribergæ in Saxonia*. Gelbe und grün Bleyn Ertz, i. e. Yellow and green Lead-Ore. M. de Schonberg. [The Green is owing to Calamine. It holds about $\frac{1}{2}$ Lead].

σ. 44. *Lapis plumbarius niger*. *Fribergæ in Saxonia*. Schwartz Bleyn Ertz, i. e. Black Lead-Ore. M. de Schonberg.

Mineræ Stanni, Tin-Ores.

1. 1. A Tin-Grain very large, brought from *Misnia*, by M. Ol. du Mont. This is shot in the ordinary Form of Crystal, an hexagonal Pyramid, rais'd on an hexagonal Column or Base. The Tin-Grains of *Cornwall* are in quadrangular Pyramids: as there appears to be one in that 1. 9. *infra*, from *Marieburg*.

1. 2. *Lapillus niger plumbi candidi ferax*. *Eibensstock in Saxonia*. Schwartz Zihngraune, i. e. Black Tin-Grains. M. de Schonberg. [This holds half Tin. It lies in Veins amongst the Ore. Mr. Weber].

1. 3. *Lapillus niger plumbi candidi ferax in lapide cinereo*. *Eibensstock in Saxonia*. Zihngraune in grauen Kalkgebürge, i. e. Tin-Grains with a Grey Caukey Vein-stone. M. de Schonberg.

1. 4. *Lapillus niger plumbi candidi*. *Ehrenfreiderdorff Saxoniæ*. Zinnegraune, i. e. Tin-Grains. M. de Schonberg.

1. 5. Tin-Grains brought from *Misnia*, by M. Ol. du Mont.

1. 6. Tin-Grains. From *Schlackenwerdt in Bohemia*.

1. 7. *Lapillus niger plumbi candidi*. *Marienbergæ in Saxonia*. Zinnegraune, i. e. Tin-Grains. M. de Schonberg. [This is the richest Tin-Mine in Saxony. Mr. Weber].

1. 8. *Lapis niger ex quo preparatur Stannum Snebergæ in Saxonia*. Schwarzer Zwitter, i. e. Black Tin-Ore. M. de Schonberg.

1. 9. *Lapilli nigri plumbi candidi feraces in silice albo*. *Marienbergæ*. Zihngrauen in weissen Quartz, i. e. Tin-Grains in a white Quartz, a sort of Spar. M. de Schonberg.

1. 10. *Lapilli nigri plumbi candidi feraces in terra lutea*. *Marienbergæ in Saxonia*. Zihngrauen in gelbem Gebürge, i. e. Tin-Grains in a yellow Vein-stone. M. de Schonberg.

7. 11. *Lapis niger ex quo conflatur Stannum.* *John-Georgenstadt in Saxonia.* Schwartz Zwitter, i. e. Black Tin-Ore. *M. de Schonberg.*

7. 12. *Stannum in Medulla Saxi.* *Mariabergæ.* Zwitter in weißen Steinmarck, i. e. Tin-Ore upon white Stone-Marrow. *M. de Schonberg.*

7. 13. *Lapillus niger ex quo preparatur Stannum.* *Mariabergæ in Saxonia.* Schwartz Zwitter, i. e. Black Tin-Ore. *M. de Schonberg.*

7. 14. *Lapis viridis cum lapillis nigris stanni feracibus.* *Mariabergæ.* Grünlichter Zwitter mit kleinen Zihngraunen, i. e. Greenish Tin-Ore, with small Tin-Grains. *M. de Schonberg.*

7. 15. *Stannum in arenoso lapide.* *John-Georgenstadt, Saxonia.* Zwitter in weißen Sandgebürge, i. e. Tin-Ore in a white Sandy Vein-stone. *M. de Schonberg.*

7. 16. *Stannum cum Galena sterili viridi.* *Mariabergæ in Saxonia.* Grün blendichter Zwitter, i. e. Green barren Tin-Ore. *M. de Schonberg.*

7. 17. The common Tin-Ore from *Aw, Saxony.* *Mr. Melmoth.* [We have a like Sort in *Cornwall*, holding some small Quantity of Tin, and a very little Iron].

7. 18. Tin-Ore, grey, of the common Sort from *Schlackenwerde* in *Bohemia*; where there are about 60 Grooves, and greater Quantities of this Metal got than in any other Part of *Germany.* This is pretty like one Sort of *Cornish-Ore* that yields $\frac{5}{8}$ Part of Tin.

Mineræ Cupri, Copper-Ores.

v. 1. Native Copper; found, but very rarely, in the Lead-Mines of *Freyberg*, in *Saxony*: sometimes in this blanch'd Form, sometimes in Flakes, and Plates, fine and malleable. *Mr. Melmoth.* There is a considerable Quantity of a yellow *Marcasite* Copper-Ore in these Mines.

v. 2. *Æs nativum è fodinis Hercyniæ.* *Gewachsen Kupffer, i. e. Grown Copper.* From the *Haartz* Mountains. *M. de Schonberg.*

v. 3. *Æs purum fossile,* *Gediegen Kupffer, Agricola; ex Ducatu Wirtembergensi.* *Dr. Scheuchzer.*

v. 4. *Cuprum nativum in modum Argenti capillaris.* *Speneri Musæi, p. 173.* *Dr. Scheuchzer.*

v. 5. *Cuprum purum nativum è Ditionibus Principum & Comitum Schwartzbergensium.* *Gewachsen Kupffer, i. e. Grown Copper.* *M. de Schonberg.*

v. 6. *Æs nativum fossile in lapide cinereo.* *Snebergæ in Saxonia.* *Gewachsen Kupffer in grauen Geburge, i. e. Grown Copper in grey Vein-stone.* *M. de Schonberg.*

v. 7. *Æs nativum fossile in lapide arenoso albo.* *Snebergæ in Saxonia.* *Gewachsen Kupffer in weißen Sandstein, i. e. Grown-Copper in white Sand-stone.* *M. de Schonberg.*

v. 8.

v. 8. A Vein of native Copper in a red Stone, from the Copper Mines of Goslar in Germany. Mr. Belchoir.

v. 9. A Marcasite, with Spar and Grit. Sent by Dr. Leopold, with the Inscription, *Minera Cupri Clausthalensis sylva Hercynia*. There are some very small Spangles of native Copper in it.

v. 10. A grey flaty Stone, with a Mass of brown Spar affixt, with Veins of blue and green in it. Sent by Dr. Leopold, with the Inscription, *Minera Cupri ex fodinis Heinebergensibus Comitatus Nassoviensis*.

v. 11. *Nago Potshawe*; from the *East-Indies*. Mr. Bulkley. They calcine it, and afterwards use it inwardly in scirrhus Tumours of the Spleen and Belly; also in hard Swellings of the Testicles. 'Tis a hard stony Earth, holding Copper: and ting'd with Green and Blue.

v. 12. *Minera Cupri viridis cum caruleo. Ex fodinis Hasso-Darmstadiensibus*. Dr. Kifner. They call this *Blue Berg-blaw*, or *Mine-Blue*.

v. 13. *Vena aris viridis & rutila quæ in se continet sexaginta per centum libras Cupri. Sneberga in Saxonia*. Reiche Kupffergrüne und rothe, i. e. Rich Copper Green, and rich Copper Red. M. de Schonberg. [It has Virgin Copper in it: and yields above $\frac{1}{2}$ Copper].

v. 14. *Lapis fissilis arenosus cum caruleis granis. Sangerhusia in Saxonia*. Sandichter Kupffer Schiefer mit blauen Kornern, i. e. Sandy Copper Shiver with blue Kernels. M. de Schonberg.

v. 15. *Lapis fissilis, qui are est dives in caruleo nigricans. Islebä in Saxonia*, Schwartz blauer Kupffer Schiefer, i. e. Blackish blue Copper Shiver. M. de Schonberg.

v. 16. *Minera Cupri. Schwartzburg in Germania*. Kupffer Ertz. M. de Schonberg.

v. 17. A white Spar, with Veins of Brown, a very bright Blue, and a few Spots of Green, pretty ponderous, and doubtless impregnated with Copper, sent by Dr. Scheuchzer, with the Inscription, *Caruleum fossile, Berglasur, & Chrysocolla, Berg-grun Agricolaë, Bulacensis*. [*Berg-Lasur* is *Mine-Blue*, *Berg-grün* is *Mine-Green*.]

v. 18. *Caruleum nativum*. Dr. Scheuchzer.

v. 19. *Chrysocolla nativa. Anneberga in Saxonia*. Kupffergrün, i. e. Copper-Green. M. de Schonberg. [This is Copper-Ore, and may yield $\frac{1}{4}$ of that Metal.]

v. 20. A Marcasite, with Spar, and Grit; sent by Dr. Leopold, with the Inscription, *Minera Cupri ex fodinis Fallumensibus in Suecia*. This holds but little Copper.

v. 21. Copper-Ore, green, and very rich. From ----- in Germany. M. Valkenier.

v. 22. A Stone, gritty, with a Cast of Green, and shining Sparks throughout. This is the common Copper-Ore of *Aw*, in *Saxony*, about 5 Miles from *Schwartzenberg*. 'Tis got in great Quantity, and some of it is pretty rich; tho' this seemingly holds but little Copper. Mr. Melmoth.

v. 23.

u. 23. Copper-Ore. Gullenbergh, in Bohemia. Brought thence by M. Ol. du Mont.

u. 24. Spanish Copper-Ore. It may hold about $\frac{1}{3}$ Copper. Brought by M. Ol. du Mont.

u. 25. *Minera Cupri prope Pagum Hummersthausen, Territorij Hasso-Darmstadiensis.* Dr. Kifner.

u. 26. *Minera Cupri prope Pagum Hummersthausen, Territorij Hasso-Darmstadiensis.* Dr. Kifner.

u. 27. *Minera Cupri ad Pagum Acheback, Territorij Hasso-Darmstadiensis.* Dr. Kifner. [By the two opposite flat Sides, and the Flakes or Veins of this Ore running parallel, 'tis apparent it was taken forth of a Fissure.]

u. 28. *Minera Cupri, prope Pagum Ellemshausen, in Comitatu Erbacensi.* Dr. Kifner.

u. 29. Copper-Ore, of a Rust-Colour, with bright Sparks interspers'd, and Threads of a very fine bright Green. Sent by Dr. Leopold, with the Inscription, *Minera Cupri, ex fodinis, Spes Metallæ fossoribus dicta, in Landgraviatu Hassia.*

u. 30. *Flos aris Coloribus maxime variis. Friberga in Saxonia.* Kupfferblume; i. e. Copper-Flowers. M. de Schonberg.

u. 31. *Flos aris Coloribus maxime variis. Gersdorff Saxonia.* Kupfferblume. M. de Schonberg. [There is also Virgin-Silver in it.]

u. 32. *Cupri Minera à Ditionibus Principum ac Comitum Schwartzburgensium.* Kupffer Kies; i. e. Copper Marcasite. M. de Schonberg.

u. 33. Copper-Ore, from the same Mine with the former, having part of a Rider of a duskey grey Stone in it. M. de Schonberg.

u. 33^x. Copper-Ore, from another Vein of still the same Mine, with a Vein in it of white Spar, crystalliz'd.

u. 34. *Minera Cupri ex Comitatu Schwartzburgensi.* Dr. Kifner. This has Veins of a fine bright green cupreous Matter, shot into extreme fine Threads, much like those of the Ore of ----- in Devonshire. It has also Spar adhering to it, white, and in some Parts tinged with green.

u. 35. A Marcasite, yellow, with a glossy Grey, and Purple in some Parts, holding Copper. From the Mines of Newsohl in Hungary.

u. 36. A Marcasite, holding Copper. From Kopperberg, in Sweden.

u. 37. *Minera Cupri. Kupffer Ertz. Schwartzburg.* M. de Schonberg.

u. 38. *Minera Cupri. Schwartzburg.* M. de Schonberg.

u. 39. *Minera Cupri. Schwartzburg. Pfanenschweiff Kupffer Ertz;* i. e. Peacocks-Tail Copper-Ore. M. de Schonberg. [It holds near $\frac{1}{3}$ Copper. Mr. Weber.]

u. 40. *Minera Cupri. Schwartzburg. Gelf Kupffer Ertz;* i. e. Yellow Copper-Ore. M. de Schonberg. [It holds $\frac{1}{3}$ Copper. Mr. Weber.]

u. 41. A Marcasite, with Spar and Grit, sent by Dr. Leopold, with the Inscription, *Minera Cupri ex fodinis Fallunensibus in Suecia.* This holds but little Copper.

v. 42. *Lapis metallicus ararius aurei Coloris. Friberga in Saxonia. Gelb Kupffer Ertz; i. e. yellow Copper-Ore. M. de Schonberg.* This may hold about $\frac{1}{10}$ Copper.

v. 43. *Lapis metallicus ararius in Silice albo. Sneberga in Saxonia. Kupffer Ertz in weissen Quartz; i. e. Copper-Ore in white Quartz. M. de Schonberg.*

v. 44. White Spar, and Marcasite, holding Copper; from the Mines at *Clausthall, Hannover. Mr. Belchoir.*

v. 45. A Marcasite, holding Copper; from *Kopperberg in Sweden.*

v. 46. A Copper Marcasite, of a dusky Colour, with some small Admixture of Spar. It very nearly resembles some of the Marcasites of *Cumberland*. From the great Mines at ----- in *Sweden. Mr. Lathalier.* He was down in one of the Mines, where he had this given him for a Sample of the common Ore, and was told it yields from 5 to 7 in 10 of Copper. They find it from 50 to 150 Fathom deep.

v. 47. Another Sample, out of the same Mine, more yellow, shining, and sulphureous. *Mr. Lathalier.*

v. 48. A Marcasite, yellow, with a glossy Grey, and Purple in some parts, holding Copper. From the Mines of *Newsohl in Hungary.*

v. 49. *Minera Cupri Hassiaca, ad Pagum Kleeberg, prope Urbem Butzbach. Dr. Kifner.*

v. 50. A Marcasite, with Spar and Grit, sent by *Dr. Leopold*, with the Inscription, *Minera Cupri ex fodinis Rhodensibus in Landgraviatu Hassia.*

v. 51. A yellow brassy Marcasite, with Lead-Ore in the same Mass; the former holding Copper, the other Silver. From *Clausthall, Hannover. Mr. Belchoir.*

v. 52. A Marcasite, yellow, with a Gloss of Purple in several Parts, and broad-grain'd Lead-Ore adhering to it. Some of this Copper-Ore is very beautifully gloss'd with a bright Blue, Green, and Purple. From the Copper-Mines at *Saalfeld in Saxony. Mr. Melmoth.* The Copper-Ore is all of this Marcasite Kind. 'Tis the richest of any of the common Copper-Ores in *Saxony*; and indeed in all *Germany*. What Quantity of Lead-Ore is got in this Mine, he did not enquire. They have of this sort of Copper-Ore, both in *Cornwall* and *Devonshire*.

v. 53. *Minera Cupri ex fodinis Dusenaviensibus Comitatus Nassovia. Dr. Leopold.* [This holds about $\frac{2}{5}$ Copper, with very little Lead.]

v. 54. A dusky grey gritty Stone, yielding Copper and Lead; from a Mine at *Ilmenaw, near Erfurth, in Saxony. Mr. Melmoth.*

v. 55. A black, glossy, flakey, light Body; from the same Mine, yielding also Copper and Lead. *Mr. Melmoth.* [Both these appear to me to hold very little Metal.]

v. 56. *Minera Cupri arenosa, Conchitem striatum complectens, & Lapillum calculosum, ex Territorio Saxo-Isenacensi, prope Pagum Gerhausen. Dr. Kifner.*

u. 57. *Minera Cupri fusca ex fodinis Hasso-Darmstadiensibus.* Dr. Kifner. [Tis very poor.]

u. 58. *Pyrites carulei & purpurei Coloris in marmore metallico albo. Fribergæ in Saxonia. Braunn und blaue Kupfferblumen in weissen Spad; i.e. brown and blue Copper-Flowers in white Spad.* M. de Schonberg. [This may hold about $\frac{1}{10}$ Copper.]

Mineræ Ferri, Iron-Ores.

Φ. 1. Native Iron; from - - - - - in Saxony, being a Shoot about $\frac{1}{4}$ of an Inch in length. Mr. Melmoth. It very readily answers the Magnet.

Φ. 2. *Ferrum nativum fossile. John-Georgen-stadt in Saxonia. Gewachsen gedigen Eisen; i.e. grown, pure native Iron.* M. de Schonberg. [This answers the Magnet very readily; and is a very great Curiosity.]

Φ. 3. A reddish, glossy Iron-Ore, appearing to be pretty rich. Sent by Dr. Leopold, with the Inscription, *Ferri repertus ad Pagum Rosberg Comitatus Weilburgici in Wetteravia.*

Φ. 4. *Minera Ferri, ex Sylva Bussingensi, ad Tres Fontes, Territorij Hasso-Darmstadiensis.* Dr. Kifner.

Φ. 5. Iron-Ore, glossy, black with a Cast of blue. Sent me by Dr. Lister, with the Inscription, *Minera Ferri communis ex fodinis Dammoragrubæ 16 Milliaribus Holmia Sueciæ distantibus.* [It appears to be very rich and fine.]

Φ. 6. Another sort, seeming to be as rich, but more shining. Sent me by Dr. Martin Lister, with the Inscription, *Minera Ferri rarior ex fodinis Sueciæ.*

Φ. 7. *Lapis ferrarius Schwarzenbergensis. Eisen-Stein; i.e. Iron-Stone.* M. de Schonberg. [This is the common Ore there. It lies in Veins, in vast Quantities, about 40 Fathom deep. The Veins in many places are a Fathom Diameter. Mr. Weber.]

Φ. 8. *Lapis ferrarius niger. Eibenstock in Saxonia. Schwartzzer Eisen-stein; i.e. black Iron-stone.* M. de Schonberg.

Φ. 9. *Vena Ferri Budingensis.* Dr. Kifner.

Φ. 10. The common Ore of Iron, near Caen in Normandy. 'Tis pretty rich, and got in considerable Quantity. It seems to have a little Copper in it.

Φ. 11. Iron-Ore, *Shickskerner.* From Bohemia. 'Tis found chiefly in this Form, in small Lumps in the *Iffer-Meadow*, in great Quantities near the Mountains; out of which it is washed by Floods after Falls of Rain. 'Tis very rich; and being only powder'd, it answers the Magnet before Calcination. 'Twas imagin'd, by some German Mineralists, to hold Gold; but, upon tryal, I could obtain neither any of that Metal, nor Silver, out of it. It yielded full $\frac{3}{4}$ of Iron.

Φ. 12. Iron-Ore, of a very dark red Colour, and very much like a sort found at Langron, in Cumberland, along with the *Hæmatites*, of which there are *Vestigia* upon this. 'Tis found very plentifully at *Schwartzenberg* in Saxony, and yields a considerable Proportion of Iron.

Φ. 13.

Φ. 13. *Minera Ferri, ad Pagum Berckhausen, Comitatus Solmen-
sis.* Dr. Kifner. This is of a Rust-Colour; and, on the Outside,
has Efflorescencies of the Hæmatites upon it, very black and
shining.

Φ. 14. Hæmatites, striated from the Surface to the Center, of
a blackish red Colour; found plentifully at *Schwartzenberg* in Sax-
ony. 'Tis rich in Iron. Mr. *Melmoth*. He hath Variety of these
Hæmatitæ, from the same Mines, which all resemble ours of
Cumberland.

Φ. 15, 16. Hæmatitæ, of a dusky red Colour, striated, and in
all other respects resembling that of *Cumberland*. From *Mochos*.
Mr. *Bulkley*.

Φ. 17. *Ferrum purum fossile. Eibenstock in Saxonia. Gewachsen
Eisen; i. e. Grown-Iron. M. de Schonberg.* [This is an Hæmatites,
which kind is also found at *Swatzberg*. It lies above the Veins.
Mr. *Weber*.]

Φ. 18. Hæmatites. *Misnia. M. Ol. du Mont.*

Φ. 19. Schystos. *Sneberga in Saxonia. Glaskopff, i. e. Glass-head.
M. de Schonberg.*

Φ. 20. Hæmatites. *Eibenstock in Saxonia. Blut-stein; i. e. Blood-
stone. M. de Schonberg.*

Φ. 21. Hæmatites, Schystos, ex *Saxonia.* Dr. *Kifner*.

Φ. 22. Iron-Ore, from *Virginia.* Mr. *Doody*.

Φ. 23, 24. Nodules, of a brown Rust-Colour; found about 10
or 12 Foot deep, in *Cormandel, East-India.* They extract Iron
out of them; which indeed is the only Metal this Coast affords.
Mr. *Bulkley*.

Φ. 25. Another Nodule, little different; only it has Tubercules
on one side. Sent by Dr. *Scheuchzer*, with the Inscription, *Vena
Martis pisiformis ex Comitatu Badensi.*

Φ. 26. Small brown Nodules; sent by Dr. *Leopold*, with the
Inscription, *Vena Martis pisiformis Smalandica, quam hyberno tem-
pore ex lacu Asel vel Esel, propè Stattioff Incola colligunt, & in
Officinis ferrariis, exinde Fornaces, Tormenta & Globulos, & alia
Instrumenta bellica fundunt.*

Φ. 27. Other like Nodules, lying in a very fine Clay of a light
brown Colour. From the same Place.

Φ. 28. *Vena Ferri Globosa. Ex Comitatu Badensi.* Dr. *Scheuchzer*.

Φ. 29. *Cauhq Roy*, is calcined before used, and then given for
the Hiccough. The Fakiers dye or stain their Clothes with it,
to appear different from others. 'Tis a Nodule, ochreous, and
holding Iron. From *East-India.* Mr. *Bulkley*.

Φ. 30. *Ferri Vena Lengnaviensis, ex Ditione Bernensi.* Dr. *Scheuch-
zer*.

APPENDIX.

Mineralia ferruginea, Magnes.

Minerals related to Iron, and holding some of that Metal.

SECT. I. The Loadstone.

†Φ. 1. *Lapis ferrarius cum Magnete mixtus. Schwartzenbergæ in Saxonia. Magnetischer Eisenstein; i.e. Load-stone, Iron-stone. M. de Schonberg.*

†Φ. 2. *Magnes Swartzenburgensis. Magnet. M. de Schonberg.*

†Φ. 3. A Loadstone, from Saxony. They sometimes find the Magnet in the Veins along with the Iron, in Saxony; and very commonly in the Upper Hungary. They smelt and run it down with the Iron-Ore. Mr. Weber.

†Φ. 4. A Loadstone; found amongst a great many more, on the Shores of the River Potomac, in Maryland.

MANTISSA I. Dendritæ.

Natural Delineations of Shrubs, upon the Surfaces of various Fossils, chiefly in black, but sometimes in brown, made by Mineral Steams.

χ. 1. Various Delineations on all sides of a grey Stone resembling Trees, Shrubs, &c. Given me by Mr. Charlton, alias Curteyn. He told me it came from beyond the Seas, but could not tell me from what Country. 'Tis pity a Gentleman so very curious after Things that were elegant and beautiful, should not have been as curious as to their Origin, their Uses, and their natural History; about which he was little solicitous. Mr. Robert Ball shew'd me lately a Body exactly like this in all respects, which he inform'd me was taken forth of the River Arno near Florence; where there are great Quantities of this Stone with these Delineations.

χ. 2. *Dendrita è Pago Sohlhofen Comitatus Pappenheimensis. Dr. Scheuchzer.*

χ. 3. *Fruticum lineamenta in Marmore albedo. Ex Lapidina Scaphusiana. Dr. Scheuchzer.*

χ. 4. *Dendrita Glacensis, ex Bohemia. Dr. Scheuchzer.* This, being split, shews how the Delineations are form'd in the Fissures betwixt the Slates.

χ. 5. *Dendrita propè Pagum Popperg Ducatus Solisbacensis. Dr. Scheuchzer.*

χ. 6. *Stigmita & Dendrita ex Comitatus Badensis ferri fodinis.*

MANTISSA 2. Fossilia Incognita & Incerta.

Various native Fossils, of whose Nature, Origin and Constitution I have not been yet able rightly and sufficiently to inform myself.

↓. 1. A Stone of a reddish Complexion, and seeming to hold some small proportion of Iron. 'Tis variously intersected with
Septa.

Septa, composed of white Spar, after the manner of the *Ludus Helmontij*. What is observable in it, and what indeed I do not understand the Origin of, is a very remarkable reticulated Work on the Flat of one Surface of it; sent by *Agostino Scilla*, with this Inscription, *Figure risultata da Corpo esteriore di qualche parte d'Animale, in Sicilia*. He did not find this till after his Book was publish'd; so that there's no mention of it there.

↓. 2. A Body of a sparry Constitution and a pale brown Colour approaching white; in Figure oblong, cylindrick, but something tapering. 'Tis fistulous, or hollow, but fill'd with a yellowish brown Stone, of the same sort with that in which it lies. Sent by *Agostino Scilla*, with the Inscription, *Tubero di qualche Animale, marino, serata nel Sasso nella Cave di Messina*. This also was found after his Book was published.

↓. 3. Various Bodies, oblong, streight, cylindrick, or rather something tapering; placed in various Postures in the same Mass: they are ponderous, of a very dusky red Colour; and indeed in that, and all other respects, they resemble Cast-Iron.

↓. 4. *Gomuttra Selagitta*. 'Tis found on a Mount call'd *Vindy*, where Cows frequent and urine. 'Tis supposed, by the *Gentous*, to be partly produced that way; as the Name imports, which signifies a Stone made of Cows Urine. When refined, 'tis used inwardly against *Gonorrhæa's*, and inward Ulcers. From the *East-Indies*. Mr. *Bulkley*. (It seems to be the *Lapis Piceus*.)

↓. 5. Black Pumice. From the Island of *Tenariffe*. This sort is found frequently all over that Island; and is very like a sort of Vein-Stone found also frequently in *Cornwall* in the perpendicular Fissures over the Tin-Ore. There is a Sample of that in the *English Catalogue*, † f. 7. It also very nearly resembles some of the light spumose Cinders found near *Vesuvius*.

↓. 6. Pumice of a pale brown Colour; found in the Caldera, or Cavity at the top of the *Pico* in the Island *Tenariffe*. 'Tis in Texture, Constitution and Matter so like a coralloid Porus, that I cannot think it to be really any thing else. The Pumice is commonly found floating in the Sea. Vid. *Phil. Transact.* N^o 304. p. 2161.

↓. 7. A Body in Constitution something resembling the precedent; but of a paler Colour, being near white. 'Tis very light, porous and friable; and has a Salt in it, which, to me, tastes very like the common marine Salt. This Salt is usually found in the Pumice. Vid. *Philos. Transf.* N^o 304. p. 2161

↓. 8. A Body, very light, porous and friable; of a light grey Colour near white. 'Tis glossy and shining like a Talc; and indeed 'tis striated length-ways after the manner of the fibrous Talc. It has a Salt in it exactly like that in the precedent.

MANTISSA III.

Commentitia quædam, seu Exempla quorundam Errorum apud
Scriptores Fossilium.

*Some Instances of Mistakes in the Writers of Fossils, relating to the
Origin of Bodies.* [Conf. Mantiss. 2. §. 5, 6, 7, 8.]

ω. 1. *Lapis Spongia*. This has pass'd hitherto for a Fossil; and is commonly class'd with Stones, by the Writers of them. 'Tis light, porous, and friable. As to its Form, 'tis commonly hollow or fistulose. It has a brackish Salt Taste; is manifestly of marine Origin; and composed of a coarse, lax, coralline Matter. The Specimens in this Collection, and all the rest of it that I have seen, appear to have been the *Theca*, *Latibula*, or Cases of some Insect, made in the manner of those of the *Phrygium* or *Cad-worm*, or rather of the *Theca* of the *Penicilli marini*. 'Tis common to find on the Sea-shore, Insects thus involv'd in Cases composed of Sand, very small Bits of Shells, Sticks, or the like; as well as of coral-loid Matter.

MANTISSA IV.

Fossilium quorundam Præparationes.

*Miscellany Instances of Metallick and Mineral Bodies, that have been
wrought; and that give some Light to Natural History.*

*ω. 1. Clay, of a very pale Colour, near white; used by the Indians about Fort. St. George to mark their Faces with. Mr. Bulkley.

*ω. 2. *Terra Sigillata*; from the Island of Crete. 'Tis of a pale Colour near white.

*ω. 3. *Terra Sigillata Seichawer, alba*. Hamburgh.

*ω. 4. *Terra Sigillata Silesiaca, ex pallido lutescens*. Dr. Kifner.

*ω. 5. *Terra Sigillata Stregoniensis lutescens*. Dr. Kifner.

*ω. 6. *Terra Sigillata Seichawer, rufa*. Dr. Kifner.

*ω. 7. *Terra Sigillata Laubacensis rufa*. Dr. Kifner.

*ω. 8. *Terra Sigillata Laubacensis, ex rufo pallidior*. Dr. Kifner.

*ω. 9. The true Venetian Bole. 'Tis of a Brick-Colour.

*ω. 10. Goslar Vitriol, dissolved and crystallized. 'Tis very prettily shot into small Squares, generally of a rhomboid Figure. They are of a green Colour; and semipellucid.

*ω. 11. Roch-Allum. From Turkey.

*ω. 12. *Alumen Rupeum. Ex Agro Romano*. The Texture, and Manner of its Crystallization, is very observable.

*ω. 13. Vermillion, from China. The Merchants send it to Nuremberg, where it is prepared and fitted for the Use of Painters. Indeed reduced, as it is, to a fine Powder, it gives a good Colour. It is a factitious Cinnabar.

*ω. 14. Vermillion, made in China; consisting of $\frac{x}{2}$ Sulphur, and $\frac{z}{2}$ Mercury. 'Tis fibrous; and striated a-cross, like some of
O O the

the *Chinese* native Cinnabar; and our Hæmatites. The Surface or Outside of it also resembles that of the Hæmatites. Mr. *Cuningham* Surgeon.

x w. 15. Factitious red Arsenick; sent by M. *de Schonberg*, with the Inscription, *Sandaraca Baxerfeldensis, Rauschgelb.*

x w. 16. *Cadmia Metallica, preparati Colores, Specierum diversarum.* *Blaue farbe, i. e.* blue Colour. M. *de Schomberg.* Smalts, all made out of Cobalt, and by the same Process; but some come forth of a finer, others of a worse Colour; according to the different Constitution of the Mineral out of which they are drawn. He has here sent thirteen Samples, viz. Varieties under the Name of *Hoos Blau*: one of ordinary *Hoos Blau*; one of *Elaar Blau*, quæ *Colore non cedit Ultramarino*; six of *Elaar Blau*; one of *Mittel Elaer Blau*; and one of ordinary *Elaar Blau*. These are made out of the Cobalt that is ponderous, grey, and shining; found plentifully in the Mines of *Snebergh*. Being powder'd and wash'd, they roast it to exhale the Arsenick; which they collect in the Flew of their Furnace, run it down, and keep for Use. Afterwards they flux the remaining Calx with Pot-Ashes and white Pebbles powder'd; and the Smalt, in fine, appears in form of a Blue-Glass. See the *Philosophical Transactions*, N^o 293. p. 1753.

x w. 17. *Cadmia preparata, ad confectionem Orichalci utilis.* M. *de Schonberg.* It is calcined.

x w. 18. *Lapis Tutia.* This is what rises from the Calamine in making Brass.

x w. 19. *Nihil Album, sive Pompholyx, ex Fornacibus cupreis.* *Hamburgh.*

x w. 20. This appears to be Litharge; 'twas sent from *Fort St. George* by the Name of *Yevay Charrum*. The Surgeons there use it as a Caustick. Mr. *Bulkley*.

x w. 21. This likewise appears to be a Litharge, and is little different from the precedent. 'Twas sent me by Mr. *Bulkley* from *Fort St. George*, by the Name of *Moordar Tingy*. 'Tis used to dye the Hair black.

x w. 22. This was given me by Dr. *Ed. Brown*; and is what he in his Travels, pag. --- calls *Iron turn'd into Copper*; from a Spring near the Copper-Mines of *Hern-grunt* in Hungary. The Brief of this Transaction is, these Springs, Rivulets, &c. that arise out of the Copper-Mines here, are impregnated with much Vitriol; in which there is also Copper dissolv'd. Indeed the Vitriol constitutes a kind of Menstruum. Upon the putting Iron in, that Menstruum preys upon it, and assumes the ferreous Parts into itself. At the same time it precipitates an equal proportion of the cupreous Parts; a thing common and well understood by Refiners, and all who have been conversant with Solutions in *Aqua Fortis*, and other like Menstrua.

x w. 23. Copper, very fine; and concreted in a very elegant and observable manner. 'Tis in form of the Letter B; and was form'd, in the manner recited in the precedent, upon the putting a Piece
of

of Iron of the very same Figure and Dimensions into a Vitriolick Spring in Hungary. M. Ol. du Mont.

* ω. 24. *Ferrum in Cuprum mutatum in Fonte Neosolenfi in Hungaria.* Dr. Leopold.

* ω. 25. A Piece of Copper in shape of a Piece of Iron, that was put into some Rivulet near *Herngrunt*. M. Ol. du Mont.

* ω. 26. *Camentum.* N. B. *Camentum sua natura ferrum est, virtute vero Aqua viva, qua prope Civitatem Eperies in Hungaria oritur, brevi temporis Spatio in Cuprum mutatur.* M. de Schonberg. (The same is done in a Rill of greenish Vitriolick Water at *Isol*, five Miles from *Schemnitz*. The Copper precipitates exactly in the very Form of the Piece of Iron, in 1, 2, 3, to 6 Months, according to the Thickness of the Iron. Mr. Weber.)

* ω. 27. *Lamina ferrea in Cuprum transmutata.* Spener. Mus. p. 162. *Ex Hungaria.* Dr. Leopold.

* ω. 28. Coarse Pewter appearing to consist chiefly of Lead. 'Tis part of the Bales in which Bohea Tea was brought over from *China*. 'Tis commonly call'd here *Tutanag*, but not rightly; *Tutanag* being the *Chinese* Name for Speltre Ore. Conf. X. o. 6. *supra*.

* ω. 29. *Cuprum rubrum Japonicum.* Borax is cheap in *Persia* and *India*; so that probably the *Japoneses* run their Copper with it: to which probably it owes this fine red Colour.

MANTISSA V.

Arma & Instrumenta lapidea, n. Spicula, Jacula, Cunei, Secures, veteris Ævi.

Or Instances of certain Stones, form'd by Men, most of them antiently, and all before the Use of Iron was known; in order to serve for Tools and Weapons, but generally supposed by the Writers of Fossils to have been Natural, and are exhibited by them under the Name of *Cerauniæ*, or *Brontia* and *Ombria*.

† ω. 1. The *Spiculum*, or Head of an Arrow, made of Flint, part grey, and part brown. Found in one of the *Orkney-Islands*, by Dr. Wallace. These Flint *Spicula* are call'd in Scotland, *Elfs Arrows Heads*. Vide *Sibbaldi Prodrum Naturalis Historiæ Scotiæ*, Part. 2. l. 4. p. 49. There are *Spicula* of like shape found also in *Ireland*.

† ω. 2. Another bearded or notch'd on each side, shaped with very great Art; of grey Flint. From one of the *Orkney-Islands*. Dr. Plot, in his *Natural History of Staffordshire*, C. 10. Sect. 8. Tab. 33. Fig. 1. has exhibited one of a Shape little different, found at *Beresford*.

† ω. 3. Another of much the same Shape, but larger, and of a yellowish Flint. From *Guinea*. Mr. Southwell.

† ω. 4. Another, the Flint of like Colour with the precedent, not bearded. Mr. William Vernon A. M. Fellow of *Peter-House* in *Cambridge*. This was found by him in *Maryland*.

† w. 5. Two others, made of a sort of a white glittering Peble. Found also in *Maryland*. Mr. *Vernon*.

† w. 6. A red Stone, square, oblong, and tapering towards each end; sent by the Name of *Elf-stone*, from *Perthshire*, in *Scotland*.

† w. 7. A Hatchet, broad, and flat; of a hard Stone, dusky and near black. From *Nova Britannia*. Captain *Dampier*.

† w. 8. Another, of a Shape more oblong; of a dark brown Colour. From ----- in the *East-Indies*.

† w. 9. Another, less; in Shape not unlike a Wedge. Found near *Canton* in *China*.

† w. 10. Another, still less; from *Virginia*.

† w. 10^b. Another. *Barbadoes*.

† w. 11. Another, less. From the Island *Barbadoes*.

† w. 12. A Dart-Head; of a grey talky Stone. *Virginia*.

† w. 13. An Arrow-Head; of a light brown Flint, somewhat pellucid. *Ireland*. Mr. *Hugh Howard*.

† w. 14. Another, finely notch'd, or bearded; of a like Flint. *Ireland*. Mr. *Hugh Howard*.

† w. 15. A rough hard Stone, ponderous, and seeming to hold in it Iron, cut into form of a Hatchet. Found in *Tuscany*. Signior *Gambarini*.

† w. 16. A Stone, very hard; red, variegated with white, and a dusky blue. 'Tis betwixt 2 and 3 Inches long; and above an Inch in diameter in the middle; tapering thence, and terminating in a Point at each end. From the Island of *Guam*, one of the *Ladrões*. The Natives use them, commonly, as a *Faculum*, or Dart, in Slings; and do great execution with them. Capt. *Dampier*, as I remember.



A
CATALOGUE
OF THE
FOREIGN FOSSILS

In the COLLECTION of
J. WOODWARD M. D.

Brought as well from several Parts of *Asia*,
Africa, and *America*; as from *Sweden*,
Germany, *Hungary*, and other Parts of
Europe.

PART II.

Exhibiting the FOSSILS that are extraneous; the
Parts of Vegetables, and of Animals, digged up
out of the Bowels of the Earth; in particular the
Shells of Sea-Fishes: as also the Stoney, Mineral,
and Metallick Bodies form'd in them.

Ranged and disposed in a Classfical Method, according
to their several Kinds and Alliances; with an Histo-
rical Account of each: as likewise various Observa-
tions, and Reflections.

CATALOGUE

OF THE

FOREIGN FOSSILS

10 July 1725,

WHEN this Catalogue was composed, I intended to add to it such extraneous Foreign Fossils as should afterwards come to my Hands; and reserv'd, for that purpose, Pages vacant, as also Numbers intermediate, to which therefore there are no Descriptions added, nor Fossils belonging. Those, which I have receiv'd since, are enter'd into the other additional Catalogues. I shall rejoice that, in the Hurry of my Business, I shall find Leisure, during my Life, to reduce all into one common Method and Series, and one Catalogue.

PART II.

Exhibiting the Fossils that are extraneous; the Parts of Vegetables and of Animals, digged up out of the Bowels of the Earth; in particular the Shells of Sea-Beasts, and the Bones, Teeth, and Mineral Bodies found in them.

Ranged and disposed in a Chronical Method, according to their several Kinds and Qualities; with an Historical Account of each; as likewise various Observations, and Reflections.

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Memb. 1. Figura Conoide, seu Pileati. Memb. 2. Figura compressa, seu Discoides. Divisio 2. Spatagi linearum ordinibus à vertice ortis, sed ad Marginem usq; non pertingentibus. Pars 2. Echini, quibus unicum solummodo in Testa foramen est, idq; in centro Basis positum. Sect. 1. Echini tuberculis admodum exiguis obfiti, cum linearum brevium ordinibus decem ad Marginem usq; non productis, sed eo modo dispositis, ut figuram in superficie ad Pentaphylli folium accedentem referant, ideoq; PENTAPHYLLOIDES haud inepte dici possunt, p. 16.
Sect. 2. Echini, cum tuberculis majoribus & magis eminentibus, & Linearum seu Tuberculorum ordinibus à vertice ad Os pertingentibus, OVARIi dicti, p. 17.
Joints and Parts of Bodies belonging to marine Animals related to the Echini. Entrochi, & Trochita. Entrocho-Asteria. Quippe quæ forma sunt Cylindræa, uti Entrochi: sed sicut Asteria in singulorum Articulorum utraq; superficie stellam pentagonam exhibent, p. 19.
Asteria. Crustacea. Pisces eorumq; Partes. Fishes in Stone, p. 20.
Ova of Fishes in Stone. Bones, Teeth, &c. of Fishes, p. 22.
Bones and Teeth of Quadrupeds. Corpora Marina præsertim Conchylia Massa Lapideæ confertim immista, p. 29.
Testa aliq; Animalium Marinorum partes, incerti Generis, p. 31.
De Conchylis Fossilibus aliqua Injuria affectis, quippe attritis, erosis, vel compressis. Fossilia Generum incognitorum, p. 33.



Vegetable Bodies dug up out of the Earth.

Leaves of Plants immersed in Stone.

α. 1. **T**HE Impression of part of a pinnated Leaf, resembling the *Osmunda regalis*, but somewhat narrower. Sent by Dr. Scheuchzer, with the Title of *Phyllitis in Cretaceo lapide Oeningsensi à Suevia*.

α. 2. A Leaf something resembling a small Bay-Leaf; sent by Dr. Scheuchzer under the Title of *Phyllitis ex Lapidina Oeningsensi à Suevia*.

^x α. 2. Sent by Dr. Scheuchzer under the Title of *Phyllitis ex Lapidina Oeningsensi*. I confess I should rather think this the Leaf of some Tree of the Pear-kind.

† α. 2. Sent also by Dr. Scheuchzer with the Inscription, *Cassia Lignea vel Canella; item Salicis folia in Lapide fissili Oeningsensi, Diocefeos Constant*. These Leaves seem to be all of a Plant of the same Species; and are much less than those of the Cinnamon or Canelle. They appear rather to be Leaves of some Tree of the Plum-kind.

α. 3. Three pinnated Sprigs of a Fern upon a grey Slate from Ilmenau. Sent by Baron Schonberg, Berghauptman, or Superintendant of all the Mines of Saxony, free Baron of the Empire, and Lord Chamberlain of the King of Poland.

Parts of Trees and Shrubs found buried under Ground.

α. 13. A Piece of Wood dug up out of the Alum-Mines near Duben in Hungary. Sent by Dr. Kifner, of Francfort.

α. 14. *Lignum fossile ex prato Kellen in Waltikommer Riedt, Territorij Tigurini*. Dr. Scheuchzer, of Zurich.

Parts of Branches of Trees, and Shrubs petrified.

α. 25. A Piece of Wood, appearing to be Oak, petrified; from Virginia. Mr. Bird.

α. 26. A Piece of some geniculated Plant, about three Inches in length, and $\frac{3}{4}$ of an Inch in diameter, seeming to be part of a Sugar-Cane. 'Tis petrified. There is an Icon of a Body resembling this in *Aldrov. Musaeum*, p. 854. N^o 2. which he calls *Caulis faniculi petrificatus*. This was sent me by Signior Agostino Scilla, Author of the Book intituled, *Lettera circa i corpi marini petrificati*, 4^o. in Napoli 1670. But this Body not coming to his hands till after that Book was published, there is no Icon, nor Account of it there.

α. 27. A Piece of petrified Wood, from ----- in *Armenia*.
Mr. *Barwick*.

α. 28. A Body in some parts of a flakey, in others of a fibrous Constitution; with Veins of Spar in it. Found in a Lake in the Island *Antegoa*. 'Twas sent by the name of *Petrified Wood*; but whether it be really such or not, I have not yet had leisure to inform myself. It is harder than *Porphyry*.

α. 29. A Body of a fibrous and porous Constitution, with stoney Matter lodged in the Interstices of the Fibres of it. Sent by Mr. *Buckley* from *Fort St. George* by the name of *Petrified Wood*. I have not time now to examine whether it be truly so or not.

Fruits dug up out of the Earth.

α. 33. Half a Cone, of the Pine-kind, seeming to be of the common Mountain-Pine, very fair, and well preserved, in the middle of a Piece of a hard brown Stone, found in *Calabria*. *Agostino Scilla*. 'Tis not in his Book.

Marine Animal Bodies dug up at Land.

Vermiculorum Marinorum Tubuli.

ε. 1. A very fair and large Tubulus of a Vermiculus. From *Malta*. There is along with it in the Stone, in which this Verm. lies, a Tooth of a Dog-Fish; and a Piece of the Spine of an Echinus, of that sort that is commonly call'd *Bastoncini di S. Paolo*. *Ag. Scilla*.

ε. 2. Another large white Tubulus, twirl'd round, in manner of a flat Cochlea; given me by Dr. *Tennison*, Lord Archbishop of *Canterbury*.

ε. 3. Two others not unlike the precedent, but very small; sent by Dr. *Scheuchzer* with the Inscription, *Tubulus marinus fossilis parvus Cornu Ammonis instar in seipsum revolutus, ex Comitatu Neocastrensi. Specim. Lithogr. p. 64. fig. 86.*

ε. 4. A fair striated Vermiculus, with its Twirls running forwards much like those of the *Buccina*. From *Malta*. *Ag. Scilla*. This is not described in his Book; being not found till after that was published.

ε. 5. A large Tubulus of a Vermiculus, streight; and seeming to have a Valve in it. Dug up near *Bononia*. Dr. *Scheuchzer*.

PATELLÆ.

DENTALIA.

NAUTILI.

γ. 1. A Nautilus of the same Species with that found at *Whitton* in *Lincolnshire*, in the *English Catalogue* of my Fossils, d. 15. From the Mountains near *Zurich*. There appear linear Striæ running along the Back of it. This was sent me by M. *Valkenier*, Envoy of the States-General of the *United Provinces* to the *Switz-Cantons*.

γ. 2. A smaller, seeming to be of the same Species, only the linear Striæ on the Back are wanting in this. Sent by *Ag. Scilla*, with the Inscription, *Configurazione di Gambaro, con la Coccia disfatta, nel Isola di Malta*. Found since his Book was publish'd.

γ. 3. Another, of the same Species; found near *Zurich*. *M. Valkenier*.

γ. 4. Another, of a more compress'd Shape. From *Malta*. *Ag. Scilla*. Found since his Book was publish'd.

AMMONITÆ.

Ammonita laves, nullis Strigis per latera transversim ductis.

γ. 5. Several Joints of a large Ammonites, in which the Sutures plainly appear. Found in a Valley among the Forest-Towns near *Switzerland*. *M. Valkenier*.

γ. 6. Two small Ammonitæ, appearing to be of the same Species with that found at *Alhampton* in *Somersetshire*, in the *English Catalogue*, d. 25^x. From *Altdorf*. *Dr. Leopold*.

γ. 7. Another, little different, only this has a bright shining Armature upon it, and the Sutures are very conspicuous. From *Switzerland*. *Dr. Scheuchzer*.

γ. 7^x. Another. This is very fair, the Armature fine, the Sutures distinct, and terminates at a Diaphragm. 'Twas found in *Burgundy* in *France*. 'Twas of the same sort exactly with the foregoing: and there are of the very same found in *Oxfordshire*, *Somersetshire*, and other Parts of *England*. *Dr. Scheuchzer*.

γ. 8. Two small ones, having the Dorsa sharp, and ferrated; being of the same Species with that found at *Hannington* in *Wiltshire*, in the *English Catalogue*, d. 25⁺. From *Zurich*. *M. Valkenier*.

Ammonita lateribus strigatis, dorso lavi.

γ. 9. A pretty large articulate Ammonites, with the Sutures very fine. Found in a Valley among the Forest-Towns near *Switzerland*. *M. Valkenier*.

γ. 10. Another, with undulated Sutures, placed very thick, and close together. From the Fields about *Hesse-Cassel*. *M. Valkenier*.

γ. 11. A small Ammonites, with the Dorsum very broad, and a double Order of Studs on the Sides. Found near *Neufchatel*. *M. Valkenier*.

γ. 12. Another, very flat, the Strigæ on the Sides not appearing so plain as in the rest. Found in the Mountains near *Neufchatel*. *Mr. Valkenier*.

Ammonita, Strigis Dorsum trajicientibus, simplicibus.

γ. 13. A Segment of an Ammonites. Sent by *Dr. Scheuchzer*, with this Title, *Strombita majoris secundum longitudinem striati Spira. è Comitatu Neocastrensi. Specim. Lithogr. Helv. p. 59. Fig. 81.*

γ. 14. A small *Ammonites*. Sent by Dr. Scheuchzer, with the Inscription of *Strombites majoris secundum longitudinem striati Spira, terna tuberculorum serie instructa*. Specim. Lithogr. Helv. p. 59. fig. 81. è Comitatu Neocastrensi.

Ammonites Strigis dorsum trajicientibus, bifurcatis.

γ. 15. A Segment of a large *Ammonites*. Found in a Valley among the Forest-Towns near Switzerland. M. Valkenier.

γ. 16. An *Ammonites*, with the Strigæ placed very close together. Sent by Dr. Scheuchzer. Found near Basle.

γ. 17. Another, somewhat less. Found near Neufchatel. M. Valkenier.

γ. 18. Another, with the Strigæ less, and closer. From the same Place. M. Valkenier.

γ. 19. Another, with the Strigæ pretty large. From still the same Place. M. Valkenier.

γ. 20. Another, with the Strigæ less, and closer together. From the same Place also. M. Valkenier.

γ. 20^x. Another, little different. Burgundy in France. Dr. Scheuchzer. This Species is common in several Parts of England.

γ. 21. Two small ones. Sent by Dr. Scheuchzer. From Switzerland.

γ. 21^x. Another, of the same Species with one of the foregoing. From Burgundy in France. Dr. Scheuchzer.

γ. 22. A larger, with the Strigæ pretty big, and high, of which some are bifurcated, and others not. Found near Neufchatel. M. Valkenier.

Ammonites, Strigis bifurcatis, dorsum trajicientibus, umbilicata.

Ammonites, limbo acuminato, inter duos sulcos per totum dorsum ducto.

γ. 25. A large *Ammonites*, from St. Gall, in Switzerland. M. Valkenier.

γ. 26. A less, from Neufchatel. M. Valkenier.

Ammonites dorso acuminato absq; Sulcis secundum Dorsum ductis.

γ. 27. From Neufchatel. M. Valkenier.

γ. 28. Another, less, from the same Place. The Ridge of the Back in this is crenated, and there adheres to the middle of the Shell on each side a shining yellow Pyrites.

γ. 29. Another, of the same Species, very fair, from the same Place. M. Valkenier.

γ. 30. Another, with the Ridge not near so much crenated. Found near Altdorf. Dr. Leopold of Lubec.

γ. 31. Two others, with the Strigæ smaller, and closer set. Found near Neufchatel. M. Valkenier.

γ. 32. A small *Ammonites*, with the Strigæ fewer, but larger. From the same Place. M. Valkenier.

γ. 33. Another small one, found near Zurich. Dr. Scheuchzer.

*Ammonita Sulco unico per Dorsum ducto.**Ammonitarum Fragmenta, & Impressiones.*

γ. 34. A Joint of an Ammonites, found near Neufchatel. Sent by Dr. Scheuchzer under the Title of *Ceratoidis articulus*. *Specimen Lithogr. Helv.* pag. 59. fig. 83.

γ. 35. An Impression of the Outside of an Ammonites upon Stone, very fair, exactly like those two found in Northamptonshire, in the *English Catalogue*, d. 98. & d. 99. and made by the Shell of an Ammonites of the same Species. From Neufchatel. M. Valkenier.

AURIS MARINA.

NERITÆ.

COCHLEÆ.

γ. 50. A Cochlites, of a compress'd Figure. Found near Neufchatel. M. Valkenier.

γ. 51. Another, very fair, with part of the Shell on, and the Clavicula more rais'd. Sent by Ag. Scilla; and seems to be that figured in his Book, *Tab. 16. Fig. 2.*

γ. 52. Another, found near Neufchatel. M. Valkenier.

γ. 53. Another, very fair. Sent by Ag. Scilla, from Calabria, but found since his Book came out.

γ. 54. Another, large. Found near Neufchatel. M. Valkenier.

γ. 55. Another, very small. Sent by the same Person, from the same Place.

γ. 56. *Cochlea tenuiter secundum orbes striata, clavicula mediocriter producta.* The Species is sometimes found upon the Shores of Maryland; but this was dug out of the Ground, with other Shells, and Teeth of Fishes, &c. at a great distance from the Sea. Sent by Mr. Jones, a Clergyman in that Country.

γ. 57. A Fragment of a *Cochlea, clavicula producta.* Found near Neufchatel. M. Valkenier.

γ. 60. A Cochlites, sent by Dr. Scheuchzer, with the Inscription, *Buccinites, ex Territorio Sangallensi.*

TROCHI.

CONCHÆ VENERIS.

CYLINDRI.

RHOMBI.

CONCHÆ PERSINÆ.

BILINGUES.

BUCCINA.

γ. 100. *Buccinum, clavicula brevi, Strigis 4. secundum testa volutam eminentibus.* Found with γ. 56. in Maryland.

γ. 100*. Another of the same sort, and from the same Place. This has the upper Shell of an Oyster adhering to it; and is so

broken, as fairly to shew and expose its internal Constitution. *William Vernon*, A. M. Fellow of *Peter-House* in *Cambridge*, found it in *Maryland*.

γ. 101. *Buccinum tuberculis parvis frequentibus asperatum clavicula producta*. Dug out of the Cliffs of the *Baltick-Sea*. There are two Samples of this Species.

γ. 101^x. *Buccinum parvum verrucosum, clavicula producta*. Ex *Agro Moguntino*. Dr. *Kisner*.

γ. 102. Fragments of a *Buccinum laeve, clavicula productissima*. From the Cliffs of *Cheasapeak-Bay*, below *Herring-Creek*, on the Western Shore of *Maryland*. Dr. *Krieg* of *Riga*.

γ. 103. *Buccinum, clavicula productissima, Volutis tumidioribus, striatis*. *Maryland*. Mr. *Vernon*.

γ. 104. *Cochlea, clavicula productissima, exigua, cancellata*. Dug up near *Bononia*. Dr. *Scheuchzer*.

PURPURÆ.

γ. 110. A small *Purpura*. Found near *Neufchatel*. M. *Valkenier*.

UMBILICI MARINI.

γ. 116. Two *Opercula* of a Species of a *Cochlea Marina*. These are commonly call'd by Naturalists *Umbilici Marini*. Sent by *Ag. Scilla*, with this Account, *Pietre di S. Margherita, cioè Opercoli di Turbini, trouati con infiniti altri corpi di Mare fra terra nel Capo della Citta di Milazzo*. Tab. xvii. A. A.

APPENDIX.

Cochlea Terrestres, ex Tellure Effossæ.

γ. 120. *Cochlea Terrestris interdum unicolor, interdum variegata, item variis fasciis depicta*. *List. Hist. Conchyl.* N^o 54. This here has a single narrow *Fascia*, and was dug up ----- Fathom deep; in sinking a Well at *Strasburg*. Mr. *Melmoth*.

γ. 121. Another, that seems to be of the same Species. This has several *Fasciæ* upon it. Found near *Frankfurt on the Main*: and sent by Dr. *Kisner*, with this Title, *Cochlea fossilis terrestris*.

CONCHÆ, BIVALVES, PECTINES.

δ. 1. A convex Shell of the *Pecten magnus subrufus, &c.* N^o 2. *List. Hist. Conchyl.* which Species, as Dr. *Lister* observes, is found in the *Mediterranean-Sea*. This was dug out of the Rocks near *Cadiz*, in *Spain*, where were many more of the same sort: as also several others. Brought to me by Mr. *Clarke*.

δ. 2. A small *Pecten*, with both the flat and the convex Shell. Found in *Arabia Deserta*, by Mr. *Henry Worsley*, who observ'd many Fossil-Shells daily as he pass'd along in that Country. Confer. δ. 116. *infra*. This very ingenious Gentleman, Brother to Sir *Robert Worsley* Baronet, travelled through, not only *Italy*, and other the more civiliz'd Parts of *Europe*; but likewise, so great was

was his Curiosity, and desire of Knowledge, through Egypt, Arabia, and several other Parts of Asia, where few Europeans besides have ever been.

§. 3. The convex Shell of a Pecten, seeming to be of the same Species with that §. Found near Neufchatel. M. Valkenier.

§. 4. The convex Shell of a small Pecten, very fair. From Calabria. Agost. Scilla. This was found since he set forth his Book.

§. 5. Thirteen very fair and entire Shells of a *Pecten inequaliter auritus*. Dug up in Maryland, and sent thence, some by Mr. Jones, others by Mr. Vernon. The biggest is 5 Inches and $\frac{1}{2}$ in length: the rest of several Sizes, less and less, to the last, which is not half an Inch long. They seem to be of several Ages: and the Growth of different Years. There are both of the upper and under Shells. Some of them have *Balani*, and other Shells adhering to them: as also a thin reticulated Body, found commonly upon Shells at Sea.

§. 5^x. *Pecten sulcis inequaliter patentibus*. Dug up near Bononia. Dr. Scheuchzer.

§. 6. A Pecten, found 3 Miles from the great River Chaplank, which is 24 Miles from Cheasapeak-Bay. Dr. Krieg.

§. 7. One Shell, of a very small Pecten, sent by Dr. Scheuchzer, under the Title of *Pectinites rarioribus striis*. List. Hist. Tit. 48. *In Lapide arenoso ferrugineo, ex agro Altdorfino Territorij Norimbergensis*.

Pectinibus Affinis CTENOIDES.

Conchylium hoc duabus testis constat auritis, altera plana, altera convexa admodum, medio dorso depresso, rostro adunco. The Shells f. 402, 403, 404, 409, 412, 413. in the English Catalogue belong to this Genus. Those were not so well freed from the Stone, in which they were originally lodg'd, that I could so clearly discover all parts of the Shell, in order to enable me to ascertain and make a right Judgment of the Kind, as I could in the two following, when they afterwards came to my Hands. That Oversight therefore ought to be corrected in that Catalogue.

§. 15. *Ctenoides sulcatus, plurimisq; tuberculis obsitus*. Found near Frankfurt. M. Valkenier.

§. 16. Another, of the same Species. Sent by Dr. Kifner, with this Account: *Reperiuntur Budinga in Comitatu Eudingensi, in terra lateritia; & à vulgo dicuntur Krottenstein, ac si diceres, Lapides Bufonum.*

SPHONDYLI.

§. 20. A large *Sphondylus*. Found in a Valley among the Forest-Towns near Switzerland. M. Valkenier.

§. 21. Part of a large *Sphondylus*, with the Ridges big, rising and round, and at last standing off from the Shell in a tubular Form. Sent by Dr. Scheuchzer, with this Title, *Concha Fossiles, ex Territorio Basiliensi, quæ illustrant doctrinam de Belemnitis*. By

which he seems to believe the *Belemnita* only Parts of this Species of Shells. But a little further Observation would have shewn him that was a great Mistake.

§. 22. One of those Tubular Bodies, separated from a Shell of the same Species.

MARGARITIFERÆ.

OSTREA.

§. 35. An Oyster, with both the Shells join'd together; found in the Deserts of *Arabia*, by Mr. *Henry Worsley*. Vid. §. 2. *supra*, & 116. *infra*.

§. 36. A single Shell of an Oyster; from the same Country. Mr. *Worsley*. 'Tis the lower, or concave Shell.

§. 37. Another, being the upper or flat Shell. From the same Place.

§. 37^x. The concave Shell of an Oyster, little different from the common *English* Oyster; appearing to be eroded in some parts by Worms. Dug up in *Virginia*. Mr. *Banister*.

§. 38. The flat Shell of an Oyster; from the Rocks on the Shores near *Cadix* in *Spain*. Found along with the Scallop, §. 1.

§. 39. Two small Oyster-shells, found near *Neufchatel*. M. *Valkenier*. There are of this very Species found commonly in *England*, and particularly about *Marston* in *Northamptonshire*. See the *English Catalogue*, f. 128.

§. 40. A single Oyster-shell, found near *Neufchatel*. M. *Valkenier*.

§. 41. Another, sent by the same Person, from the same Place.

§. 42. Another, of a more oblong Shape; and which seems to be of a different Species. Found near *Neufchatel*. M. *Valkenier*.

§. 43. Another, found near *Lutgeren*, in the County of *Baden*. Dr. *Scheuchzer*.

§. 44. Another, found in the Country about *Neufchatel*. Sent by Dr. *Scheuchzer*, under the Title of *Chama Fossilis*. *Spec. Lithogr.* p. 55. fig. 75. 'Tis pity this very learned, ingenious, and inquisitive Gentleman had not, with greater Accuracy, adjusted the Kinds of the Fossil-shells he has publish'd in his Book. There are but too many Instances of his Inadvertency in this respect; of which this, of ranking a Shell that is incontestably of the Oyster-kind among the *Chama*, is one. All those which he has done me the favour to present to me, I have here taken care to reduce to their proper Classes and Tribes.

§. 45. Another, very large, and thick; from the Island of *Gaza* near *Candy*.

§. 46. An Ostracites, of an oblong Shape; found near *Neufchatel*. M. *Valkenier*.

OSTREA ARBOREA quibus scilicet Margines dentati sunt.

§. 56. A very fair and entire Pair. Found in the Chalk-pits in *Languedoc*. Mr. *John Locke*. A Shell of this Genus is call'd *Rafsellum Lapis*, by Dr. *Lister*, *Hist. Conchyl.* Tab. 486.

§. 51. Another Pair, found in a Valley among the Forest-Towns near Switzerland. M. Valkenier. Shells of this very Species are found in Northamptonshire, Lincolnshire, &c. See the English Catalogue, f. 172. & seq.

§. 52. Another single Shell, of the same Species, found in the same Place. M. Valkenier.

§. 53. Another, that appears to belong to this Genus; but the Edges of the Shell are broken off. Found near Neufchatel. M. Valkenier.

§. 54. Another, less, of the same Species with the last. Found in the same Place. Sent by Dr. Scheuchzer under this Title, *Concha lapidea curvirostro rugosa & tuberculis quandoq; munita, dorso elatiore*. Spec. Lithogr. p. 56. fig. 77.

RECURVIROSTRA.

§. 60. A very fair one, with both Shells; found in the Dutchy of Wirtemberg. M. Valkenier. Many of this very Species are found in England. See the English Catalogue, f. 181. & seq. One of this Species is figured in Dr. Lister's Hist. Couchyl. in his Chapt. De Conchitis Bivalvibus, Fig. 38.

§. 61. Another, of a different Species, growing gradually broader towards the Margins. Found in the Dutchy of Wirtemberg. M. Valkenier.

§. 62. Another small one, found in the Canton of Bern, sent by Dr. Scheuchzer, under this Title, *Conchites Anomius rugosus rostre subtereti & insigniter adunco donatus*. List. Tit. 4, 5.

ANOMIÆ.

§. 70. A large Pair, smooth, and not sinuated in the Margins. Found near Neufchatel. M. Valkenier. This Species is found in Gloucestershire.

§. 70^r. A Pair less. *Ex Territorio Biennensi*. Dr. Scheuchzer. This Species is common in Gloucestershire.

§. 71. A Stone form'd in a small flat Shell of this kind, found in the same Place. M. Valkenier.

§. 72. A Pair of Shells of this kind, found in Mount Leger near Zurich. Sent by Dr. Scheuchzer under this Title, *Conchites Anomius rostro prominulo & veluti pertuso donatus*, List. Tit. 46. This Species is found frequently in Gloucestershire, and the neighbouring Midland Counties of England.

§. 73. A small one, found near Neufchatel. M. Valkenier. This likewise is common in England.

§. 74. Two Pair, of an oblong Shape, with the Margin sinuated. Found in great plenty on the side of an Hill near Neufchatel. Sent by Dr. Scheuchzer, with this Title, *Concha rarior Anomia vertice rostrato Columna de Purpura*. These are also common in England.

§. 74^x. Another, of the same Species. *Ex Territorio Biennensi*. Dr. Scheuchzer.

§. 75. Another Pair, larger, but of the same Species; from the same Place.

§. 76. Two others, of a Species something different; from the same Place.

§. 77. Two small ones, finely striated, with the Margins not sinuated. Found on Mount Leger near Zurich. Sent by Dr. Scheuchzer, under this Title, *Pectunculites parvus striis capillaribus notatus*. Spec. Lithogr. Fig. 29. p. 23. This Species is likewise found in the Cliffs of Sheppy-Island. See the English Catalogue, f. 321.

§. 78. Four fulcated *Anomia*, with a sinuated Margin. Sent by Dr. Scheuchzer, under the Title of *Conchita seu Pectunculita striata ex Monte Legerio Helvetia*. This Species also is found commonly in the middle Parts of England.

§. 79. Another of the same Species, found in a parcel of *Lapis Judaicus*, brought from Syria.

§. 80. Another, with the Margin but very little sinuated. Found near Neufchatel. M. Valkenier.

§. 81. Three others, of which one appears to be compress'd by some external Force. From the same Place. M. Valkenier.

§. 82. Two more, very large, from the same Place. Dr. Scheuchzer.

§. 83. Two less, and much sinuated; from the same Place. This Species is very common over all the middle Parts of England.

§. 84. Two others, from Dr. Scheuchzer, with this Title, *Conchites striatus striis eleganter expressis armatura Margaritarum simili splendens, seu Pectunculites subsphearicus, Listeri Tit. 25. ex Comitatu Neocastrensi*. These are found commonly in England.

§. 84^x. Two of the same Species: *ex Territorio Biennensi*. Dr. Scheuchzer.

§. 85. Another, dug up at the Depth of 50 Fathom in an Iron-Mine, about 20 Miles from Newsohl, Hungary. Mr. Weber.

§. 87, 88. Two Stones, seeming to be form'd in Shells of the *Anomia* kind. Sent by Dr. Kifner, with the Title of *Hysterolithi ex Vinetis Lohensteinensibus*. Wormij Mus. pag. 83.

§. 89. Another. Hess-Darmstadt. M. Valkenier.

DENTICULATÆ; sc. *Pectunculi* LEPTOPOLY-GINGLYMI Listeri.

§. 95, 96. Two Shells of this Kind, found near Mentz. Sent by Dr. Kifner under this Title, *Concha fossiles striata & fasciata*. The Shells are thick, and the Striæ pretty deep, otherwise they differ not from the Species dug up in England, in the English Catalogue, f. 418. which are also now found living upon our Coasts.

§. 97. Another, of the same Species, found at Weinheim in the Palatinate. Dr. Leopold.

§. 98. Another, very perfect, and fair. Found near Neufchatel. M. Valkenier.

§. 98^x. Two others, little different, only the *Denticuli* are smaller, and the Shells thinner. Maryland. M. Vernon. They seem to be of that Species exhibited by Dr. Lister, under the Name of *Pectunculus subrufus paululum sinuosus dense & leviter admodum striatus*.
Hist.

Hist. Conchyl. N^o 76. Tab. 245. which is found commonly on the Shores of *Jamaica*.

§. 99. Another, of a Species somewhat different. Found near *Neufchatel*. *M. Valkenier*.

Denticulata Figura oblonga.

§. 105. A Pair of that Species, which is call'd the *Jamaica-Cockle*. Dug up in *Maryland*. *Mr. Jones*.

§. 106. A single Shell, of the same Species. Found in the same Place. *Mr. Jones*.

§. 107. An extreme small Shell, of the same Species, from the same Place. *Mr. Vernon*. This seems to be the Shell of a Creature very young, and not near arrived to a Year's Growth.

PECTUNCULI.

§. 110. A Pair of Shells, found in *Calabria*, very fair, and little different from the *Pectunculus maximus subfuscus valde gravis*. *List. Hist. Conchyl.* N^o. 108. which in his *Hist. Animal. Angl.* pag. 173. is call'd *Concha è maximis admodum crassa rotunda ex nigro rufescens*. This Species is found living in great Numbers upon the Shores of *Yorkshire*: and is likewise commonly dug up at *Richmond* in *Surrey*. See the *English Catalogue* ----- *Ag. Scilla*. It seems to be that figured in his Book. Tab. XV. Fig. 1.

§. 111. A single Shell somewhat more flat, otherwise little different. Found in *Calabria*. *Ag. Scilla*. Tab. XV. Fig. 2. This indeed seems to be the same with the *English Pectunculus maximus subfuscus* mention'd above. §. 110.

§. 111*. Another of a Form somewhat more oblong; otherwise little different. *Maryland*. *Mr. Vernon*.

§. 112. A Stone given me by *Mr. Benj. Middleton*, very perfect, and fair, form'd in a *Pectunculus* not much different from that §. 111. 'Twas found in *Barbadoes* 192 Foot deep, in sinking a Well in *Mr. Middleton's* Plantation there, in the Middle of the Island, on a rising Ground, and call'd for that Reason, *The Mount-Plantation*. 'Twas lodg'd in a Stratum of Stone, of the same Sort with that of which this Body it self is composed. They sunk 60 Foot deeper (*i. e.* to 252 Feet) before he left the Island: but were not then arrived at the Spring. They don't usually find Water in that Neighbourhood till the Depth of about 50 Fathom. They every where find the Earth, from the Surface to the Bottom, disposed into Strata. He does not remember in what Order they lay, but observed they consisted of very various Matter. For, besides the Strata of Stone, he took notice of Clay, Marl, and Sand. This Well cost 150 Pound, or thereabouts, sinking so far. There were great Numbers of these *Conchitæ*, some bigger to twice the Bigness of this, others much less: but all of the same Sort, and he observed no others. Not far from the said Well, blowing up a Rock, he formerly observed several of these *Conchitæ* also lodged in the Stone of that Rock.

§. 111. Another less, found with several more, about 10 Miles on this Side *Trent*. Mr. Ben. Middleton.

§. 114. Another near *Neufchatel*. M. Valkenier.

§. 115. Four small flat ones, found near *Frankfurt* on the *Main*. Sent by Dr. Kifner.

§. 116. A Stone form'd in a flattish *Pectunculus*. Found among several others of the same Sort, and Oyster Shells, &c. in *Arabia Deserta*, at 8 or 9 Miles Distance from the Red-Sea, between *Tor* and *Sues*. Mr. H. Worsely. Conf. §. 2. *supra*.

§. 117. A Shell of the Species in which the Stone call'd *Bucardites* is form'd. Found in *Calabria*, where they occur plentifully in the Fields and Mountains. Ag. *Scilla*. Tab. XVI. A.

§. 118. The Stone call'd *Bucardites* form'd in a Shell of the same Species with the preceeding, and found in the same Place. Ag. *Scilla*, after his Book was publish'd.

§. 119. A single Shell of a large cancellated *Pectunculus*, perfect and fair. Dug up in *Maryland*.

§. 120. Another, less, of the same Species, from the same Place.

§. 121. A Pair, of the same Species, very large, and having the Cavity filled with a brown Sand of the same Sort with that in the Stratum in which this and the other Bodies were bury'd. Out of this Sand I pick'd several small Shells and Fragments of larger, both Bivalves and turbinated. 'Tis observable, that there is in one of the Valves of this Shell a round Hole of that Sort that is commonly made by the *Purpura* in the Shells of living Fishes. That Creature thus bores and pierces the Shell, in order to prey upon the included Fish; which it does by passing its Tongue, which is hard, bony, long, and sharp for the Purpose, thorow the Hole it has thus made. This Practice of this Creature was observ'd by the ancient Naturalists: and in particular by *Aristotle* and *Pliny*. ταῖς γὰρ πορφύραις τοσαύτην ἔχει δύναμιν τοῦτο τὸ μόριον [he is speaking of the Tongue] ὥστε καὶ τῶν κογχυλίων διατρῦσαι τὸ ὀστέον, εἰον τῶν εὐρυβίων δις δαλεάζουσιν αὐτάς. *Aristot. de Partib. Animal.* L. 2. c. 17. *versus finem*. *Pliny* mentions the same thing. *Lib. IX. Cap. 36.* „*Lingua Purpure longitudo digitali, qua pascitur perforando reliqua conchyliis: tanta duritia aculeo est.*” Tho' there be indeed so many others, that 'tis hardly needful, yet I chuse to take notice of this further Evidence, that these Fossil-Shells were the Covers of Animals that were once living: and the rather, to evince, that these have all the Proofs of that, that can be desired, or that those now found upon the Sea-Shores have. Besides this Shell here, the *Pectunculus subrufus*. p. 81. §. 98^x. the *Pectunculus fasciatus* *infra* §. 122. the *Pectunculus exiguus* §. 124. and the *Tellina* p. 95. §. 149. are all bored in like manner. There are in a Shell, of this very Kind, §. 119. *supra*, 2 like Holes, that are not pierced quite thorough the Shell. The Reason is, that Shell is very crass, and thick;

so that the Animal, having long labour'd in vain, and without having reach'd the included Fish, desisted.

§. 122. *Pectunculus fasciatus, dente ad Cardinem unico magno. Maryland. Mr. Vernon.*

§. 123. The opposite Valve of a lesser Shell of the same Species. From the same Place. Mr. Vernon.

§. 124. *Pectunculus exiguus crassus fasciatus. Maryland. Mr. Vernon.*

CARDITES,

Sive Pectunculii dorso in utraque testa in aciem elato.

§. 125. A large Stone form'd in a Shell of this Genus. Found near Neufchatel. M. Valkenier.

CUNEI.

§. 130. A large Stone form'd in a Shell of this Genus, with great Ridges running from the Cardo to the Margin. From Neufchatel. M. Valkenier. This is of the very same Species with those in the *English Catalogue*, f. 550. & seqq. which are found plentifully in *Gloucestershire*.

§. 131. Another of a longer Shape, and having the Ridges less. Found near Neufchatel, sent by Dr. Scheuchzer under the Title of *Conchites ab uno Cardinis latere brevissimus, ab altero longissime excurrens, striatus. Spec. Lithogr. Helv. Pag. 54. Fig. 74.*

§. 132. A Stone very fair and entire of that Genus which Dr. Plot calls *Hippocephaloides*. The Margin of this Stone is very finely undulated. Found in the Dutchy of Milan by Ag. Scilla, after his Book was publish'd.

§. 133. A Stone form'd in a Shell of this Genus, found near Basil. Dr. Scheuchzer. This is of the very same Species with those in the *English Catalogue*, f. 572. found in *Gloucestershire*.

§. 134. A smaller Stone, with Part of the Shell yet remaining. Found near Neufchatel. M. Valkenier. This is of the same Species with that in the *English Catalogue*, f. 541.

§. 135. A small one sent by Dr. Scheuchzer under this Title, *Conchita bivalvis curviroster Strijs obliquis crassioribus veluti costis donatus, Spec. Lithogr. Helv. pag. 58. fig. 79. ex Comit. Neocastrensi.* This is a Species of that Genus which Dr. Plot calls *Hippocephaloides*.

§. 136. Two small ones found near Neufchatel. M. Valkenier. This is of that Species in the *English Catalogue* ----- being found commonly in -----

§. 137. A large Stone fasciated, having fair Ridges running parallel to the Cardo. Found in a Valley among the Forest-Towns near Switzerland. M. Valkenier. This is of the same Species with that in the *English Catalogue*, f. 614. being found commonly in several Parts of *Gloucestershire*.

TELLINÆ.

§. 145. A very large Tellinoides, with Part of the Shell yet remaining upon it, found near Neufchatel. M. Valkenier.

§. 146. Another less from the same Place.

§. 147. The Shell of a very small Tellina. Maryland. Mr. Vernon.

§. 148. *Tellina, crassa, compressa, fasciata, in Margine dentata.* Maryland. Mr. Vernon.

§. 149. *Tellina, magna, crassa; Dentibus, & Sinubus adversis, ad Cardinem solito majoribus.* Maryland. Mr. Jones.

MUSCULUS; *sc. Fluviatilis, cardine non dentato.*

CTENOIDES.

MITYLUS, *seu Musculus marinus.*

§. 160. A small one, very slender, found near Verona. Ag. Scilla, since his Book came out.

SOLENES.

CHAMÆ.

§. 170. *Chama pholas latus ex altera parte obfuscus scaber sive rugosus.* List. Hist. Conchyl. N^o. 269. Dug up in Maryland, Mr. Jones. This Species is at this Day found living on the Coasts of England.

§. 171. *Chama fusca, lutea planior.* List. Hist. Conchyl. N^o. 259. Dug up in Maryland, Mr. Jones. This Species of Chama is found in the Seas on the Northern Coasts of England.

§. 172. Dug up in Maryland, Mr. Jones. This seems to be the *Chama angustior ex altera parte sinuosa.* List. Hist. Conch. N^o. 265. which is found in the Seas about Barbadoes.

IMBRICATÆ.

PINNÆ.

§. 185. Part of both Shells of a large *Pinna marina*, sent by Ag. Scilla with this Title, *Punta de Penna Marina & altri frantumi trovata nel Monte Mario di Roma, il quale e composto di simili coccia marine.* In the Stone that fills up and also adheres externally to this Pinna, are found other small Shells: and particularly several very fair Pectines. This came not into Ag. Scilla's hands till after he had finished his Book: and therefore is neither described nor figured there.

TRIVALVES. OSTREOIDES.

PHOLADES.

§. 10. *Pholas latus, rugosus ex dimidio dorso & asper.* List. Hist. Conch. N^o. 279. Dug up in Maryland. This Species is found living on the English Coasts in several Places.

QUIN-

QUINQUEVALVES.

ANATIFERÆ vulgo dicta, seu BERNICLE.

MULTIVALVES. BALANI.

ε. 20. Five or six of the common *West-Indian* Balani adhering to each other, in the usual manner. Dug up in *Maryland*. Mr. Jones.

ε. 21. Three Balani of the same Sort, very fair, intire, and all of the same Growth, and Size. Also from *Maryland*. Mr. Vernon.

ECHINI MARINI.

PARS I. Duobus in Testa foraminibus tuberculis in eorum superficie exiguis admodum SPATAGI dicti.

SECT. I. Qui ad unum latus sulcum insignem habent, seu CORDIFORMES.

Artic. 1. Foraminibus versus latera positis, uno sub fissura: altero, in latere opposito.

ζ. 1. An *Echinus spatagus* with the Sulcus or Fissure very large and deep. Sent by *Ag. Scilla*, and figured by him. Tab. VII. Fig. 1. with this Title, *Echino spatago oppresso & petrificato in unguo di Malta*.

ζ. 2. Another of this Species, but less; from the same Place. Found by *Ag. Scilla* after his Book was publish'd.

ζ. 3. Another, of a Species different from the former, and seeming to be the same with that which is commonly found in the Chalk-pits of *Kent, Essex*, and other Parts of *England*. See the *English Catalogue* ----- Found near *Neufchatel*. M. Valkenier.

ζ. 4. A Variety of the same Species with the precedent, found near *Neufchatel*: and sent by Dr. *Scheuchzer* under this Title, *Echinites spatagites vel Brissoides bullatus & striatus*. Spec. Lithogr. Helvet. pag. 61. fig. 84.

ζ. 5. Another of the same Species, but somewhat less; from the same Place. M. Valkenier.

ζ. 6. Another, sent by *Ag. Scilla*, and seeming to be that figured in his Book. Tab. X. Fig. 4.

ζ. 7 and 8. Two very flat ones, of a Species different from any of the former. *Ag. Scilla*. Tab. X. Fig. 1.

Artic. 2. Spatagi Cordiformes uno foramine in media fere basi, altero in ipso sulco seu fissura posito.

SECT. II. Spatagi nullo sulco laterali donati utrisque foraminibus in Basi Teste.

Artic. 1. Altero foramine in ipso basis margine, altero prope oppositum marginem sito; GALEATI vulgo dicti.

Artic.

Artic. 2. *Spatagi altero foramine in Basis centro, altero in margine.*

Divis. 1.—*lineis foraminosis à vertice ad marginem productis.*

Memb. 1. *Figura Conoide seu PILEATI.*

z. 25. A *Spatagites* consisting of a yellowish Flint formed in a *Spatagus Pileatus* of the same Species with those commonly found in the Chalk-pits in *Kent, Essex*, and other Parts of *England*. See the *English Catalogue* ----- sent from ----- in *Spain*.

z. 26. Another, of black Flint, less, and not so much rais'd. Found near *Neufchatel*. *M. Valkenier*.

z. 27. Another less, from *Bleistorp* near *Neustadt* in the *Dutchy of Holstein*. *Dr. Leopold*.

z. 28. Another, somewhat different, from the same Place. *Dr. Leopold*.

Memb. 2. *Figura compressa, seu DISCOIDES.*

z. 35. A very large one sent by *Ag. Scilla*. Found since his Book was publish'd. There are adhering to it the flat Shells of some Kind of small Bivalve.

z. 36. A lesser, sent by *Ag. Scilla*, and figured in his Book. *Tab. XI. fig. 12.*

Divisio secunda. Spatagi linearum ordinibus à vertice ortis, sed ad marginem usque non pertingentibus.

z. 42. A *Spatagus* extremely fair and perfect, of an oblong Figure, in the Shape of an Escutcheon. The upper Surface of it is rais'd into 5 Ridges, each of which is at the Bottom, almost encompassed by two Rows of small Lines. Sent by *Ag. Scilla*, and figured in his Book. *Tab. X. Fig. 3.*

PARS II. *Echini, quibus unicum solummodo in Testa foramen est, idque in centro Basis positum.*

SECT. I. *Echini tuberculis admodum exiguis obsiti, cum linearum brevium ordinibus decem ad marginem usque non productis, sed eo modo dispositis, ut figuram in superficie ad Pentaphylli folium accedentem referant, ideoque*

PENTAPHYLLOIDES

haud inepte dici possunt.

z. 50. One large, very fair, and entire, flattish towards the Margins, and rising in the Middle. The Teeth, as they are call'd, of this *Echinus*, are yet preserv'd: and appear standing round the Foramen in the Middle of the Shell. Sent by *Ag. Scilla*, who has given a Figure of it *Tab. IX.* under this Title, *Echino detta dall Aldrovando Echino metra, &c.* From *Malta*.

z. 51. Another very beautiful and perfect, somewhat less with the Margin more sinuated, otherwise not different from the foregoing. *Ag. Scilla.*

2.52. Another likewise very entire and fair, more copped and rais'd in the Middle than either of the precedent. There adheres to one Side of this a very fair Scallop: and in several Parts of it a fine reticular Substance, which is found commonly affix'd to Stones, Shells, and other Bodies in the Sea, and is generally thought by Naturalists to be the Remains of the Spat of some Kind of Fish. *Ag. Scilla.*

2.53. Another with the Surface smother, the Margin thinner and broader, and the Body of it more depress'd. Sent by *Ag. Scilla*: and figur'd by him *Tab. XI. (1) Fig. 3.*

2.54. Another rising more equally from the Margin to the Middle. *Ag. Scilla. Tab. X. Fig. 2.* I saw a Shell from Sea in the Collection of Mr. *William Cole* of *Bristol*, of the same Species with this.

2.55, 56. Two others, broad, flat and smooth: with the Figure of a Cinquefoil very fair upon them, but small in Proportion to the Shell. From *Malta. Ag. Scilla. Tab. VIII.*

2.57. Another somewhat different. Dug up in *Maryland. Mr. Jones.*

2.58. Part of another, flat and thin; the Sutures very regular, and the Delineations upon the Plates extremely beautiful. Dug up also in *Maryland. Mr. Vernon.*

SECT. II. *Echini, cum Tuberculis majoribus & magis eminentibus, & Linearum seu Tuberculorum ordinibus à vertice ad Os pertingentibus, OVARIJ dicti.*

2.65. An *Echinus Ovarius* very beautiful and entire with the *Mammilla & Papilla* or Tubercles upon them very large: and five single undulated Rows of small transverse Lines, reaching from the Top to the Mouth or Hole at the Basis of the Shell. Sent by *Ag. Scilla. Tab. XXIV. Fig. 1.* under the Title of *Istrice di mare petrificato & conservatissimo. Delle colline di Messina.* We find of this Species in the Chalk-pits of *Surrey, Kent, and Essex.* See the *English Catalogue* *b. 207, & seqq.* The Creatures whose Exuviae these are, are found living at this day in several Seas. I have a very perfect and entire Shell of this very Sort from the *East-Indies.*

2.66. Another of the same Species with 2 Spines belonging to the Shell in the same Mass of Stone. *Ag. Scilla.* Found since his Book came forth: and therefore not figured or described in it.

2.67. A Mass of Stone with Part of a Shell of the same Species with the former, but much larger. There is in the same Stone a Piece of a Scallop. Figured by *Ag. Scilla, Tab. XXIV. Fig. 2.* under the Title of *Sasso di Malta bianco, con parte d'Istrice, ed una spina dell' istesso.* Though he mentions a Spine in the Description, and exhibits one in the Figure, yet in the Stone none appears.

z. 68. A Mass of Stone, with several Spines of Echini in it, and Part of an Echinus of the Species preceding: as also a small one entire of a Species somewhat different. *Ag. Scilla. Tab. XXIII. Fig. 2.* From *Messina*.

z. 69. A small *Echinus Ovarius*, of a somewhat more compress'd Shape, otherwise not differing from z. 65, *supra*. Found near *Neufchatel*. *M. Valkenier*.

z. 70. Several Segments and Plates of Echini of the same Species with z. 65. parted at the Sutures. *Ag. Scilla*. Of these he has figured two Plates. *Tab. XXIII. Fig. 3.* under the Title of *Mammelle da Malta*.

z. 71. The Impression of a like Plate, or Mammillæ, upon a grey Flint. *Ag. Scilla*. Found since his Book was publish'd.

z. 72. An *Echinus Ovarius*, very fair, and of a Figure more rais'd than z. 69. being indeed of a different Species, as wanting the five undulated Rows or small Lines which are in all the preceding Species, and having the Mammillæ much less. *Ag. Scilla. Tab. XIII. Fig. 1.* From *Messina*. To the Bottom of this adheres a small Shell seeming to be of the same Species.

z. 73. Another, of the same Species, compress'd by some external Force. *Ag. Scilla. Tab. XXVI. Fig. 1.* From *Messina*.

z. 74. Another of the same Species, also compress'd, but in a different manner. From the same Place. *Ag. Scilla*. This seems to be that figured by him, *Tab. XXVI. Fig. 2.*

z. 75. Another compress'd in a still different manner. From the same Place. *Ag. Scilla. Tab. XXVI. B.*

z. 76. Another differently compress'd, from the same Place. *Ag. Scilla. Tab. XXVI. Fig. ult.*

z. 77. A small Echinus of a Species somewhat different from the preceding. From *Neufchatel*. *Mr. Valkenier*.

z. 91. A Spine of an Echinus in a Mass of Stone. *Ag. Scilla*. There are in the same Mass Fragments of several Mycetites not unlike that exhibited by him in the Stone. *Tab. XXIII. Fig. 1.* under the Name of *Poro*.

z. 92. Several Spines of Echini Ovarij. *Ag. Scilla. Tab. XXIV. Fig. 3.* under the Title of *Spine d'Istrice petrificate, dette in Malta dal vulgo, Bastoncini di S. Paolo*.

z. 93. Part of the Spine of an *Echinus Ovarius*. Sent by Dr. *Scheuchzer*, under the erroneous Title of *Lithophyton, sive spinosus Lapis Wagneri Hist. Natur. Helv. - - - - - & Scheuchzeri Spec. Lithogr. Helvet. pag. 20. fig. 26.* Found on Mount Leger. This Sort is sometimes also found in *England*.

z. 94. Another Spine of a different Echinus from the same Mountain. Dr. *Scheuchzer*. This Sort is also not uncommonly met with in the Quarries of *Oxfordshire, Gloucestershire, and Northamptonshire*.

z. 95. Four others from *Neufchatel*. *M. Valkenier*.

z. 96. Two Spinæ of Echini, very thick, of an oval Shape, and like those brought from *Syria*, under the Name of *Lapis Judaicus*. Found near *Neufchatel*. *M. Valkenier*.

2.97. A great Number of Spines of Echini of different Sizes and Figures; brought from Syria, under the Name of *Lapis Judaicus*. These Bodies were by Naturalists ever reputed meer Stones; but in a Lecture that I read publicly in Gresham College, May 19. 1693, I demonstrated them to be Spines of Echini, to the full Satisfaction of the Auditory.

Joints, and Parts of Bodies, belonging to Marine Animals related to the Echini.

n. 1. A Joint of an articulated Body, sent by Dr. Scheuchzer, under the Title of *Dolioli figura Lapillus. Specim. Lithogr. Helvet. pag. 5. fig. 7.* From Mount Leger near Zurich. This Body is commonly dug up in the Chalk-pits of Surrey, Kent, and Essex. See the *English Catalogue*.

n. 2. A Body sent by Dr. Scheuchzer, under the Title of *Biretiformis Lapillus. Spec. Lithogr. Helv. pag. 7. fig. 9.* Found on Mount Leger.

n. 3. A small Body thick set with little Cavities on one Side, and a pentagonal stellar Figure on the other. Sent by Ag. Scilla, under the Title of *Animale marine curiosissimo petrificato.* From Messina.

n. 4. An oblong bony Body: strigated in a various manner, but chiefly transversely. Dug up, with the *Lapis Judaicus* in Syria.

ENTROCHI & TROCHITÆ.

0. 1. The Head of an Entrochus, consisting of five Plates of the Shell to which it originally adhered: and several Joints or Trochi, rising from it. Dug up with the *Lapis Judaicus* in Syria.

0. 2. Another like Head, but less: and without any Trochi joining to it. Sent by Dr. Scheuchzer with the Title of *Modiolus Stellatus. Spec. Lithogr. Helvet. pag. 10. fig. 13.* From Mount Leger.

0. 3, & 4. A Trochus, and several Joints of an Entrochus, united in one round Column, both dug up, along with the *Lapis Judaicus* in Syria.

0. 5. Entrochi from Hefs-Cassel. Mr. Valkenier.

0. 6. Trochita Hildesienses. Dr. Kifner.

0. 7. An Impression of a Trochus upon Stone. Sent by Dr. Kifner, under the Title of *Trochita Matrix in Silice fluviatili prope Confluentes.* Coblentz.

ENTROCHO-ASTERIÆ.

Quippe qua forma sunt Cylindræa, uti Entrochi: sed sicut Asteria in singulorum articularum utraq; superficie Stellam pentagonam exhibent.

1. 1. Entrocho-Asteria. From Hefs-Cassel. M. Valkenier.

2. Several Joints of *Entrocho-Asteria*. Sent by *Ag. Scilla*, with the Title of *Varij Stelletti marini petrificati trovati in Malta*. Found after his Book was publish'd.

3. Joints and Columns of the same Genus. Sent by Dr. *Scheuchzer*, under the Title of *Asteria columnaris Entrochitæ similis varietates. Spec. Lithogr. Helv. pag. 2, 3. fig. 1, 2, 3.* From Mount Leger.

ASTERIÆ.

1. *Asteria* from Hefs-Cassel. *M. Valkenier*.

2. *Asteria* from Malta. *Ag. Scilla*. Sent with the *Entrocho-Asteria*. N^o. 1, 2. under the Title of *Varij Stelletti marini petrificati*. Found after his Book was publish'd.

CRUSTACEA.

1. A Crab little different from the common Sea-Crab living upon our Coasts. Given me by Mr. *Charlton* alias *Courteyn*, who said it was brought him from *Persia*, digg'd up there: but he did not enquire in what Part of that Country.

2. Some Parts of the Shell of a Crab with the Chelæ or Claws, one of them pretty large: and Part of two of the Legs thick set with little Knobs as is usual in this Kind. Sent by *Ag. Scilla*, under this Title, *Granchio petrificato e mezzo disfatto dal Isola di Malta*. 'Twas not found till after his Book was publish'd.

3. Another Claw of a Crab almost entire. *Ag. Scilla*. Found near *Messina*: and figured in his Book. *Tab. XIX. Fig. 1.*

4. Part of the Claw of a Lobster. *Ag. Scilla*. Found in the Island of *Malta*, after his Book was publish'd.

5. Two small Bodies, seeming to be the crustaceous Flaps of the Tails of some Fish of the Lobster-kind. From *Malta*. *Ag. Scilla*, after his Book was publish'd.

PISCES eorumque PARTES.

FISHES in Stone.

1. A scaly Fish with a forked Tail, about 7 Inches long, and near two Inches over where thickest. The Head, one of the branchial Fins, and the Body with the Scales and Tail, appear all very fair. It lies in a blackish ponderous hard Slate, [the Germans call it Shiver-stone] dug up near *Isleb* in *Thuringia*. Given me by Mr. *Godfrey*; to whom it was presented by Dr. *Hoffman*, Publick Professor at *Hall* in *Saxony*.

2. Another, 6 Inches long, of a more slender Shape than the preceding, dug up also near *Isleb*. *M. de Schonberg*.

3. Another little different, sent by Dr. *Kisner*, with this Title, *Lapis fissilis Islebianus, Pisces Lineamenta ex Pyrite constantia referens*.

μ. 4. Another also from *Isleb*. The Body of this is fair: but the Head is wanting. *M. de Schonberg*.

μ. 5. Another, in which the Tail, and, at about 2 Inches Distance, the two opposite Fins both appear. In this the Slate is broken: and the former Part of the Fish wanting. From *Isleb*. *M. de Schonberg*.

μ. 6. Another, not much different, from the same Place. *M. de Schonberg*.

This and the foregoing Fishes from *Isleb* are all upon a ponderous Slate of a dusky blackish brown Colour, hard, and seeming to hold some Metal. The Fishes upon this Stone are all so thin, and flat, and have taken up so little room in the Stone, that they appear to be only the Skins or Exuvia, rather than entire Bodies of Fishes. But that is the less strange, when 'tis known how easily the Bodies, and even the very Bones of some Fishes, liquate and dissolve. And indeed these are found lodged among metallick and mineral Matter: and particularly Marcalite, which is compos'd of Arsenick, Sulphur, Vitriol, and other like Salts. Now these, when in Water, and in a State of Solution as they were, would together constitute a Menstruum that might contribute greatly to the Dissolution of the Flesh of these Fishes. And what renders this more probable, is, that they were sustain'd in it for a considerable Tract of Time, before they settled down with that mineral Matter which compos'd the Strata, wherein we now find these Fishes inclosed. 'Tis known that the Fins, Tails, Skins and Scales of Fishes, consist generally of Parts much more tenacious and consistent than the Flesh of them: and consequently would not be so easily wrought upon. Of all these the Scales are square, or rhomboidal: and do not terminate round as those of the common scaly Fishes usually do. Many of them are of the Complexion that they are of naturally, and whilst the Fish is living: I mean whitish, bright, and shining. Some indeed carry a Gloss of Purple, others of greenish or yellow; but whether that be natural, or owing to the Minerals among which they have been so long lodged, is not so easy to determine. The Scales in these are commonly very fair, plain, and well preserv'd: as are also, in most of them, the Tails, Fins, Heads, and Jaws, which indeed are the Parts that are the most hardy and durable. In those that came from *Syria*, chiefly the Skeletons of the Bones, as likewise the Tails, and the Fins, are well preserv'd, and frequently Scraps of the Flesh, but always stript of the Skin: nor do any Scales appear, either in those that here follow, or any others that I have seen.

μ. 7, 8, 9. Three Skeletons of Fishes very fair with the Heads, the Gills, Scraps of the Flesh and the Tails. From ----- near *Canobine*, in Mount *Libanus*.

μ. 10. Another, likewise very fair, sent by *Ag. Scilla*, with this Title, *Pesce petrificato nell rocche della Citta di Baruta*, i. e. *Berytus*, *Phœnicia*.

μ. 11. A whitish sort of Slate, with the Skeletons, Tails, and other Remains, of two Fishes in it. From *Tripoli disoria*, in the Province of *Castravan*, in which they are common. Dr. *Sherard*.

μ. 12. A Piece of the same Slate, from the same Place, having on it the intire System of a small Fish, very fair.

μ. 13. *Pisciculus in Lapide fissili, Vallis Bolca, Ditionis Veronens.* M. *Bourguet*.

μ. 14. *Pisciculus ex Lapidina Oeningensi, qua est in Ditione Constantiensi.* Dr. *Scheuchzer*. These two Pieces of Stone were originally contiguous: and, being split, part of the Fish adheres to one Piece of the Stone, the rest to the other. The Fish is very fair, and well preserv'd.

μ. 15. Two small Star-Fishes in the whitish Slate, wherein the Skeletons of Fish are commonly found, in *Canobine*, on Mount *Libanus*. This was part of a larger Piece, whereon were Remains of several small Fishes.

OVA of FISHES in Stone.

μ. 20. A Mass of brown Stone, composed chiefly of small globular Bodies, appearing to be the *Vesicula* of the Ova of Fishes, fill'd with a very fine Sand. Sent by Dr. *Scheuchzer*, with this Account, *Hammites subflavi coloris ex Birsa Flumine. Spec. Lithogr. Helv. p. 40. fig. 22.*

μ. 21. Another Mass, with like Bodies in it. Sent by Dr. *Scheuchzer*, with this Account, *Hammites seu Meconites, nivei candoris, ex Birsa Flumine. Spec. Lithogr. Helv. p. 40. fig. 55.*

μ. 22. Another, brown. Sent by Dr. *Kisner*, under this Title, *Hammites seu Meconites, subflavi coloris.* Found near *Frankfort* on the Main.

μ. 23. Another, very hard, so as to take a fine Polish. Sent by Dr. *Scheuchzer*, with the Title, *Marmor Hammiticum subflavi coloris, ex Raurica Valle.* This appears to be part of a Nodule, or Peble.

BONES, TEETH, &c. of FISHES.

μ. 30. Part of a large Tooth, round, and tapering. It seems to have been a Tusk of the Morfe, or Walrous, call'd by some the *Sea-Horse*. Sent by *Ag. Scilla*, under this Title, *Ivorio calcinato del Tempo, trovata nella Cave di Malta e sperimentato non inferriore alla vero.* He thought this part of the Tooth of an Elephant, as indeed these are generally reputed. I take them rather to be of the Morfe. This is certain, they are generally dug up along with the Teeth of Fishes, as also Shells, and other marine Bodies.

μ. 31. Part of another, less, dug up in the Dutchy of *Wirtemberg*, along with the Whale's Tooth, μ. 40. *infra*. There are upon the Surface of it fuliginous or halituous Delineations of Shrubs, as likewise upon the Whale's Tooth. M. *Valkenier*.

μ. 32. Two Pieces of a large Tooth, being broke off from one kept in the Duke of *Wirtemberg's* Musæum, and presented by the Keeper to Captain *Richard King*, who gave it me. It was dug up in that Dutchy, probably along with the precedent; and has like Delineations upon it. The Keeper call'd it *Ebur Fossile*; and thought it produced naturally in the Earth.

μ. 33. Two other like Pieces. Sent by Dr. *Sheuchzer*, with the Inscription, *Unicornu Fossile-Canstadiense*. Dr. *Spleissius* has wrote a Treatise about this, and other Bodies dug up there, under the Title of *Dissertatio de Cornibus & Ossibus fossilibus Canstadiensibus*, 4^o. *Scaph.* 1701.

μ. 40. A very large Grinder of some cetaceous Fish, weighing ----- perfect and intire. Dug up in the Dutchy of *Wirtemberg*, along with μ. 33. M. *Valkenier*.

μ. 50. Two Teeth of the common Shark, or *Canis Carcharius*. *Ag. Scilla*, Tab. III. Fig. 1. His Account of them is, *Dente di Lamia petrificati detti Glossopetre ordinatamente raccolti in Sasso di Malta*. Both of them are finely ferrated about the Edges, and have the Points inclining to one Side.

μ. 51. A very large Tooth, of the same Species of Shark, perfect and fair, near 5 Inches long, and almost 4 broad at the Root. From *Malta*. *Ag. Scilla*. Found since his Book came out. This is ferrated in like manner, and inflected to one side, as are all the following, to μ. 57. inclusive.

μ. 52. Another as perfect, and near as big; from the same Place. Given me by Mr. *Samuel Doody*.

μ. 53. Another something less. Sent by *Ag. Scilla*, and figured by him, Tab. VI. Fig. 1.

μ. 54. Another, still less than the precedent; but very fair. Given me by Dr. *Tennison*, Lord Archbishop of *Canterbury*, with part of the Stone in which it was originally lodg'd.

μ. 55. Another, with part of the Stone in which it lay. *Ag. Scilla*, Tab. V. Fig. 2. from *Malta*.

μ. 56. Another, exactly of the same Shape, but something less. Found in *Virginia* by Mr. *Banister*. Given me by Mr. *Doody*.

μ. 57. Another, of still the same Shape, dug up in *Maryland*. Mr. *Jones*.

μ. 58. Another, lying in the Stone, from *Messina*. This has a small Apophysis rising from the Root on one side.

μ. 59. Another, slenderer, and not ferrated on the Edges. Found by Mr. *Banister* in *Virginia*, and given me by Mr. *Samuel Doody*.

μ. 60. Another, of much the same Shape, not ferrated, with two small Apophyses from the Root on each side. Found in digging near *Ghent* in *Flanders*.

μ. 61. Five small Teeth, being those figured by *Ag. Scilla*, Tab. XIV. N^o 1, 2, 3, 4, 5. and sent by him with this Account in writing; *Cavate di mano del Autore nelle Colline di Messina*.

μ. 62. Several Teeth also of Sharks, of various Sizes and Shapes. Found, some in *Malta*, others near *Messina*, by *Ag. Scilla*. See his Book, Tab. VII.

μ. 63. A Tooth of a Shark, ferrated on the Edges, and large, being above 4 Inches long, but not near so much inflected as the former all are, except some among those in μ. 61 & 62. From *Calabria*. Found by *Ag. Scilla*, after his Book was publish'd.

μ. 64. Another, in Shape little different, but less. From *Maryland*. Sent by Mr. *Jones*.

μ. 64^a. Two more, of nearly the same Figure, and Size; but somewhat thinner and flatter. From the same Place. Mr. *Vernon*.

μ. 64^b. Two others, less, and having the Cuspides a little inflected towards the Left-Hand. From the same Place. Mr. *Vernon*.

μ. 64^c. Two, still less, with the Cuspides verging also the same way. These have the Edges smooth, and not crenated, or serrated. From the same Place. Mr. *Vernon*.

μ. 64^d. Two, little different, only the Cuspides verge towards the Right-Hand. Also from *Maryland*. Mr. *Vernon*.

μ. 65. Three small ones, sent by Dr. *Leopold*, with the Inscription *Glossopetra Luneburgensis*.

μ. 66. Two Sharks Teeth, near 2 Inches in length, inflected, not sideways, as several of the precedent are, but inwards. Dug up in *Maryland*. Mr. *Jones*. There are in the Collection μ. 62. from *Malta*, two that are exactly like these.

μ. 67. Another, inflected in a manner different from all the foregoing, viz. outwards. 'Tis also a little twisted towards the Point. 'Tis one of the Fore-Teeth, or Apprehensores of a Fish, of the Shark or Dog-Fish Kind. *Ag. Scilla*. It seems to be that grav'd, Tab. VI. Fig. 4. under the Title of *Dente di Canicola*.

μ. 67^a. Another, less. *Maryland*. Mr. *Vernon*.

μ. 68. Another like Tooth, but somewhat less. Found near *Neufchatel*. M. *Valkenier*.

μ. 69. Another, still of the same Shape. Sent by Dr. *Scheuchzer*, with the Inscription, *Glossopetra Altezeiensis, ex Palatinatu de quibus*.

μ. 70. Another, little different, only smaller. From *Maryland*. Mr. *Jones*.

μ. 70^a. Two, smooth, slender, and a little inflected towards the Right-Hand; the Root large, with 2 Apophyses arising out of it on each side the Tooth. *Maryland*. Mr. *Vernon*.

μ. 71. A Tooth belonging to a Dog-Fish, of a Species much different from any of the foremention'd. This Tooth is flat, and very broad at the Bottom; the Point not rising very high, but is hook'd or inclin'd to one side. 'Tis ferrated all round: the Serratures are larger and deeper than in any of the former. 'Tis an Inch and a quarter in length, and very near as much between the two extreme Fangs of the Root. *Ag. Scilla*. 'Tis bedded on a softish Stone, which he calls a *Tophus*, in which it was originally lodg'd; and there adheres to one side of the Stone, a Piece of the Shell of a *Pecten*. *Malta*.

μ. 72. Another of the same sort; from the same Place. *Ag. Scilla*, after his Book was publish'd.

μ. 73. Ten more of the same. *Maryland*. Mr. *Jones*, and Mr. *Vernon*. These are of several Sizes, and have the Cuspides inflected, some towards the Right-Hand, and others towards the left, as is usual in the Teeth of the same Jaw, as they happen to stand of one side of it or the other.

μ. 74. Another, of the same Shape, but with the Serratures considerably smaller, especially towards the Point. *Agost. Scilla*. From *Malta*.

μ. 74^x. Another, little different, but that the Serratures towards the Point are wanting in this Tooth; being perhaps only worn out by the chewing. Dug up with μ. 73. in *Maryland*. Mr. *Jones*.

μ. 75. Two others, small, with the Roots not so broad. From *Malta*. *Ag. Scilla*.

μ. 75^a. Sixteen small ones, of various Shapes. All dug up in *Maryland*. Mr. *Vernon*.

μ. 76. Another an Inch and 3 quarters in length; thick with Tubercles in several Parts of it. The Edges in this are undulated, as well as serrated. Found near *Messina*, by *Ag. Scilla*, after his Book was out.

μ. 77. Another, of a different Shape from any of the former; being very broad and thick at the Root; but the Body of the Tooth very short and low. This is serrated round the Edges. From *Calabria*. *Ag. Scilla*. Found after his Book was out.

μ. 78. A Mass of Stone, with 2 large Teeth, each rising to an obtuse Point from a broad Bottom. These are serrated on the Edges; but the Serratures are deeper and grosser than in any of the rest. They lie both in the same manner, and on the same Plane: and there are some Remains of a third also in the same Plane, and at the same Distance. *Ag. Scilla*, Tab. xii. Fig. 1. His Account of it is *Tufo di Malta, che contiene una parte di Ganaschia con tre denti incassati & petrificati*. There is a Seam in the Stone, which is, I suppose, what he imagin'd to be the Jaw of the Fish: but nothing like a Jaw appears here. And in truth the Teeth of Fishes of the Dog-Fish Kind, are never infix'd in their Jaws; being only held on by means of Muscles, so that they can move them, raise them on end in their Mouths, and lay them down flat again at pleasure.

μ. 79. Part of the Tooth of a Fish that *Ag. Scilla* has given an Icon of the Head and Teeth of, Tab. xxvii. and of the Teeth more distinctly Tab. i. He calls this Fish *Pesce Vacca*. This Tooth was dug up in *Malta*, where they are dug up in great Numbers. He has given a Figure of it, Tab. iv. Fig. 1. It is composed of several Spikes, rising from the Root in the same Plane, in a cristated Form.

μ. 80. Two Teeth, an Inch and a quarter in length, somewhat inflected, of a conical Figure, and a brown Colour. From *Malta*. *Ag. Scilla*. One of them has some part of the Root remaining.

These

These were found since his Book came out. We dig of the very same not uncommonly in the Quarries of *Oxfordshire*, and *Nor-shamptonshire*.

μ. 81. Another of the same sort, but smaller; with the Root depending from it intire. *Malta. Ag. Scilla.* He sent together with it, several Teeth of this very sort, out of the Jaws of a Species of Fish of the Wolf-Fish-Kind, taken in the Sea adjacent to *Sicily*. By this it appears, that the Tooth is join'd to the Root by a Suture.

μ. 82. Four others of the same Form, but much less. They are of a reddish brown Colour, but have the Tips or Points white. From *Malta. Ag. Scilla*, after his Book was publish'd. These are the Fore-Teeth of a Fish of the Wolf-Fish Kind, found at this day living in the Seas about *Sicily*. He sent me the Jaw of one taken there; of which he has publish'd an Icon, Tab. ii. Fig. 4.

μ. 83. Another, brown, in shape a little flatted near half an Inch long, the upper Part terminating in three Points. There adheres to this a Root of $\frac{3}{4}$ of an Inch long. From the same Place. *Ag. Scilla.* Found since his Book came forth.

μ. 90. Several boney Bodies, from $\frac{4}{10}$ to $\frac{8}{10}$ of an Inch in Length, of a flattish Shape, the broadest near $\frac{3}{10}$ of an Inch over. There run along the two opposite Flats of these Bodies, for their whole Length, parallel Lines; which seem to be so many Commissures, and so the Bodies composed of several Plates joining at those Lines. I have not seen any thing exactly like them; which is far from strange, considering the vast Diversity of Marine Animals yet undescribed, and unknown, and how imperfect Accounts we have of the Parts of those that are known. These seem by their Structure, to have been of the *Officula* that are found in the Heads of some Kinds of Fishes, rather than Teeth. Dug out of the Earth in *Malta. Ag. Scilla*, after his Book was publish'd.

μ. 91. A Tooth, flat, and ending at the Top in an Edge, about $\frac{6}{10}$ of an Inch in Height, and $\frac{3}{10}$ in Breadth. It appears to be one of the Incisores, or Fore-Teeth of some Species of *Lupus Marinus*. Dug up in *Malta*.

μ. 95. A very elegant Body, boney, appearing to have been the Palate of some Fish of those Kinds which have their Palates boney, which several have. It is composed of several thin Plates, placed edgeways by one another. From *Malta. Ag. Scilla*, after his Book was out.

μ. 100. A boney Body in figure somewhat approaching an Oval, about an Inch long, and $\frac{3}{4}$ of an Inch over; consisting of several *Tabellæ* placed horizontally one upon another, being composed of several small round Bodies, some of them white, others yellow, each about $\frac{1}{10}$ of an Inch in Diameter. The Body is not equally thick in all Parts; and does not any where exceed $\frac{2}{3}$ of an Inch in Thickness. This Composition, the Fineness of the Colours, the Smoothness and Politeness of this Body render it extremely elegant and beautiful. It seems to have been the boney Palate of some kind

kind of Fish*. There are besides this three Fragments more of the same sort, one of which I caused to be cut; and thence learned that it is very hard, and takes a good Polish. The upper Surfaces of these Palates are smooth, appearing to have been worn by the mastication and chewing of the Fish; for in such Parts in which the Plates are broken, or separated so as to discover those round Bodies within, where they have suffer'd any Attrition, as those in the Surface have, they appear to be each convex on one side, and concave on the other, the lower Orders of them being by that means inserted into, and join'd with the upper. From *Malta*. *Ag. Scilla* after his Book was out.

μ. 105. Several Parts of the boney Tongue of a sort of *Pastinaca Marina*, common in the *Brasilian* Seas, and call'd there *Nari Nari*. These were dug up in *Maryland*. Mr. *Jones*. There is an Account of them in *Philosophical Transactions*, N^o 232. p. 674.

μ. 106. Another like boney Substance, either of the same Body, or very like it, from the same Place.

μ. 115. Teeth of the *Lupus Piscis*, both of the conick and of the flat Sort; which last are usually call'd *Bufo nitæ*. Dug up in the Island *Malta*. *Ag. Scilla*. He has caused some of these to be figured, Tab. II.

μ. 120. Two little boney Plates lying in the Tophus in which they were found. They were commonly dug up with the *Bufo nitæ*, and both those and these are usually call'd in *Malta*, *Occhij di Serpenti*. *Ag. Scilla*.

μ. 130. Seven Bodies seeming to be Bones out of the Heads of some Fishes. *Malta*. *Ag. Scilla*. Found after his Book was published.

μ. 135. A boney Body of the same shape with those found in *England*, and commonly call'd *Siliquastra*; but larger than they usually are here. This was dug up in *Syria* along with the *Lapis Judaicus*, and other marine Bodies.

μ. 140. A boney Body of an irregular Figure, $\frac{3}{4}$ of an Inch long, and $\frac{1}{4}$ of an Inch broad near the middle. Found near *Riga*. Dr. *Krieg*.

μ. 145. Four flat Bodies from $\frac{1}{2}$ an Inch to an Inch and $\frac{1}{2}$ in length, of a compress'd Figure, and serrated on each Edge. Dug up at *Malta*. *Ag. Scilla*; after his Book was out. These are not unlike the *Aculeus* of the *Pastinaca Marina* of that Species which is call'd the *Sting-Ray*.

μ. 150. Three concave Bodies pointed at one end, and gradually expanding and enlarging quite to the other. *Ag. Scilla*. He takes them for *Rostra*, or Beaks of *Polypi Marini*. He found them in the Rocks near *Messina*, after his Book was published.

* A considerable Part of the Mouth of the common Thornback is lined and covered with a Crust composed of small round Bodies, not unlike these in shape, but they are thinner, and in only one single *Tabella*.

μ. 151. Four boney Bodies, with the Rostrum less picked than the foregoing, much shorter, and the Roots of it very long, and expanded very wide. *Messina. Ag. Scilla.* Found since his Book came out.

μ. 152. A boney Body, channel'd, and somewhat inflected two Inches in length, $\frac{6}{10}$ of an Inch in breadth at one end, and gradually lessening to the other. *Ag. Scilla. Tab. xiv. F. 4.* There are along with this three others. He thinks them to be *Rostrum d'Animali Simili al Polipo.*

μ. 154. A small Piece of Bone, having its Surface of a green Colour, and its interior Parts of a blue; broke off from a much larger. That is throughout of the same Colour. It seems to be part of the scutellated Bone of a Sturgeon; being flat, of a porous or cellular Constitution on one side, tho' the Cells be somewhat worn down, and flatted; and smooth on the other. 'Tis about $\frac{1}{10}$ of an Inch in thickness, 3 Inches long, and 1 Inch and $\frac{1}{2}$ broad. Taken up near *Herngrundt* in *Hungary*; colour'd by the Water of the rich Copper-Mines. Given me by Dr. *Edward Brown*, President of the College of Physicians. Those Bodies that the Jewelers call *Turcois-Stones*, are no other than Pieces of Bones tinged blue by the Copper-Ore, amongst which they were lodg'd. These they cut, polish, and set in Rings. And indeed the same learned Gentleman, in his *Travels*, p. 68. informs us, that in those very Copper-Mines of *Herngrundt*, are Stones found of a beautiful green and blue Colour; and one sort upon which *Turcoises* have been found, and therefore call'd the Mother of the *Turcois*. By this I am the better enabled to apprehend an obscure Passage in *P. Poterius's Pharm. Spagy.* l. 2. c. 25. where he says, that in the Cabinet of *S. Cassiani del Pozzo* at *Rome*, he saw "Turcois-Stones* made of "Ebur-Fossile, exactly like the true natural *Turcoises*, agreeing "with them in all respects, in Colour, in Hardness, and in Virtues."

μ. 160. Six Vertebra's of the Back-Bone of a large Thornback, lying in Stone obliquely, and in a manner that shews they were put into it by some considerable Force. Sent by *Ag. Scilla*, with this Inscription, *Vertebre di Pesce impastate insieme dal Sasso di Malta.* Found after his Book came forth.

μ. 161. A single Vertebra, near an Inch in Height, and $\frac{7}{16}$ of an Inch in Diameter, appearing to be of some Fish of the Dog-Fish Kind. *Ag. Scilla.* Found in *Calabria*, after his Book came out.

μ. 162. Another, less. *Ag. Scilla. Tab. xviii. Fig. 2.*

μ. 163. Another, different, much like the Vertebres of Fish of the Ray-Kind. *Ag. Scilla. Tab. xviii. Fig. 4.*

* "Turchios Lapides, ex dicto Ebore factos veris, & naturalibus Turchinis Gemmis simillimos, atque in omnibus convenientes, Colore, Duritie, & Virtute præstantes."

μ. 164. Another, large: hollow'd, or having a considerable Cavity thorow the Middle of it. *Maryland*. Mr. *Vernon*.

μ. 165. Another, large, solid, and not hollow'd; sent from the same Place, by Mr. *Vernon*, with the Inscription, *Vertebra lumbaris ad cuius latus foramina vasculifera conspiciuntur*.

μ. 166. Another, by the same Person, and from the same Place.

μ. 180. Three Pieces of Bones. *Maryland*. Mr. *Vernon*. These are much like those dug out of *Harwich* Cliff, in the *English Catalogue*, n. 2, 3, & seqq.

μ. 200. A bony Body, in Shape flat, and round: smooth on one Side, and rugose on the other. 'Tis near 2 Inches and an half in Breadth: and $\frac{3}{4}$ of an Inch in Height. 'Tis of a very porous Constitution. Sent from *Maryland*, by Mr. *Vernon*, with the Inscription, *Isitheosteon, patellarum in modum ad Pinnae in suo loco retinendas & dirigendas, inserviens*.

μ. 201. Another like Body, but not half so big. From the same Place, and by the same Person.

Bones and Teeth of Quadrupeds.

v. 1. The Bone of the Foot of a Horse, commonly call'd the *Coffin-Bone*. Found bury'd with several other animal Substances in the Dutchy of *Wirtemberg*. M. *Valkenier*. This being apply'd to the Tongue, sticks to it; a Property very observable in several of the bony Bodies which have lain many Centuries in the Earth, from which indeed they derive that Property, and have it frequently to as high a degree, as *Bolus Armena*, and some other like Earths.

v. 20. A Tooth of that Sort call'd, the *Fang-Teeth*, *Eye-Teeth*, or *Dentes Canini* of some Quadruped. It exactly resembles the Fang-Tooth of a Lion, which died in the Tower in 1684, now in the Custody of Mr. *Oldisworth*. It was dug up in the Dutchy of *Wirtemberg*, along with μ. 33. M. *Valkenier*. The Tip of this is broken off.

v. 25. A large Grinder appearing to be of a Horse, 3 Inches long, flattish, and above an Inch over. Sent by Dr. *Scheuchzer*, with the Inscription, *Unicornu fossile Dentis figura Canstadiense. vid. Spleissium de Ossib. foss. Canstad. 4^o. Scaph. 1701.*

v. 30. Two Teeth, half an Inch long, slender and inflected, appearing to be the Incisores or Fore-Teeth of some small Quadruped. Sent by Dr. *Kisner*, with the Inscription, *Dentes fossiles Canstadienses. Conf. v. 25. supra.*

Corpora Marina praesertim Conchylia Massa Lapidea confertim immista.

ξ. 1. A Mass of a hard brownish Stone, with the Shell of a Land-Snail in it, of the same Species with that γ. 121. This has several Fasciae in it. Dug up near *Frankfort* on the *Main*, and sent by Dr. *Kisner*, with this Title, *Cochleae fossiles terrestres Zenis*

nis distincta, una cum alijs Testaceis integris & confractis, Massa lapidea immersa.

§. 2. Another Mass with two of the same Cochleæ in it, and other Shells. Found near Frankfort. Dr. Kifner.

§. 3. Another, appearing to be of still the same Species, in a whitish Stone, in which are several other small turbinated Shells. Sent by Dr. Kifner, with this Title, *Cochleæ terrestres fossiles in lapide argillare cinereo ex Agro Moguntino.*

§. 4. A Mass composed of several turbinated Shells, each inclosed in an oval Crust. Sent by Dr. Kifner, with this Title, *Buccinacula candida in Massam friabilem congesta & Tartarea incrustatione veluti candisata. Ex Agro Moguntino.*

§. 5. Small Cochleæ very numerous, in a Mass of soft Stone. Sent by Dr. Kifner, with this Title, *Buccina aliaque testacea fossilia in Massam lapideam duram congesta, & Tartaro nigricante singula incrustata.* Found near Frankfort.

§. 6. Sent by Dr. Kifner, with this Title, *Buccinacula fossilia in unam Massam subflavam compacta, ex Agro Moguntino.* They are very numerous, the whole Mass being composed chiefly of them.

§. 7. *Buccinacula nivei coloris in lapide subflavo agri Moguntini.* Dr. Kifner.

§. 8. A Mass that has been very thick set with little flat Pectunculi, of which the Shells are now perish'd and gone, but the Places they took up, and the Impressions, appear every where very fair in the Stone. Found near Frankfort. Dr. Kifner.

§. 9. A Mass of very hard brown Stone, thick set with Pectunculi striati. From Basil. Dr. Scheuchzer.

§. 10. A Stone in which there have lain many very small Muscles. The Impressions remain very fair: but the Shells are perish'd. Found near Frankfort. Dr. Kifner.

§. 11. A stony Mass in which are lodged several Muscle-Shells. Sent by Dr. Kifner. Found near Frankfort.

§. 12. A small Scallop, with some other Shells, in a Mass of brown Stone. Found in a Field not far from the River Great-Chaplank, 24 Miles from Chesapeak-Bay in Maryland. Dr. Krieg.

§. 13. Several recurvirostrated Shells of the same Sort, with that N^o. ----- lodg'd in a brown gritty Stone. From Schafhuse in Swisserland. Mr. Valkenier.

§. 14. A Mass of Stone of a dusky green Colour, with the Impression of a Pecten very fair upon it. The Shell is perish'd: but there is the Place or Cavity where it lay. This Cavity exhibits both the Shape and Bigness of the Shell with a very remarkable Exactness: and may pass for one of the very many Instances and Proofs we meet with, that these Impressions are all owing to Shells, and that the Bodies resembling them, which have been call'd by Naturalists, *Pectinitæ, Pectunculitæ, &c.* owe their Forms to *Pectines, Pectunculi, &c.* This Mass was sent by

Dr. Scheuchzer, with this Title, *Conchites striatus Chrysocolla lapidea immersus. Ex Suitensium Alpibus.*

§. 15. Four Shells appearing to be of the same Species, lodg'd in the very same Sort of Stone. *Ex Agro Tigurino. M. Valkenier.*

§. 16. Impressions on the Convex or Out-side of three of the same Sort of *Pectines*, very fair, in the same Sort of Stone, and from the same Place. *M. Valkenier.*

§. 17. A Mass of a hard whitish Stone, in which are two or three *Pectines*, and many of the *Concha Anomia*, some of them broken, so as to shew Spar concreted and crystalliz'd in the Cavities of them, which is very common in this and other Shells. *Ag. Scilla.* He calls these sparry Concretions in the Inside of the Shells, *Corpi di Pesce petrificati*, and shew'd them to his Antagonists for such, when they demanded of him why the Bodies should not be preserved as well as the Shells. From *Messina*. This he sent me for the Mass exhibited, *Tab. XIX. Fig. 2.* But if so, he took a little too much Liberty in his Icon, there being several Things in the Figure which are not in the Body. But indeed their ill Usage and Exasperations of him, and his Zeal for maintaining his Argument, disposed him to take that Liberty in several other Particulars.

§. 18. A Stone having in it the Tooth of a Shark, and the Spine of an Echinus. *Ag. Scilla*, sent for that delineated by him, *Tab. VI. Fig. 3.* But if it be, he has taken the same Liberty in this that he did in the foregoing. From *Malta*.

Testa aliaque Animalium Marinorum partes, Incerti Generis.

o. 1. A Body sent by Dr. Scheuchzer, under the Title of *Concha fossilis Tellinoides porosa.*

o. 2. Two Bodies, each about an Inch in Length, of a conical Figure, but somewhat inflected, set all over with Scales, placed in a Quincunx Order. *Ag. Scilla. Tab. XIII.* From the Hills near *Messina*.

o. 3. Two Bodies of a Discoid Form, convex on both Sides, being thicker in the Center, and lessening gradually till they terminate in an Edge quite round. They have crooked Lines rising from the Umbilicus on both Sides, tending to the Edge of the Body. They are about $\frac{4}{10}$ of an Inch over. Sent by Dr. Scheuchzer, under this Title, *Lentes lapideae striatae utrinque convexae Lentibus vitreis [Conspicillorum] similes. Ex Altissimis Suitensium Montibus. Spec. Lithogr. Helv. p. 31. fig. 44.*

o. 4. Two others of the Bigness of the foregoing, and of the same Figure, except that they are convex only on one Side, being flat on the other, and on the Flat they have Circles within one another, from the Center to the Circumference. From the same Place. Dr. Scheuchzer. *Spec. Lithog. Fig. 46, 47.*

o. 5. Five Masses of a dusky Grey-Stone in which are imers'd great Numbers of Bodies of the two Species before-mention'd, of several Sizes; some so small, that they are but just discernible, others near an Inch over. These are broken in such a manner, that the interiour Composition of them is clearly discover'd: and they appear to be made up of several Cases inclosing one another, and all of the same Shape with the outermost. What these very strange Bodies are, and to what Use they have served, is not easy to determine. I have not yet met with any thing in Nature like them. They are of a bony Substance: and if I may have the liberty to give my Conjecture, I should think them to be of those Bones that lie loose in the Heads of several Kinds of Fishes. There are in the same Stone some other broad and thin Bodies, which are of different Composition from those described, and seem to be made up of transverse Fibres. Sent by Dr. Scheuchzer, with this Inscription, *Lapis Frumentarius descriptus in Append. Miscell. Curios. Ann. 1697 & 1698. pag. 63. Conf. cum Lentibus lapideis striatis. Spec. Lithogr. p. 31. Fig. 42. & seqq. vid. ejusmodi Lapidis Iconem in Museo Calceolar. p. 317.*

o. 6. A yellowish Stone, in which are several of the Bodies before mentioned. *Ag. Scilla* from *Messina*. Found after his Book was publish'd.

o. 7. A Mass of Stone, of much the same Sort with that of o. 5. *supra*; and having several like Bodies in it. Among the rest, there is one large, near an Inch in Diameter, and flat on that Side that lies uppermost. 'Tis of an Ash-Colour: only there commences, in the Center of the Flat, a Line of a reddish Colour, striated a-cross in such manner as to resemble a twisted Cord or Thread, and passing spirally in 10 Gyri to the Margin of the Body, which is near round. These spiral Twirles, bring the Body, commonly call'd *Umbilicus marinus*, into my mind; some of which have on one Side spiral or cochlear Gyres, tho' much more gross than these. That Body is only the Operculum of a Sort of Sea-Shell: and whether this may not have served for the same Use, must be left to future Enquiries, and more diligent Observations on the Productions of the Sea. There are apparently two Kinds of this Body: that which is convex on both Sides, of which there is some Description p. 234. o. 5. *supra*: and this which is plain or flat on one Side. Sent by Dr. Scheuchzer, with the Inscription, *Lentes lapideæ. Specimen Lithogr. Helv. p. 30.*

o. 8. *Lentes lapideæ, utrinque convexæ, Massâ Lapideâ exemptæ. Ex altissimo Monte Aubrick. Dr. Scheuchzer. Conf. Specim. Lithogr. Helvet. p. 30.*

o. 9. *Lapis frumentalis, vel numismalis, ad Thermas Fabarias Comitatus Sarunetum. Conf. Specim. Lithogr. Helvet. p. ---*

De Conchyliis Fossilibus aliqua Injuria affectis, quippe attritis, erosis, vel compressis.

π. 1. The convex Valve of an Oyster-Shell; very crass, but much fulcated, perforated and corroded by Worms. Found in *Arabia Deserta*, between *Suez* and *Tor*, along with those δ. 35, 36. by Mr. *H. Worsley*.

The *Echini Ovarij*, ζ. 73, 74, 75, & 76, *supra*, appear to have been compress'd and broken by some external Agent.

π. 10. A Pair of the fulcated *Anomia*, with the Shells clapped close together in such manner, that they appear to have been compress'd by some external Force. *Neufchatel*. Dr. *Scheuchzer*.

Fossilia Generum Incognitorum.

ρ. 1. A Piece of a grey Stone, having the Surface thick set with little Pores or Cavities. Sent by Dr. *Scheuchzer*, under this Title, *Stigmites*. *Spec. Lithogr.* p. 13. Fig. 15.

ρ. 2. A Stone of a very strange Shape, branching at one end into two Parts. *Ag. Scilla*. From *Messina*. Found after his Book was out.

ρ. 3. A Flint much resembling the Body of a very large Beetle. Found near *Neufchatel*. M. *Valkenier*.

ρ. 4. Two Bodies of an oblong Shape, somewhat approaching to an Oval. Found in the Country of *Hess-Darmstadt*. M. *Valkenier*. We find the very same sort of Stones in the Quarries about *Oxford*. See Dr. *Plot's Natural History of Oxfordshire*, §. 148. *Tab. vii. Fig. 10.*



The first of these is the fact that the

The second of these is the fact that the

The third of these is the fact that the

The fourth of these is the fact that the

The fifth of these is the fact that the

The sixth of these is the fact that the

The seventh of these is the fact that the

The eighth of these is the fact that the

The ninth of these is the fact that the

The tenth of these is the fact that the

The eleventh of these is the fact that the

The twelfth of these is the fact that the

The thirteenth of these is the fact that the

The fourteenth of these is the fact that the

AN
ADDITION
TO THE
CATALOGUE
OF THE
Foreign Native Fossils,
In the COLLECTION of
J. WOODWARD M. D.

Rr 2

AN
ADDITION
TO THE
CATALOGUE
OF THE
Foreign Native Plants
In the Collection of
J. WOODWARD M.D.

P R E F A C E.

TIS now above six Years since I digested and put my Foreign Native Fossils into a Method; when I likewise drew up a Catalogue of them. Both were done with much Hurry and Precipitation: and only in the Intervals of my Business; but with all the Faithfulness, Care, and Exactness that was possible. There are my own Notes, Descriptions, and Observations, upon some of them; but, of the far greater Part, I had not Leisure to do more than only simply deliver, in their own Words, the Accounts that I receiv'd from those who sent or brought them. None of these are so particular and full as might have been wish'd; but the Place where each was found is assign'd: and of what Kind the Body is; tho', as to this upon Examination, I sometimes see Reason to differ from the Person who presented me the Body; as will appear from my classing these Fossils, and the Company that I range each amongst.

The Fossils in the following Catalogue are such as have come to my hands since those in the former were methodized and cast into Classes. I have now not more Leisure for these Impleys than I had then; so that I am constrain'd to take the same Course in the drawing up of this, that I did in that. Tho' my Affairs permit me hitherto to descend no further, yet, by even this Account, [what each Body is, and where 'twas found] the Use of them is secured: and they may have the Fortune to fall hereafter into the hands of those that may be so happy as to have more Time; and Incouragement to make further Observations, and draw up particular Accounts of each.

Directions for *Would my other Ingagements permit that, I*
the composing *would put these, and those of the former Catalogue,*
of a Catalogue *together; casting them jointly into the same Me-*
of Fossils. *thod. I would also dispose all the Native Fossils of*
England, in my Collection, into another like Me-
thod. Then I would give the History of each, so far as my Know-
ledge or Information extended; with an Account where it was found:
at what Depth: amongst what other Matter; in what Manner it
lay: whether in a Fissure, or in a Stratum; with all other Circum-
stances of the Place. Next, I would note every Thing observable in
the Body itself; its Colour; its Figure, Texture, or the Manner of
the Concretion of the Parts; and the different sorts of Matter that
concur and are united in the same Mass. Finally, I would bring
each single Body to the Fire, to chymical Tryals, and all other Tests;
in order thoroughly to discover its Nature, Constitution, Properties,
and various Uses.

Was this once effectually done, and just De-
The great Use- *ductions and Inferences made from the whole, it*
fulness of such *would go a great way towards a Natural History*
a Composure. *of Fossils, and the perfecting this Knowledge;*
which tho' it hath lain hitherto so much in the
dark, is, of all others, the most entertaining and useful. They who
know the great Revenue that arises to this Kingdom from the Me-
tals and Minerals in it; how considerable Discoveries have been made
of late Years; and what Improvements of the Ways of Smelting and
Refining of them; to pass by the Consideration of various other Fos-
sils, of real Use and Value; will see of how great importance to the
Publick these Studies are. What adds further to their advantage
is, that they are not only pleasant, but, if the Compiler be accurate,
they must be clear likewise, sure, and little liable to Error and Im-
position. Mathematical Propositions are ordinarily abstracted; require
great Extent of Thought, and Application of Mind. Whereas these
Mineral Propositions are plain, simple, and obvious. The Relations
of the Site and Circumstances of the Fossils in the Earth, and of the
various Experiments made upon them, are no other than so many
Histories of Fact. The Accounts of all Things observable in the Fos-
sils themselves, will carry with them Evidence of Sense, which is the
highest Certainty. These Fossils will be so many standing Monuments,
that give perpetual Attestation to this; and there can need no other
Proof

Proof of those Accounts, than only a simple View of the Things set forth in the Catalogues. Nor, finally, can it be difficult to discern whether the Conclusions, drawn from those Relations, Experiments, and Accounts, follow rightly from them or not. I had begun an Essay of this Method in the Chapter of the Ludus Helmontij, in my Catalogue of the native Fossils of England; and intended another Sample of it in the History of my Lead-Ores: but Things of greater Pressure and Moment intervening, prevented and took me off from further Pursuit of it.

Aug. 23. 1725.



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Terra, & Terris Affinia.

α. 1. **A** Reddish Earth. *New-England.*

α. 2. "Clay of which we make Brick, found near *Maderas.*" [I observ'd, in all Parts of this, small Sea-shells in considerable Numbers. *J.W.*] *East-India.* Mr. Bulkley.

α. 3. "A sort of Clay or Ochre used to mark with. It grows "on the sides of some high Mountains." *East-India.* Mr. Bulkley.

α. 4. *Terra lutosæ, fusci Coloris, ex Monte rubro prope Elverfeldam.* Dr. Leopold.

α. 5. *Terra rubra Elverfeldensis.* Dr. Leopold.

α. 6. *Terra atrii Coloris. Ex Territorio Angelomontano.* Dr. Scheuchzer.

α. 7. This was sent for red Ochre; but 'tis rather a sort of Bole. *New-England.*

α. 8. *Bolus Colore Florem Persici referens.* S. Zanichelli.

α. 9. *Terra sive Bolus, ex Valdel Molin, Ditionis Veronensis.* Mr. Bourguet.

α. 10. The true *Terra Lemnia.* 'Tis of a reddish brown Colour, and in its native State; just as taken out of the Earth, without washing, or other preparation, being only form'd into a Bole, and the Judge's Seal set upon it; which is done upon the Place where it is digg'd. There's a great Solemnity once a year, upon a certain Holyday in *July*, used at the taking of it up. Dr. Picanini was present when this was taken up. This sort is very rare; and reserv'd chiefly for the Grand Seignior. The Cups, out of which he drinks are made of it. The Pit is in a great Plain; the Stratum is horizontal; and about 4 Inches thick.

α. 11. *Terra Lemnia*, of a paler Complexion, being the common sort. The Stratum lies immediately under that of the former. Dr. Picanini.

α. 12. "*Sura Pasham* is used inwardly, after 5 Calcinations; and good to cool inward Inflammations. The Dose à gr. x ad ʒi. *East-India.*" Mr. Bulkley.

α. 13. *Marga, seu Hepatites; prope pagum Pfungen, Ditionis Tigurinae.* Dr. Scheuchzer.

α. 14. "A sort of Ochre, that serves for marking, found at about 3 Foot depth. 'Tis a Bole. There is black Earth over it, and hard white Clay under." *East-India.* Mr. Bulkley.

α. 15. Earth, grey, with a Cast of green; native, and just as taken out of the Pit, near *Cassa*, a principal City in the *Lesser Tary;*

tary; where 'tis found in great Quantity. The *Turks* and *Tartars* call it *Cassaca*; and make use of it in their Baths, it being smooth, unctuous, and detergent; and indeed one of the finest Fullers-Earth I ever saw. 'Tis *absorbent*, and adheres to the Tongue. Dr. *Picanini* of *Rhatia*, brought it from the Place.

α. 16. Whitish Clay, used as Fullers-Earth, and found near the other, α. 14. *East-India*. Mr. *Bulkley*.

α. 17. Soap-Earth, found in great Quantity on the Land near the Banks of the River *Hermus*, in *Asia Minor*, about 7 Miles from *Smyrna*. 'Tis found on the Surface of the Earth, in form of that wont to be raised by Worms, every Morning. They sweep it up, boil it with Oil, and make Soap of it; which is the best in the world: and preferable to the *Castile*. There is a Tax upon it, which brings in a vast Revenue to the Grand Seigneur. Mr. *Chishull*.

α. 18. A sort of Earth, found lying in Fissures of Rocks, in the Island of *St. Helena*, where 'tis call'd *Marrow of the Earth*.

α. 19. *Marga, grisei Coloris, in Saxo arenario, Conchyliis minutis referta. Ex Saxo Lithopolis ad Rhenum.* Dr. *Scheuchzer*.

α. 20. " *Tella Sagrum*, is a sort of Clay found in Rivers, and " is used inwardly to dry, and absorb watery Humours; also good " in recent Coughs and Colds." *East-India*. Mr. *Bulkley*.

α. 21. Ochre, yellow. *New-England*.

α. 22. " Common red Earth. It serves here to mark with. " 'Tis found about 6 Foot deep; Sands lie above it, and Clay under it." *East-India*. Mr. *Bulkley*.

α. 23. *Ochra non usta Fragmenta, ex Monte Rammelio prope Goslarium.* Dr. *Leopold*.

α. 24. *Terra Martialis, ex Valle Claussthal, Ditionis Vriensis.* Dr. *Scheuchzer*.

α. 25. *Creta, effossa prope Unter-Schachen, Territorij Vriensis.* Dr. *Scheuchzer*.

α. 26. *Creta, ex Valle Unter-Schachen, Territorij Vriensis.* Dr. *Scheuchzer*.

α. 27. *Terra natans.* A pale-brown, light Earth. *New-England*.

α. 28. *Lac Luna, au dern Zigerback, Ditionis Abbatis Cellanorum.* Dr. *Scheuchzer*.

α. 29. *Lac Luna, è Crypta Kaverheimensi Solisbaco Palatina.* Dr. *Bayer*.

α. 30. *Gur album talcoides, ab Himmelsfursten, Saxonia.* Dr. *Henckel*.

α. 31. *Gur ferrugineum talcoides, a Zellerfelde, Hannoveria.* Dr. *Henckel*.

α. 32. *Terra viridis, Tyrol.* D. *Linck*.

α. 33. *Viride montanum Hungaricum, f. Cryfocolla.* From *Newsohl*, in *Hungary*. D. *Linck*. It appears to me to be a Preparation, and not in its native Condition.

ARENÆ.

ε. 1. Sand, green; found on the Shores at one of the Oſtia of the Nile, Egypt.

ε. 2. The common Sand, out of which the Duſt-Gold is waſh'd, Guiney. D. Chandos.

ε. 3. " A Sand, found on the Surface of the Ground." East-India. Mr. Bulkley.

ε. 4. Sand, black, glossy, and ſhining; appearing to be Blend, or Mock Lead, reduced to this Form; taken up about 6 Miles from the Mouth of James-River, in Virginia; whither it is forced up from Sea by the Freshes. There is also, amongst it, some small share of the common white Sand. Mr. Bembde.

SAXA.

γ. 1. A talkey reddish Stone. " *Sauſtra Beady*. They calcine " it 100 times, being first prepared with Juices. This is also a " *Panacea*; and cures, as they ſay, 1000 Diſeaſes. *Sauſtra* ſignifies a Thouſand." East-India. Mr. Bulkley.

γ. 2. A talkey Stone of a dusky grey, with a Caſt of green. *Nephriticus Lapis, ex monte ſeptimo Rhetia*. Dr. Scheuchzer.

γ. 3. Ten Varieties of Emery from Smyrna. Mr. Baden. Theſe Stones are of various Colours, and Conſtitutions; but have all talkey Micæ in them.

γ. 4. A Stone, greenish, and appearing to have been worn by the Motion of Water. Found, amongst many others of like ſort, in the River Teglimento [*Ol. Timavus*] in Friuli. Monſieur Maximilian Miſſon.

γ. 5. Small white Stones, ſeeming to have been ſmooth'd and worn in like manner; found in great Numbers in a River near Salerno, in the Kingdom of Naples.

γ. 6. *Saxum lineis nigris ſtriatum, de quo in Crystallographia. Ex Gothardo Monte*. Dr. Scheuchzer.

γ. 7. *Stigmatæ, vel Dendritæ, ex Comitatus Badensis Terrifodinis*. Dr. Scheuchzer.

γ. 8. *Lapis fiſſilis Pyrite atramentario perſuſus ac ferrugineo Colore tinctus; ad Radicem Montis Tittliaci, Ditionis Angelomontani*. Dr. Scheuchzer.

γ. 9. *Lapis fiſſilis niger, ſupra Thermaſ fabarias*. Dr. Scheuchzer.

γ. 10. *Lapides fiſſiles rubri, ex valle Engſolana, prope Fugum Irth, Ditionis Bernenſis*. Dr. Scheuchzer.

γ. 11. *Aſſa poory*, is a ſort of Slate. The Powder is uſed in Fumigations for Children when they get Cold, &c. The Smell is very offensive. East-India. Mr. Bulkley.

MARMORA.

δ. 1. *Marmor ſubflavum, Maculis ſanguineis aſperſum; ex Terrifodinis Comitatus Badensis*. Dr. Scheuchzer.

8. 2. Marble, the Ground blackish with a Cast of Green, having Spots, oblong, and some of them square, White with a Cast of Green. This is the *Ophites* of the Moderns: and probably of the Antients. At least *Pliny** reckons the *Ophites* with the *Green* Marbles, and says, 'tis like the Spots of Serpents; meaning that it has Spots, like those of some Kinds of Serpents, from which it had its Name. He mentions two Kinds of it: the one white and soft, the other blackish and hard; the latter of which sort this seems to be of. He further observes that it was call'd likewise *Memphites*, from the Place in which 'twas found. *Memphis* was anciently a City of *Egypt*; and 'tis from that Country that this Marble, and the Works made of it, were ever fetch'd, particularly by the *Romans* of old. This Piece was found on the Shores of *Pozzuolo* in *Italy*, amongst other Fragments and Remains of ancient Work, by Mr. *Hugh Howard*.

8. 3. Granite, from Mount *St. Catherine*, a little to the South of Mount *Sinai*. All the Mountains from thence to the *Red-Sea*, consist of different sorts of Granite.

SILICES, CALCULI.

8. 1. *Lapis igniarius rubri Coloris, ex Schio Ditionis Vicentinae*. Mr. *Bourguet*. This is of the Flint Kind, ruddy within, and cover'd with a white Crust outwardly.

8. 2. *Achates, ex Montibus Euganei*. This seems to be part of a Stratum of the same sort that is call'd in *England* *Chert*. See *The Catalogue of the English native Fossils*. S. *Zanichelli*.

8. 3. *Pyrites Siliceus, ex Monte Legerio*. Dr. *Scheuchzer*.

8. 4. A grey Flinty Pebble. From the Shore at the *Cabo de bona Esperanza*. Mr. *Wren*.

8. 5. A flinty Pebble, not different from some commonly found in *England*. Found near *Fort St. George, East-India*. Mr. *Bulkley*.

8. 6. Another. *Ibid*.

8. 7. *Silex Hammites, ex Birsa Fluvio, Agri Basiliensis*. Dr. *Scheuchzer*.

8. 8. A Part of a sparry Pebble, from *Fort St. George, East-India*. Mr. *Bulkley*.

8. 9. *Lapides pellucidi, Linsburgenses*. Dr. *Hugo*.

8. 10. Small Pebbles, diaphanous. *East-India*. These are of the same Hardness with the *English*. Mr. *Beavor, Jeweller*.

8. 11. *Chelidonium Mineralis, Rotsmund, Praefectura Sanensis, in Territorio Bernensi*. Dr. *Scheuchzer*.

* L. 36. c. 7. Viride—Sit illud Serpentinum maculis simile, unde & Nomen accepit.—Duo ejus Genera: molle candidum, nigricans durum. Vocatur & *Memphites* à loco.

APPENDIX 1.

Geodes, Osteocolla, Ætites, Bezoar-Minerales.

- e. 12. Geodes, from the Desert of Nitria, betwixt Alexandria and Grand Cairo, Egypt. Dr. Sherard.
 e. 13. Osteocolla, *Margâ medicata internè referta, de Selbolde in Comitatu Henburg.*
 e. 14. Osteocolla *Selboldensis.* Dr. Kifner.
 e. 15. Geodes, Ætites *ex Valle Gleichensi prope Gudensbergam Urbem in Hassia celebrem.* Dr. Kifner.
 e. 16. Ætites *Ericeti Luneburgensis.* Dr. Hugo.
 e. 17. Bezoar-Minerales *fossile, ex Sicilia, Bocconis.* Mr. Bourguet.
 e. 18. Bezoar Minerale *P. Boccone, Recherches & Observ. Nat. p. 227. & seq.* Dr. Sherard.

APPENDIX 2.

Pisolithi.

- e. 19. Pisolithus, *ex Agro Ermeslebens.* G. Frid. Milius.
 e. 20. Pisolithus *Carolinarum.* Dr. Henckell.

APPENDIX 3.

Pumex, Lapis Spongia.

e. 21. Lapis externa specie Pumicem referens, talem scilicet qualem Montes Ignivomi ejaculare solent, Examini vero chymico subjectus longè aliam prodit Naturam. Integra Caules ex hisce Lapidibus conflata in altissimis Hassia Montibus, & alibi passim, occurrunt; quos tamen nunquam arsisse pluribus iisq; certissimis Documentis facile evincitur. Fragmenta hoc Numero indicata, in Cacusmine Montis Hassiaci, Wintercasten appellati, à Petris decussa sunt. Mich. Rheinoldus Rosinus, Munda-Saxo.

e. 22. Lapis Spongia vulgaris fossilis; *ex Agro Bononiensi.* Mr. Bourguet.

e. 23. A light, porous, friable Body, suppos'd to be a Cinder of a blackish Colour. From Mount Vesuvius.

Talcum squamosum, seu foliaceum. Mica.

- z. 1. White foliaceous Talc, with white Spar. Guinea. D. Chandos.
 z. 2. Lapis talcosus, *Bononiensis.* Mr. Bourguet.
 z. 3. Lapis calcarius subalbidus, cum admixto Selenitide; *ex Monte calcario Luneburgensi.* Dr. Leopold.
 z. 4. Talcosus Lapis candidus prope solium in Valle Pragallensi, Rhatia. Dr. Scheuchzer.
 z. 5. Mica Argentea, in Saxo albo; *ex Sila Fluvio Ditionis Tigurina.* Dr. Scheuchzer.
 z. 6. Mica parva subviridis, in Saxo albo; *ex Sila Torrente, Ditionis Tigurina.* Dr. Scheuchzer.

z. 7. "*Superna Gairecom*. The Powder boil'd with Butter, is
" taken to cure Leannels of the Body." *East-India*. Mr. Bulkley.

z. 8. *Lapis Talcoides, Rhochlizenfis*. G. Frid. Milius.

z. 9. *Mica varia*. Found near Fort St. George, *East-India*. Mr. Bulkley.

z. 10. "*Nella Corivendum*, is found by digging at the Foot or
" Bottom of Hills, about 500 Miles to the Southward of this
" Place. They use it, as Emery, to clean Arms, &c. It serves
" also to grind Rubies, by making it like hard Cement, by the
" help of Stick-Lac mix'd with it." *East-India*. Mr. Bulkley.

z. 11. Small Stones, reddish, having in them Sparks of a white
shining Talc. There is a Mountain of these in the Country. *New-England*. These have been thus worn, and rounded, by the Water of the Deluge departing. That Mountain must be compiled after the manner of Gravel here in *England*. There were many of these Stones sent, all of near the Size of these.

z. 12. Mock-Lead, or black Talc, powder'd; from *Guinea*.

z. 13. *Creta nigra, ex Territorio Angelomontano*. Dr. Scheuchzer.

z. 14. *Granatorum Minera, ex Agro Bononiensi*. S. Monte.

z. 15. *Talci Minera, ex Melioboco*. Germanis der Brouken, vel Blocksberg. Dr. Kifner.

z. 16. *Lapides Lucidi Bononienses*. Mr. Bourguet.

z. 17. *Lapidis Bononiæ Fragmenta rarissima, ex Monte Padano*. Mr. Bourguet. These are striated; and so might be better rank'd amongst the fibrous Talcs.

Selenites, Lapis specularis.

n. 1. *Selenites Rhomboidalis Solito longior, ex Marga juxta Passy Villam non longe Parisiis*.

n. 2. "*Rauty Mummy*, or Stone-Mummy. It grows on the
" Tops of high Rocks. It is said to be caus'd by the Dews that
" fall upon the Stones. They powder and boil it in Milk, and
" then give it to stop Gonorrheas, Dose ʒ ss. Morning and Even-
" ing." *East-India*. Mr. Bulkley. This is the Rhomboid Selenites.

n. 3. *Lapis specularis Jenensis*. G. Frid. Milius.

n. 4. *Lapis specularis Scandianensis*. Dr. Scheuchzer.

n. 5. *Muscovia* Glas; from *Russia*.

n. 6. "*Rauty Muddum*. Mix'd with Honey, 'tis good to cure
" Leannels." *East-India*. Mr. Bulkley.

Talcum fibrosum. Amianthus.

o. 1. *Spatum ex albo rubescens Jenense*. G. Frid. Milius.

o. 2. Striated Talc, from *Smyrna*.

o. 3. *Spathum Amiantho simile, ex Monte Legerio*. Dr. Scheuchzer.

o. 4. *Gypsi, vel Spathi Species, Mercurio sublimato similis, ex Agro Schaphusiensi*. Dr. Scheuchzer.

o. 5. "*Pashauna Beady*. The Powder prepar'd, by boiling in
" Milk, is given inwardly for the Stone and Gravel, Dose ʒ ss.
" twice a day, with equal Weight of Salt." *East-India*. Mr. Bulkley.

θ. 6. A coarse, grey, sparry Substance, of Constitution like that call'd ordinarily *petrified Wood*; from *Tripoli*, in *Barbary*.

θ. 7. A blackish stoney Substance, in Form of that commonly call'd *petrified Wood*. Sent from *Tripoli*, in *Barbary*, for *Date-Tree* petrified. Dr. *Sherard*.

θ. 8. *Asbestos*, ex *Hungaria*. Dr. *Breynius*.

θ. 9. *Asbestos*, *fodina Argentea Suhebergensis*, in *Suecia*. Mr. *John Angersten*.

LUDUS HELMONTII.

λ. 1. *Ludus Helmontij*, with ferruginous Septa. *Hungary*. Dr. *Ed. Brown*.

BELEMNITES.

κ. 1. *Belemnites*, ex *Agro circa Littgeren Comitatus Badensis*. Dr. *Scheuchzer*.

κ. 2. *Belemnites*, f. *Lapis Lyncis*, ex *Moscovia*. G. *Frid. Milius*.

κ. 3. *Belemnites cuspidatus*. Ex *Com. Badensi*. Dr. *Scheuchzer*.

κ. 4. *Belemnites rarissimi*, *Lineis spiralibus picti*, *Indolis Agathina*. *Seelfa*, prope *Hannoveram*, ad *Ripam Leynæ*. Dr. *Hugo*.

κ. 5. *Belemnites minores*, *calcarei*, ejusdem *Loci*. Dr. *Hugo*.

κ. 6. *Belemnites Litoris Balthici juxta Travæ Ostium*. D. a *Melle*.

CORALLOIDEA.

λ. 1. *Porus Coralloides stellatus*, juxta *Parisios effossus*. Dr. *Fussien*.

λ. 2. A *Coralloid Astroites*. Mr. *Miller*. From *Virginia*. Found with several *Sea-Shells*, in digging at a considerable Depth, near *James-River*, about 20 Miles from *Sea*.

λ. 3. *Millepora Fossilis*, *Agri Veronensis*. S. *Zanichelli*.

λ. 4. *Madrepora*, ex *Zopica Monte*. Mr. *Bourguet*.

λ. 5. *Mycetites*, f. ut vulgo vocatur, *Fungites Ceratoidæus*. *Fungites collecti sunt una cum affinibus, infra descriptis, λ. 6. & λ. 9. Conchitis, Asteriisq; in Eissalia Ducatus Luxemburgico contermina, & ubivis montosa Regione; ubi, plurimis in locis. Argilla, Gylva, vel Carulea, omnes reconditi jacuerunt.* M. *Rosinus Munda-Saxo*.

λ. 6. *Fungites*, alius, *Conoides*. M. *Rosinus*.

λ. 7. *Caryophyllus*, *marinus*, *fossilis*, *parvus*. Ex *Sassuolo Dirionis Mutinensis*. M. *Bourguet*.

λ. 7^x. *Mycetites minimus*, *striatus*, *cuneiformis*. à *Chaumont*. Dr. *Fussien*.

λ. 8. *Mycetites Coralloides*. Ex *Agro Buxovillano*. Dr. *Kisner*.

λ. 9. *Fungus lapideus scutellaformis*, excisis veluti striis quibusdam notabilis. Hi *Fungi marini lapidei sunt, & plane incogniti. Reperiuntur simul cum Ostreopectinitis, & aliis Conchylis. Sunt autem valde discrepantium Formarum, & Structura diversissima, tantæq; interdum Molis ut aliqui 50, 80, 100, imo 200 & 300 Libras facile pendere possunt. Quibus permixti interjacent etiam Astroites varij, quos tamen nihil aliud quam memoratorum Fungorum quorundam Fragmenta esse, instituta Collatione compertum ha-*

beo. Mich. Rheimoldus Rosinus, Munda-Saxo. He hath set forth an Account of these Fossil Fungi, or *Mycetita*, in his *Tentamen de Lithozois & Lithophytis subterraneis*, 4to. Hamb. 1716. where he wrongly imagines these to be of marine Origin, and brought from Sea, with the Shells, at the Deluge. Whereas these *Mycetita*, being stoney, must have been dissolv'd, as all Stones and stoney Coralloides were. See *Nat. Hist. Earth*, Part 2, and 4. Their being found along with Shells, which he urges as an Argument, no more proves that these, than it does the Flints, Pyritæ, and various other Bodies, undoubtedly of mineral Origin, came from Sea. He owns that there are none like these now found at Sea; and they are altogether unknown. See my Papers against Dr. Buttner's Notion in his *Rudera Diluvij Testes*.

λ. 10. *Fungites porosus Neostadiensis prope Hannoveram.* Dr. Hugo.

λ. 11. *Fungites minores Ficus aridas referentes, ejusdem Locī.* Dr. Hugo.

λ. 12. *Lapis constans ex Conis s. Cuneis se invicem amplectentibus. Ex Ripa Neostadiensī.* This Body I place in this Class, it seeming something to approach the Constitution of the Body call'd by some *Lithostrotion*, which I have rank'd among the Coralloids; perhaps not very rightly, I being not satisfied of the Origin or Constitution of either those Bodies, or these. Of these there is one found in *Lancashire*; in the *Catalogue of the extraneous English Fossils*, Class 13. q. 35. amongst the *Fossilia incognita*.

Crystalli, Fluores crystallini.

μ. 1. *Crystallus Helvetica.* Dr. Scheuchzer.

μ. 2. *Crystallus diaphana, cujus Plana lateralia non sunt parallela, Pyramide exigua. Ex Alpibus Valesiis.* Dr. Scheuchzer.

μ. 3. *Crystallus diaphana, rara, in qua Canaliculi quadranguli.* Dr. Scheuchzer.

μ. 4. *Crystallus fusca.* Dr. Scheuchzer.

μ. 5. *Crystallus micā Chrysocolle aspersa.* Dr. Scheuchzer.

μ. 6. Crystal, a very large Sprig, join'd by several lesser. *Freyberg. G. Frid. Milius.*

μ. 7. Another Specimen, less. Out of the *Alps of Switzerland.* Dr. Scheuchzer.

μ. 8. A Sprig of Crystal, pretty clear, having about it several fine Amethysts, shot into Cubes. *Freyberg. Mr. Linck.*

μ. 9. A Cluster of crystalline Sprigs, very transparent, and beautiful, growing in various Postures. Out of the *Alps of Bearn.*

μ. 10. *Crystallus succineo Colore notata.* Dr. Scheuchzer.

μ. 11. Spar, very beautifully crystallized; out of the *Hartz-Mountain, Lunenberg. M. Valkenier.*

μ. 12. Spar, crystalliz'd very elegant. *Freyberg. Mr. Linck.*

μ. 13. Part of a large ferruginous Ball, hollow, the Inside thick set with hexangular sparry Crystals, [in manner of those found near *King's-Weston.*] From *Bombaim, East-India.* Mr. Stuart, Surgeon.

μ. 14.

μ. 14. *Fluor Lap. Calcario adnatus, in Monte Padano, Agri Bonon. S. Monte.*

μ. 15. *Fluor trigonus, descriptus in Specim. Lithogr. Helvet. Dr. Scheuchzer.* All the genuine Crystals, that are clear and transparent, are of an hexagonal Shape: as are also the genuine crystallized Spars, which consist of Crystal render'd, in some degree, opaque, by admixture of stoney Matter. Where Talc, or other mineral or metallic Matter, is united in the Mass, it changes the Form to Trigonal, Cubic, Rhomboid, &c.

Crystalli Coloribus imbuti Gemma.

μ. 16. The Jargon, *Pegu.* This is little harder than Crystal. Mr. Beavor, the Queen's Jeweller.

μ. 17. Rock-Rubin, native, *Pegu.* All the three sorts of Rubin are found in *Pegu*; from which Country we generally have them. Mr. Beavor.

μ. 18. Balass-Rubin, native, *Pegu.* Mr. Beavor.

μ. 19. Spinel-Rubin, native, *Pegu.* Found in the Rivers. Mr. Beavor.

Fluores simplices in Stratorum Saxeorum Fissuris concreti.

μ. 20. A Piece of that sort of white Spar that breaks in Rhomboid Figures, and is commonly found in the Lead-Mines of the Peak. There are Samples of it in the Catalogue of the *English Native Fossils*, f. 24, and f. 25. 'Twas sent with the Title of *Selenita Rhomboidalis ex Monte Gimmor, Abbatis Cellanorum, descriptus in Specim. Lithogr. Helvet. Dr. Scheuchzer.* This is very different from the *Selenites Rhomb.* of Dr. Plot. N.H. Oxfordshire.

μ. 21. *Androdamas diaphanus, Selenites Rhomboidalis, Crystalli adinstar pellucidus, ex altissimi Montis Gamor, Abbatis Cellanorum specu, de quo vide Specim. Lithogr. Helv. p. 52. Dr. Scheuchzer.*

μ. 22. *Androdamas vario situ concretus, ex specu Gamor Abbatis cellanor. Spec. Lithogr. Helvet. p. 53. Dr. Scheuchzer.*

μ. 23. A talky Spar, white, with a Cast of green; found near Fort St. George, East-India. Mr. Ed. Bulkley.

μ. 24. *Sunco Pully*, from East-India, sent by Mr. Ed. Bulkley, who, I believe, very wrongly takes it for a sort of *Arsenick*. 'Tis there given in Agues and Fevers. Mr. Ed. Bulkley.

μ. 25. *Spatum album, Saxonia.* Dr. Henckell.

μ. 26. *Spatum rubrum, Saxonia.* Dr. Henckell.

μ. 27. *Spatum speculare candidum ex Fodinis Clausthalensibus, in Hercyniis.* Dr. Leopold.

μ. 28. Spar, white, with a Cast of Purple; having in it small *Amethysts*. New-England.

μ. 29. *Lithophosphoros Suhlenfis, Fluoris purpurascantis Speciem indutus: Igni impositus Tempore nocturno splendet.* G. Frid. Milius.

μ. 30. *Fluor mineralis, cujus Frustula Prunis candentibus inspersa in Tenebris pergrato Lumine resurgit. Ubi tamen Calor plus justo invaluit, cum Fragore in Partes minutissimas dissilire solent. Integra hujus*

huius Fluoris Vena extat, & ad Aeris Mineram facilius fundendam adhibetur, Rothleberoda, Pago in Comitatu Stolbergico, ad Pedem Sylva Hercynia sito. Mich. Rheinoldus Rosinus, Munda-Saxo.

μ. 31. Spar out of the Hartz Mountain, Lunenburg. M. Valkenier.

Lamina fluorea: Stalactites, Tubera, Flosculi, Incrustationes.

μ. 32. A Sparry Incrustation. Sent with the Inscription *Tophus, ex Pago Rorbis, Ditionis Tigurina.* Dr. Scheuchzer.

μ. 33. *Materia Stalactites, qua Saxa prope Scaturigines Thermarum Fabariensium incrustat.* Dr. Scheuchzer.

μ. 34. *Arabicus Lapis, Ebori similis Plinij. Ex Monte Legerio.* Dr. Scheuchzer.

μ. 35. A Sparry Incrustation, from the side of a Fissure of a stoney Stratum, sent with the Title of *Stalactita nivei Candoris, & Saxis prope Scaturigines Thermarum Fabariensium.* Dr. Scheuchzer.

μ. 36. *Tartarus ex Fonte Aponensi.* What he calls a Tartarus, is a Sparry Matter, brought forth by Water, cast on a Board, and gradually incruited upon it. S. Zanichelli.

μ. 37. *Stalactites Carolinarum, Carlsbader Tophus.* Dr. Henckell. This is nothing but an Incrustation of Spar, cast, successively, by the Water, on the sides of these Bathes.

μ. 38. *Quartri Vena, intra parietes Lapidis subcaerulei, Lineis albis striati, prope Thermas Fabarias.* Dr. Scheuchzer.

μ. 39. *Tofus, ex Balneo Walterschwitano, Territorio Tugiensis.* Dr. Scheuchzer.

μ. 40. *Tofus, ex Balneo Faliscano, Rhetia.* Dr. Scheuchzer.

μ. 41. *Tessella Helvetica Luforii similes in Fluore albedo.* This Spar adheres to a Fissure of a Stratum of Stone. These Dice seem to be artificial, and put on. I broke the Mass in several Parts, but could find no Dice in the interior Substance of it.

μ. 42. *Stalactites ex Antro Baumanniano mirabili, in Hercynia.*

μ. 43. Sent as Part of a *Stalactites, ex Spelunca Baumannii.*

μ. 44. *Stalactites Seleniticus, ex Isiria Dominii Venetorum.* M. Bourguet.

μ. 45. White Spar, out of the *Grotta Palotta*, in Rome. Monf. Maximilian Misson.

μ. 46. *Paula Gumda*, found in Water-falls, and Canals. The Powder given in Milk, is good for Gonorrheas. East India. Mr. Bulkley.

μ. 47. A very remarkable Kind of *Osteocolla*; found in great plenty, on the Brow or Side of a hollow'd Way, at — in Tuscany, betwixt Pisa and Poggibonzi. Monf. Maximilian Misson.

μ. 48. Another Specimen, from the same Place.

μ. 49. White Sparry Efflorescencies, from a Sparry Plate. Sent with the Inscription, *Fluor albus floridus, ab Himmelforth, Styria.* *Flos Ferri, Eisenbluth dictus*, i. e. Iron-Blood. Dr. Henckell.

μ. 50. An Efflorescent Talky Spar. *Ex Antro Nebel-loch. d. Agro Wirtemberg.* Dr. Kifner.

μ. 51. *Tophus*, vel *Tartarus*, ex ingenti *Lapidina* veterum Romanorum, in Ditione *Vicentina*, in *Montis spelunca excavata*. Mr. *Bourguet*. This is an Efflorescent Spar, common in the Grotto's, and perpendicular Fissures of Stone, in *England*. See the Catalogue of the *English* native Fossils, CLASS VI.

μ. 52. *Herba Tartarizata*, ex *Flumine Velino prope Interamnem*. S. *Zanichelli*.

μ. 53. *Folia Alni Tartarizata*, ex *Belunensi Ditione*. S. *Zanichelli*.

μ. 54. Stone, from a Wall near *Philadelphia*, said to be made of Christians Bones, by the *Turks* at their taking the City. Dr. *Smith*, in one of his Epistles, mentions this Wall as an Instance of the *Turkish* Barbarity. What passes thus for Bone, is nothing but a loose soft porous Stone, form'd in an old Aquæduct, now in the Wall. Dr. *Sherard*. The Tradition of the present *Turks* is, that this Wall was built out of the Bones of the besieg'd by those *Turks* who first took *Philadelphia*. Sir *Paul Rycaut's* History of the *Greek Churches*, CHAP. II. He takes the Bodies in this to be really Bones, cemented together. On which account he brought a Piece of it from thence. Whereas, in truth, it consists of various Bodies, chiefly Vegetables, incruited over and cemented together by Sparry and Stoney Matter brought out into Springs and Rivulets: and of such Incrustations, Sir *Paul* himself gives Instances in this very Chapter. Had he made due Observations upon those, he would have seen these were no other. There was a great Quantity of it sent me, from which I framed Judgment of it.

μ. 54^x. A brown Sparry Incrustation, compos'd of various flat thin parallel Plates, much resembling the Incrustations of the Tea-Boylers of the Coffee-Houses of *London*, and probably form'd by the Sun's exhaling the Water, as those are by its being exhal'd by Fire. This was found incruited upon the Plaister of the *Piscina mirabilis* at *Baia*. *Monf. Maximilian Misson*.

Fossilia Natura varia, n. quæ constant imprimis ex Fluore Talceo, Materia autem minerali, & metallica admisto.

μ. 55. Two Veins of brassy shining *Marcasite* in a white Spar, sent by the Name of *Spathum*. From *Clausthall*, by Dr. *Leopold*.

μ. 56. Spar, white, semipellucid, having on the Surface numerous Flores of a crytalliz'd shining brassy *Marcasite*. From the *Hartz Mines*, *Lunenburg*. Mr. *Valkenier*.

μ. 57. Spar, pretty diaphanous, shot into hexangular Crystals; with a pale brown Talc, and Flores of *Marcasite*, concreted upon it. From *Hartz-Mines* also.

μ. 58. Another Specimen, little different, only the *Marcasite* is in greater Quantity. From the same Mines.

μ. 59. Another, from the same Mines.

μ. 60. A semipellucid Column, compos'd of Shoots of Spar, of an irregular and uncommon Figure; with small Flores of *Marcasite* on one Part. *Ereyburg*, Mr. *Linck*.

μ. 61. White Spar, the Surface form'd into small Plates, wedg'd together in a very various and observable Manner, holding much Lead. On the Surface are sprinkled small Sparks of a brassy shining Marcasite. *Clausthall, Hannover.*

μ. 62. Another Specimen ; from the *Hartz-Mines.*

μ. 63. Another from the same Mines. This has besides, crystalliz'd Spar, and a pale brown talky Matter, incorporated with it.

μ. 64. Another. The Marcasite on the Surface of this is shot into small quadrangular Pyramids. From the same Mines.

μ. 65. From the same Mines. The sparry Plates are larger, and somewhat more transparent than any of the foregoing.

μ. 66. From the same Mines. The Plates of this are still more transparent.

μ. 67. The Plates of this are yet more transparent, and near crystalline. From the same Mines. There are small Flores of Marcasite likewise on the exterior Surfaces of the three last. These and the rest of the Spars from the *Hartz-Mines*, by their Weight, seem to hold Metal. 'Tis said to be Lead. I have not yet had leisure to make Tryal.

Lapides Venarum metallicarum, fluoreo-Talcei.

μ. 68. Blende Germanicè, *Minera Speciem quidem sed nullum Valorem habet. Ex Fodinis Clausthalensibus.*

μ. 69. Sterile nigrum in Fodinis Plumbi, Blende. *Saxonia. Dr. Henckell.*

μ. 70. Sterile nigrum ; ex Stanni Fodinis. *Dr. Henckell.*

μ. 71. Genus Montanum Suecicum, Sod Slag appellatum ; quod invenitur in Argenti Fodina, *Sulberga. Mr. Angersien.*

BITUMINOSA.

v. 1. Bitumen fossile coagulatum, quod invenitur in Ferrifodina Beterberg, in Suecia. *Mr. John Angerstein.*

v. 2. Coal, light, but fine as Canell, brought, by an Indian, out of the inner Parts of the Country. *New England.*

v. 3. Lithanthracis Species, nostratibus Stein-Gallen dicta, mediis Saxis eruta ; ex Praefectura Vallis Rhenana. *Dr. Scheuchzer.*

v. 4. Lithanthrax, s. Carbo fossilis Helsingburgo-Scanicus. *Dr. Leopold.*

v. 5. Lithanthrax, ex Valle Engstlanâ, Ditionis Bernensis. *Dr. Scheuchzer.*

SALES.

ξ. 1. Nitrum nativum Sancto-Mauritianum Rhetia. *Dr. Scheuchzer.*

ξ. 2. Vitriolum Hassiacum. *Dr. Leopold.*

ξ. 3. Vitrioli Vena, ex Alpibus Suitensibus. *Dr. Scheuchzer.*

ξ. 4. Vitriolum Martis, ex Fodina Fahlunensi Suecia. *Dr. Leopold.*

ξ. 5. Vitriolum viride Goslariense. *Dr. Leopold.*

ξ. 6. *Lapis Atramenti ruber, vel Minera Vitrioli, ex Fodinis Goslariensibus.* Dr. Kifner.

ξ. 7. *Vitriolum album nativum Schemnicense, Hungaricum.* Dr. Leopold.

ξ. 8. *Misy flavum ex Fodinis Goslariensibus.* Dr. Kifner.

ξ. 9. *Farina Aluminis, Dibana.* Dr. Leopold.

ξ. 10. *Alumen candidum, nativum, Dibanum.* Dr. Leopold.

ξ. 11. *Terra aluminosa, cruda, Dibana.* Dr. Leopold.

ξ. 12. *Lapis Scissilis niger Eliaridensis, Scanicus, ex quo Lixivium Aluminis coquitur.* Dr. Leopold.

ξ. 13. *Lapis Eliaridensis, Scanicus, primâ vice calcinatus.* Dr. Leopold.

ξ. 14. *Lapis Oris Eliaridensis Scanicus, secundâ vice calcinatus.* Dr. Leopold.

ξ. 15. *Fissiles Lapides pregnantés Sale, Boracis amulo, ex Territorio Angelo-Montano. V. Scheuchzeri sp̄ciφ. Helvet.*

SULPHUR.

o. 1. *Lapis gryseus, viridi passim tinctus, qui circa Mineram sulphuris reperitur. Ex Fodinis Clausthalensibus. Germanis Berg dicitur.* Dr. Kifner.

o. 2. A Mineral, yielding Sulphur, brought by an Indian from the Inland Parts of the Country. *New-England.*

o. 3. *Sulphuris Minera, cum Gypso. Ex Agro Forlivensi. Signior Jos. Monte.*

o. 4. *Sulphur cum Lapide speculâri quod rarum est. Ex Scandianensibus Collibus, Ditionis Mutinensis. M. Bourguet.*

o. 5. *Sulphur nativum stalacticum. Smyrna.*

ARSENICUM.

o. 6. Native yellow Arsenick, *Auripigmentum. Smyrna.*

o. 7. *Taulacum*, a sort of Arsenick, yellow, with Specks of red; which, after many tedious and difficult Preparations, is given inwardly: and esteem'd a Panacea. They say that Gold may be extracted out of it. *East-India. Mr. Bulkley.*

o. 8. *Rauty Pundoe*, a sort of Arsenick; being well prepared, 'tis given in Coughs and Colds. 'Tis found on the Tops of high Hills. *East-India. Mr. Bulkley.*

o. 9. *Puckaun Beady*, is a sort of Arsenick, found by Riversides; and, after many troublesome Preparations, is used in the Diabetes. *East-India. Mr. Bulkley.*

o. 10. This seems to be red Arsenick. From *China. Mr. Oliphant.* He says it is taken forth of the Copper-Mines. They call it *Hingwang*, and use it in Medicine: as likewise in Painting. Alone it makes an Orange-Colour; incorporated with Ceruis, more or less, a Lemon-Colour, and various Yellows. There seems to be Cinnabar in it.

CINNABARIS.

o. 11. *Cinnabaris, a St. Ioo, Normandia. Præbet Mercurij Partem decimam, Sulphuris tertiam.*

o. 12.

9. 12. Native Cinnabar. *Hungary*. M. Sam. Robeserz.

9. 13. Cinnabar. *China*. Mr. Oliphant.

PYRITES.

π. 1. *Pyrites . . . India Orientalis*. *Argyradamas Plinij*. This is orbicular, striated from the Surface to the Center; and not different from those commonly found in *England*.

π. 2. *Pyrita areus, ad Oppidum Leun, Comitatus Solmensis*. Dr. Kifner.

π. 3. *Orchites, Formæ curiosa. Ex Bononia Monte*. Signior Jof. Monte.

π. 4. *Pyrites rotundus angulatus. Præfectura Ertzen prope Pyrmont*. Dr. Hugo.

π. 5. A *Pyrites*, of a globose Figure, seeming to be composed wholly of many cubick *Pyritæ*, very distinct and fair. Sent with the Inscription, *Minera Argentum continens, globosa. Ex Margifodinis, prope Erzam Ducatus Carlewbergensis*.

π. 6. *Pyrites ex Marga-Fodinis Principatus Waldercensis, haud procul a Pyrmont, ubi in magna Copia reperiuntur. Vulgo Mergelnuos, i. e. Nux margarum*. This is of Constitution much like the precedent.

π. 7. *Pyrita cubici elegantissimi, ex Torrente Nolla, in Valle Domestica, Rhetia*. Dr. Scheuchzer.

π. 8. *Pyrita cubicus ex Fontibus Rhani posterioris, in Rhatia*. Dr. Scheuchzer.

π. 9. *Pyrita tessellati, s. Ludus Paracelsi, ita dictus è Ludo Tessellarum*. Found in stoney Soil near *Sen Hora da Lappa* in the Province of *Tras os Montes* in *Portugal*.

π. 10. Cubic *Pyritæ, Malabar, East-India*.

π. 11. Two large Cubic *Pyritæ*, of a blackish Colour, found in a Mountain not far from *Sakia* in that part of South-East *Tartary* call'd by the Natives *Thibet* or *Butant*. The Metropolis of this Country they call *Lhassa*. Brought thence by *Padre Felix* a Capuchin Fryar, who was a Missionary in those Parts 1724.

π. 12. Several less, in a Cluster, or concreted in one Mass. Out of a Mountain near *Kiazé*, in the Province of *Hupak*, in the Kingdom of *Great Thibet*. By the same.

π. 13. A Cubic *Pyrites. Newfoundland*.

π. 13^x. Bodies of various Figures, angular, and crystalliz'd, of the Bigness of large Peas, black, glossy, talkey, and much of the same Constitution with *Blende*. But, some of them put into the Fire, emitting a sulphurous Smell, I chose to rank them with the *Pyritæ*. I had the following Account with them. "*Wicran-tum*, found in the Diamond-Mines. They first powder it, and then mix it with the Juice of divers Plants, then dry it and calcine it; and this they repeat sixty times: but the first Calcinations are made with a Mixture of divers Urines, viz. Human, with that of an Elephant, Horse, Camel, Ass, Goat, &c. and, after

“ after that, with the Juices. 'Tis good in Coughs, and Consumptions.” *East-India*, Mr. *Bulkley*. At the first view, I imagined they held Tin; they something resembling the Tin-Grains. Of what Constitution they are, must be determined by trial.

MARCASITA.

π. 14. *Marcasita*, *J. Georgenstadt*, ex quo Sulphur & Vitriolum. Dr. *Henckell*.

π. 15. *Marcasita cum Quarzo*. Ex *Fodina Chalybis Comitatus Sarunetum*. Dr. *Scheuchzer*.

π. 16. A *Marcasitic Incrustation*. *Hartz. Lunenburg. M. Valkenier*.

π. 17. *Marcasita Sulphureus*. *Freybergensis*. Dr. *Leopold*.

π. 18. A *Marcasite* with *Spar* incorporated with it. *Hartz. Lunenburg, M. Valkenier*.

π. 19. A *Marcasite*, from *Smyrna*.

π. 20. *Marcasita*, *gemaner Kiefs*, i. e. common Ore, ex quo conficitur Sulphur & Vitriolum. Dr. *Henckell*.

π. 21. *Marcasita albus Arsenicalis*. *Weisser Kiefs*, or *Gift Kiefs*, i. e. white Ore, or poisonous Ore, *Fodinis Stanni & Cobalti*. Dr. *Henckell*.

COBALTUM.

π. 22. *Minera Cobalti ex qua Smalta preparata, cum Floribus ejus coloris Florum Persicorum*. Ex *Saxonia prope Schneeberg*.

π. 23. *Cobaltum, ex quo Caruleum factitium preparatur*. Ex *Fodinis Schneebergensibus, in Misnia*. Dr. *Leopold*.

π. 24. *Cobaltum Freybergensium, minoris Ordinis*. Dr. *Henckell*.

π. 25. *Cobaltum Schneebergensium, Blauferben*, i. e. blue-colour'd Cobalt. Dr. *Henckell*.

ANTIMONIUM.

π. 26. *Antimonij Minera, ex Insula Ilva*. M. *Bourguet*. This has Sulphur upon it, much after the manner of that of *Cornwall*.

π. 27. Native Antimony, cover'd with a brownish Crust, after the manner of that of *Cornwall*. Mr. *Sam. Robeseri*. This is from *Hungary*.

π. 28. *Vena Antimonij, ex Valle Sexamnina, Rhatia*. Dr. *Scheuchzer*.

π. 29. *Alumen Plumosum, cum Minera Argenti & Plumbi intermixtum*. Invenitur in *Fodina Sahlberga, Suecia*. Mr. *John Angersten*.

CALAMINARIS.

π. 30. *Lapis Calaminaris, Boiemorum, Galmcij*. Dr. *Henckell*.

NIGRICA FABRILIS.

π. 31. *Black-Lead, Nigrica fabrilis*, found at the Surface, he thinks in great quantity, on the high Hill of *Gibraltar*. Mr. *Warren*.

π. 32. A sparry Body, cover'd over with a Crust of Black-Lead, in the manner that the Antimony of Cornwall is cruſted over with Sulphur. See the Catalogue of the additional *English* native Fossils, g. 12. This yields a fifth part Silver. *New-England*.

π. 33. *Plumbago, ab Altenburgia, ex Minis Stanni.* Dr. Henckell. This is Wad, or Black-Lead, with White-Spar.

ARGENTI MINERA,

Seu potius Plumbi in se Argentum continentis.

ρ. 1. Silver-Ore, with common, shining, brassy Marcasite, and white Spar. *Potosi, Peru.*

ρ. 2. Silver-Ore, with white Spar, and Sparks seeming to be of Lead-Ore. *Potosi.*

ρ. 3. *Minera Argenti alba, dives cum Pyrita, ab Himmelsfursten in Saxonia, continens 6 ad 10-Marcas Argenti.* Dr. Henckell.

ρ. 4. *Minera Argenti ditissima, cujus lbj. continet 3 xij. Argentum purissimi.* *Hercynia.* *Ex Fodina Samson dicta.* Dr. Hugo. It has brassy shining Marcasite, and white Spar, incorporated with the Lead-Ore.

ρ. 5. *Minera Argenti ditissima, cujus lbj. continet 3 x. Argentum purissimi.* *Hercynia.* *Ex Fodina dicta St. Jacobi.* *Andreasberg.* Dr. Hugo. This has incorporated with it a red Spar, much like that of the *Rotgulden Ertz.*

PLUMBI MINERA.

σ. 1. *Plumbum statu suo, Terra Metallica flava circumductum, de Tarnowitz ex Polonia.* This nearly approaches a native or virgin Metal. The small Quantity of white Mineral with it, somewhat resembles *Saccharum Saturni*: and is doubtless a white Lead-Ore of the same sort with the *English.*

σ. 2. *Vena Saturni tessellata, ex Fodinis Hartzigerodanis in Duc. Anhaltino.* Dr. Leopold. This is of the finest Blue or Pottern-Ore. He calls it *tessellated*, not as shot into Tessellæ, or Cubes, as some Lead-Ore does, but as breaking in Squares, which this sort of Ore, when clean, as this is, commonly does.

σ. 3. *Minera Argenti & Plumbi in Fodina Suhlberga, Suecia.* Mr. Angersten.

σ. 4. *Minera Plumbi, ex Fodina Gratia Dei Clausthalensi.* Dr. Leopold.

σ. 5. Lead-Ore, Pottern, from a Fissure of a Rock at the Day, about 60 Miles North-East from *Boston*, up in the Country, in *New-England.* Captain Crowe.

σ. 6. *Molybdena grossior grober bleyglantz, i.e. Coarse Lead, shining, hic ubivis obvia, continens 60 Libras Plumbi, & 1, 2, 3. Lotos Argenti.* *Saxonia.* Dr. Henckell.

σ. 7. *Minera Plumbicum Marcasita, ex Fodinis Clausthalensibus.* Dr. Leopold.

- σ. 8. *Minera Saturni rudis, dives, cui Minera Cupri intermixta ex Hercynia. Continet etiam aliquid Argenti.* Dr. Hugo.
- σ. 9. Lead-Ore, rich. New-England. This is exactly like the common Lead-Ore of Mendip. See the Catalogue of the English native Fossils, Class XI. Part 3. n. 28. & seq.
- σ. 10. Lead-Ore, glossy, and shining; from Cornelius Munster, about five Leagues from Aix la Chapelle.
- σ. 11. *Vena Plumbi, & Argenti, prope Biberwier, Comitatus Erenberg, in Tirolensi.* Dr. Scheuchzer.
- σ. 12. *Minera Saturni cubica cui Crystallus intermixta supra Marmore Metallico subviridi, de Bleystadt, prope Joachimsthal, in Bohemia.*
- σ. 13. *Minera Plumbi cubica Quartzo albo innata, cui & cupri nonnihil commixtum; de Annaberg, in Saxonia.*
- σ. 14. *Minera Plumbi & Argenti, ex Fodina Suhlberga, in Suecia.* Mr. Angersten. This nearly approaches the English steel-grain'd Lead-Ore.
- σ. 15. Steel-grain'd Lead-Ore, from the Silver-Mine at Freyberg, Saxony, five hundred Foot deep. Dr. Arnold of Exeter. There is white Spar with it.
- σ. 16. *Molybdena, Granis minutioribus. Saxonia.* Dr. Henckell.
- σ. 17. *Vena Plumbi, in Tova, Rhatia.* Dr. Scheuchzer.
- σ. 18. *Minera Argentea & Saturnea, ex Argenti Fodina. Suhlberg, in Suecia.* Mr. Angersten.
- σ. 19. Lead-Ore, incorporated with white Spar; yielding also Silver. Brought by the Name of Silver-Ore, from Clausthal, 12 Leagues from Hanover. Lord Hertford.
- σ. 20. *Vena Plumbi & Argenti dives, ex Rhatia.* Dr. Scheuchzer.
- σ. 21. *Vena Plumbi dives, ex Fodina Hartzigerodana, in Ducatu Anhaltino.* Dr. Leopold.
- σ. 22. *Minera Plumbi dives, ex Fodinis Sahlbergensibus, haud procul Upsalia, Suecia.* Dr. Leopold.
- σ. 23. *Minera Plumbi ex Fodina Eleonora & Ludovica, Clausthalensi.* Dr. Leopold.
- σ. 24. *Minera Plumbi, cum Galena, & Chrysocolle, in Marmore sordide albicante, ex Fodina Spes Metallifossoris dicta, qua est Rhotia, in Landgraviatu Hassiaco Darmstadiensis.* Dr. Leopold.
- σ. 25. *Vena Plumbi, rarior, Rhetica.* Dr. Scheuchzer.
- σ. 26. *Minera Plumbi viridis, perrara, pura puta fere Plumbum, ab Zshopaum, Saxonia.* Dr. Henckell.
- σ. 27. A brown talky Lead-Ore, from the Black-Sea. 'Twill not be brought to run into Shot by any means. Dr. Sherard.
- σ. 28. *Minera Plumbi alba, Weiss bley Ertz; i. e. white Lead-Ore. Saxonia.* There is of this sort in England. See the Catalogue of the additional native English Fossils, l. 13. & seq.

STANNI MINERA.

- τ. 1. Tin-Grains. *Minera Stanni ditissima Zuingra'upe, a Schlackenwalde, in Bohemia.* Dr. Henckell.

τ. 2. *Minera Stanni, Mariembergensis. G. Frid. Milius. Tin*
Grains, very fine.

τ. 3. Fragments of Tin-Ore, rounded, smooth'd, and reduced
to the Form of Pebbles, probably by the Motion of Water. *Minera*
Stanni fluviatilis, à Seiffen. Dr. Henckell.

τ. 4. *Minera Stanni rubra, dives, ex Altenberga, Saxonie.*

CUPRI MINERA.

υ. 1. *Cuprum nativum, seu potius precipitatum, ex Fodina Schilou*
Duchatus Vestmannie, apud Suecos. Being beat with an Hammer,
some Parts of it discover a Toughness near a Malleability. *Mr. John*
Angersten.

υ. 2. *Minera specialis Cuprea, in Fodina Schilou, Ducatus Vest-*
mannie, in Suecia. Mr. John Angersten.

υ. 3. *Minera Veneris ditissima, ex Fodina Linsnadahlen, Provincia*
Herdahlen, in Suecia. Mr. John Angersten.

υ. 4. Copper-Ore, with white Spar. *Scroton, near Wallinford,*
New-York.

υ. 5. Out of the same Vein with the precedent.

υ. 6. Copper-Ore. This yields about $\frac{2}{7}$. *Connecticut Colony, New-*
England.

υ. 7. *Vena Cupri, in Marmore luteo, (Spaat) cum adhærente Cæ-*
ruleo, ex Fodinis Heimburgensibus, Comitatus Nassovici, prope Ur-
bem Embis. Dr. Leopold.

υ. 8. *Vena Cupri, Argenti quoque ferax, ex Fodina Guttenbergica,*
in Bohemia. Dr. Leopold.

υ. 9. A poor Copper-Ore, sparry, grey, with part green. *Sax-*
um, Chrysocolia perfusum, Vena Argenti Index. Ex Rhetia. Dr.
Scheuchzer.

υ. 10. A brassy shining Copper-Ore, found at *Seraakioi, on the*
Bosphorus on Europa Side. Dr. Sherard.

υ. 11. *Minera Cupri Sublensis, Thuringia. G. Frid. Milius.*

υ. 12. *Cupri Minera, prope Sublam, in Thuringia. Dr. Kifner.*

υ. 13. *Minera Cupri, ex Fodina Yarpenbergensi, in Suecia. Mr.*
John Angersten.

υ. 14. *Minera Cupri, dives, ex Fodina Fahlunensis in Gestricia, Sue-*
cia. Vocatur alias illa Fodina magna Cupri Fodina Montanorum.
Mr. John Angersten.

υ. 15. *Vena Cupri dives. Ex Valle Palenza. Dr. Scheuchzer.*

υ. 16. *Minera Cupri ex Fodinis Costricensibus prope Geram, quæ*
Voightlandia Oppidum est. Dr. Leopold.

υ. 17. *Minera Cupri Ochra infecta, ex Fodina Clausthalensi.*

υ. 18. *Minera Cupri, in Marmore candido, (Spaat) ex Fodina*
Clausthalensi. Dr. Leopold.

υ. 19. *Vena Cupri, diversi-color. Ex Fodina Clausthalensi. Dr.*
Leopold.

FERRI MINERA.

- Φ. 1. *Minera Ferri dives, f. Hæmatites. Eybenstock, in Saxonia.*
- Φ. 2. *Hæmatites, found in a River near Mount Sinai. Dr. Sheppard.*
- Φ. 2. *Ferri Minera ex insula Ilva. Signior Jos. Monte. Part of this Vein consists of Chips, or thin Plates, after the manner of one sort of talky Spar. On one side of the Mass is a Grain of a brassy shining Marcasite.*
- Φ. 4. *Minera Ferri ditissima, Fodinarum Beturbergarum, in Suecia. Mr. Angersten.*
- Φ. 5. *Ferri Minera Norvegica prope Urbem Arandale, cujus Portus appellatur Mardoë. à D. Jac. a Melle.*
- Φ. 6. *Minera Ferri, è Fodina Beterberg, in Suecia. Mr. John Angersten.*
- Φ. 7. *Minera Ferri, à Clausthall. Dr. Kifner.*
- Φ. 8. *Minera Ferri ditissima, Fodinarum Beturbergarum, in Suecia. Mr. John Angersten.*
- Φ. 9. *Minera Ferri Fodinarum Dannemarensium in Ducatu Upplandia, Suecia Regni. Mr. Angersten.*
- Φ. 10. *Minera Martis optima Sahlbergensis, Suecia. Dr. Leopold.*
- Φ. 11. *Ferri Minera Suhлана, ex Fodina dicta Reventhal. Dr. Kifner.*
- Φ. 12. *Ferri Minera Suhлана, ex Fodina dicta Friderick. Dr. Kifner.*
- Φ. 13. *Innamoo chasha Roy, i. e. Iron-Stone. They get Iron out of it; though there are other sorts that afford more. This sort is us'd in Phyllick. East-India. Mr. E. Bulkley.*
- Φ. 14. *Vena Chalybis, Schwartzertz dicta, ex Comitatu Badensi. Dr. Scheuchzer.*
- Φ. 15. *Vena Chalybis, Meliwerk dicta, ex Comitatu Sarunetum. Dr. Scheuchzer.*
- Φ. 16. *Vena Chalybis, Meliwerk dicta, ex Comitatu Sarunetum. Dr. Scheuchzer.*
- Φ. 17. *Vena Chalybis infima, Roth-Ert dicta, ex Comitatu Sarunetum. Dr. Scheuchzer.*
- Φ. 18. *Vena Ferri, ex Alpe Guppen, Ditionis Glareonensium. Dr. Scheuchzer.*
- Φ. 19. *Minera Ferri Conchis onusta, ab Heidenheim, Wirtembergia. Dr. Kifner.*
- Φ. 20. *Vena Ferri ex Hammite constans, ex Monte Baumgarten, Territorij Bernensis. Dr. Scheuchzer.*
- Φ. 21. *Minera Martis fertilior, ex Fodinis Lunschitenfibus, in Saverlandia. Dr. Leopold.*
- Φ. 22. *Minera Ferri ditissima, ex Cryptis Elbingeroda. Hercynia.*
- Φ. 23. *Minera Martis porosa, ex Fodinis Oppidi Lünschitt, in Saverlandia, in Duc. Montano. Dr. Leopold.*
- Φ. 24. *Vena Chalybis genuina, Rother-Ertz dicta, ex Comitatu Sarunetum. Dr. Scheuchzer.*
- Φ. 25. *Vena Ferri figurata, Suhlenfis, Hennebergica. Dr. Leopold.*

Φ. 26. Iron-Ore. New-England.

Φ. 27. *Vena Ferri globosa, & pisiformis, ex Comitatu Badensi.* Dr. Scheuchzer.

Φ. 28. *Vena Ferri Pisiformis, ex Territorio Schaphusano.* Dr. Scheuchzer.

Φ. 29. A sort of Iron-Stone, found in a shallow River. East-India. Mr. Bulkley.

Φ. 30. *Saxum Ferri Mineram in se continens, cum varij Generis Conchyliis. Ex Ripa Neostadiensis.* See another like Specimen of various and numerous Shells in Iron-Stone, from Hesse-Castle, in the Catalogue of the additional foreign extraneous Fossils, v. 4.

DENDRITÆ f.

Delineationes Arbustorum Minerales.

χ. 1. *Dendrites flavus ex Diocesi Eystetensi.* Dr. Bayer. *Hujus, Tabula eruuntur multa: & hæc quoque longe ampliores. Confer. Scheuchzeri Herbar. Diluv. Tab. VI.*

χ. 2. *Pietra emboscata*, the Florentine Marble, taken out of the Quarry, about four Miles from Florence, by Dr. Picanini. 'Tis found in thin Strata, and is full of Cracks. In these is commonly found a black mineral Matter; which ordinarily has insinuated itself into the Substance of the Stone, so far as it was shattered, on each side the Crack, exhibiting various Delineations; but chiefly, as fuliginous Steams are wont, in Form of Shrubs. They penetrate the Substance of the Stone: and appear, near the Crack, where-ever the Stone is cut. Much of the Stone in this Quarry, and indeed of the Country round, is of this sort. There is, in the same Quarry, likewise another sort of Stone, somewhat yellower, having in it Delineations of Towers, Castles, and Buildings.

χ. 3. Another Sample of the same sort of Stone, cut and polished. Out of the same Quarry.

χ. 4. *Dendrites. Repertus non procul ab Urbe Ratisbonensi, media in Via quâ Ingolstadium tenditur; ubi Lapis hisce signaturis notatus, est valde copiosus. D. Ant. Picanini.*

Ejecta ex Montibus ignivomis.

↓. 1. A vitrified Substance, variegated with dusky and green, flung forth of *Vesuvius*. Mr. Bembde was present when it was flung forth. It fell upon his Hat.

↓. 2. A black heavy Sand: a light Substance, friable, somewhat like a Scoria, black within, of a pale brown without, and a yellow sulphurous Substance. Cast out of the new Island near *Santorini*. Dr. Sherard.

Fossilia Artis ope redacta.

ω. 1. A Regulus, from the first running of the *Potosi* Silver-Ore, φ. 1. *supra.*

ω. 2. *Recrementum Metallicum, s. Pars fundi fornacis in quo Plumbum liquefactum est. Clausthalij, in Hercyniis.* Dr. Leopold.

ω. 3. *Scoria Chalybis Sarunetana.* Dr. Scheuchzer.

ω. 4. *Cadmia Fornacum, Ofenbruch; i. e. Ovenbreak, Saxonia.* Dr. Henckell.

ω. 5. *Lapis Bononiensis calcinatus, sive Phosphorus Mineralis.* Mr. Bourguet.

ω. 6. *Charta, ex Asbesto Lapide Hungarico facta.* Dr. Breyn.

ω. 7. *The Caput mortuum of Amber: or what remains after the Salt, Oil, and Spirit, are distill'd off.*

ω. 8. *Alumen Crystallizatum, ex lixivio Lapidis scissilis Eliaridensis confectum.* Dr. Leopold.

ω. 9. *Tartar of Rhenish-Wine; from Germany.*

ω. 10. *Tessellæ of Paste, and Glafs, red, yellow, blue, and green, being Remains of the antient Opus Tessellatum; found on the Shores of Pozzuolo, Italy.* Mr. Howard. Some of these are worn, smooth'd, and rounded, so as to appear like small Pebbles, by the Agitation of the Sea; in like manner as Fragments of Marble-Stone, &c. beat out of the Cliffs, commonly are. There is among them a Piece of green Glafs, of a very remarkable Constitution; being thick set with Pipes of a yellow Colour.



AN
ADDITION
TO THE
CATALOGUE
OF THE

Foreign Extraneous Fossils,

In the COLLECTION of

J. WOODWARD M. D.

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A CATALOGUE of the Additional Foreign Extraneous Fossils.

Vegetabilium Partes ex Tellure eruta.

- α. 1. **L**ignum Fossile, è Turffa-Fodinis Belendorffiensibus, tertio à Lubeca Lapide erutum. M. à Melle.
- α. 2. Lignum Fossile Quernum, è Turffa-Fodinis Belendorffiensibus, tertio à Lubeca Lapide, sub Materia bituminosa, qua aliquot Orgy-
arum Altitudine illud contexerat erutum. M. à Melle.
- α. 3. A Piece of Fossil-Wood, found in the Peat-Earth, about
ten English Miles from Lubec; wherein there are frequently found
Oak, and Birch-Trees. M. à Melle.
- α. 4. Folium Castanea, recens explicatum, eâque plane Conditione
qua solent Folia hujus Arboris exeunte Maio Mense, quo Tempore Di-
luvium accessit; in sulphuris Minera, ad xxx Pedum Profunditatem
in Agro Foroliviensi effossa. Signior Fos. Monte.
- α. 5. Lapis fissilis Filice notatus; ex Argenti Fodina Manebaensis,
Ducatus Vinariensis. G. Frid. Milius.

Conchylia Marina. Univalvia.

- β. 1. Vermiculus Marinus. Effossus inter plura alia, in Loco dicto
il Mavignone, Bononia. M. Bourguet.
- β. 2. Tubuli vermiculares minores, instar Cornu Ammonis in se
revoluti. Ex Zopica, Ditionis Veronensis. M. Bourguet.
- β. 3. Siphunculi marini, etiam ex Loco dicto il Mavignone.
- β. 4. Dentalis major Scandinaviensis Italia. Respondent huic Tu-
buli aut
Siphunculi Maris, Dentales dicti majores Bonanni, p. 91. n. 8.
uti &
Denticulus Elephantis. Rumph. p. 123. T. XLI. j. Dr. Scheuch-
zer. Mus. Diluv. p. 53. n. 354.
- β. 5. Enthalia fossilia, à Sassuolo, Ditionis Mutinensis. M. Bourguet.
- β. 6. Enthalia, ex Agro Bononiensi. M. Bourguet.
- β. 7. Patella Fossilis, cucullata. Chaumont, per Gisorre. Dr.
Fussien.

Conchylia Marina. Turbinata. Nautili.

- γ. 1. Nautilus Oryctographia mea Tab. 2. delineatus. D. Bayer.
- γ. 2. Nautilitarum Species admodum singularis, quippe qua à vul-
garibus Nautilitis sinuosa parietum qui concamerationes distinguunt

Construptione paululum deflectendo, ad Cornua Ammonis, concamerationes magis minusque anfractuosas nacta, propius accedunt. Hoc Numero designata Specimina, gyri Partem priorem haud concameratam cuncta conservant, qua mutilati apparent, qui sequenti Numero sistuntur. Reperta circa Munden aut Hildesiam Oppida.

γ. 3. Nautilita alij concamerationibus frequentioribus instructi. Ibid.

AMMONITÆ.

δ. 1. Ammonites Lineis pluribus Serpentiniformibus, concamerationes quibus olim instructus erat declarantibus, ubique depictus. Repertus circa Munden aut Hildesiam Oppida.

δ. 2. Ammonites alius talis sulcatus. Ibid.

δ. 3. Alius; cujus quidem una Superficies aculeis circa Marginem dispositis exornata conspicitur: altera vero Aëris humidi & nitrosi Injuria licet exesa sit, nihilo secius valde notabilis est. In ea namq; Parietes quibus olim gaudebat concamerationum, eroso Lapide, quodammodo prominentes, & idcirco accuratius discernendas passim exhibet. Ibid.

δ. 4. Nautilites præcedentium Ammonitarum adinstar Concamerationes olim obtinens plurimum anfractuosas, nunc Lineis illis Serpentiniformibus saltem adumbratas. Ibid.

δ. 5. Ammonita marmoreus. Querford. Dr. Hugo.

δ. 6. Cornu Ammonis, in Marga Neostadiensis. Dr. Hugo.

δ. 7. Impressiones Cornu Ammonis in Geode Altorfina. D. Bayer.

δ. 8. Cornua Ammonis Agri Altorfini. In Oryctographia sua descripsit. D. Bayer.

δ. 9. Ammonita Eldagensis, prope Hannoveram. Dr. Hugo.

δ. 10. Cornu Ammonis Merienhagensis, Præfectura Laaenstein. Dr. Hugo.

δ. 11. Cornu Ammonis non spinatum, in extremo Ambitu sulcatum, binis Tuberculorum Ordinibus, uno in summâ Spirâ, altero prope sulcum, striis insuper binis vel ternis ad prima, hinc ternis ad secunda Tubercula, aliquibus etiam in spatiis intermediis excurrentibus. Achelbergbey Rotlingen, bitorio à Tubinga.

δ. 12. Cornu Ammonis non spinatum, valde compressum, læve, ex Pyrite ferrugineo. Ex Comitatu Neocastrensi. Dr. Scheuchzer, N° 17. Mus. Diluv. p. 22.

δ. 13. Cornu Ammonis spinatum, spina Loco in Ambitu crenatum, valde compressum, læve, Spirâ latiori unica terminatum. Dr. Scheuchzer, Mus. Diluv. Ibid. N° 100.

δ. 14. Cornu Ammonis spinatum, crassius, striis undatim & bifurcatim spiram trajicientibus, & in Tania veluti articulata concurrentibus, Angulosq; varios formantibus, quorum apex Caput respicit.

Prope Schavenburgense Balneum Territorij Basiliensis, Ochracei est Coloris, sæpe aurea armatura splendens: Dorsum aliquando Taniola trajicit. Dr. Scheuchzer, Mus. Diluv. p. 30. N° 105.

δ. 15. Idem absque Taniola. Ex Territorio Basiliensi prope Schavenberg. Dr. Scheuchzer. Ibid. N° 107.

§. 16. *Cornu Ammonis, spinatum, Taniolâ Spina Loco Spiram ex-
timam ambiente, valde compressum laeve vel undatis striis parum ele-
vatis donatum, unica Circumvolutione terminatum. Ex Comitatu
Neocastrensi. Dr. Scheuchzer, Mus. Diluv. p. 29. N° 98.*

§. 17. *Cornu Ammonis spinatum laeve, Spira media in Gibbum
elevata, & sensim ad Spinam, seu Dorsum acuminatum declivî.
Ex Agro Veronensi. Dr. Scheuchzer, Mus. Diluv. p. 33. N° 138.*

TROCHI.

§. 1^x. This Trochus very nearly approaches, if it be not the
same, with that Species in the Catalogue of the extraneous English
Fossils, e. 1. *Ex Loco vulgo dicto il Mavignone. Mr. Bourguet.*

NERITÆ.

§. 1^{*}. *Neritæ, Colorem nativum adhuc retinentes, prope Herren-
hausen effossæ.*

COCHLEÆ, Forma compressiore.

ε. 1. *Cochlita Ore angustiori & depresso, ex Zopica, Ditionis Ve-
ronensis. M. Bourguet.*

ε. 2. *Turbinata, ex Agro Veronensi. M. Bourguet.*

COCHLEÆ, Clavicula brevi.

ε. 3. *Cochlites, ex Val del Molin, Ditionis Veronensis. M. Bourguet.*

ε. 4. *Cochlea fossilis candidissima. Chaumont. Dr. Fussiau. This
Species is found on the Shores of England: and is the same with
that in the Catalogue of the extraneous English Fossils, e. 38.*

ε. 5. *Eadem Species, ex Montibus Asolanis Ditionis Tarvisina.
D. Zanichelli. Purpurea Lingua perforatur.*

ε. 6. *Eadem Species. Ex Loco vulgo dicto il Mavignone. Mr.
Bourguet.*

ε. 7. *Eadem Species. Ex Ronca Ditionis Veronensis. M. Bourguet.*

ε. 8. *Eadem Species. Ex Agro Bononiensi. M. Bourguet.*

COCHLEÆ, Clavicula productioni.

ε. 9. A very large Cochlea. Found near Paris. Dr. Fussiau.

ε. 10. *Ex Val del Molin. M. Bourguet.*

ε. 11. *Chaumont. Dr. Fussiau.*

ε. 12. *Ex Monte Mario prope Romam. D. Zanichelli.*

ε. 13. *Ex Val del Molin, Ditionis Veronensis. Mr. Bourguet.*

ε. 14. *Digg'd up near Paris. Dr. Fussiau.*

ε. 15. *Ex Val del Molin. Mr. Bourguet.*

ε. 16. *Weinheim Palatinatus. Mr. Rosinus.*

ε. 17. *Val del Molin, Ditionis Veronensis. Mr. Bourguet.*

ε. 18. *Weinheim Palatinatus. Mr. Rosinus.*

ε. 19. *Digg'd up near Paris. Dr. Fussiau.*

ε. 20. *Ibidem.*

ε. 21. *Digg'd up with other Shells, several Yards deep, near
James River, Virginia, 20 Miles from Sea. Mr. Miller.*

ε. 22. *A Stone cast in some Shell, probably of this Kind. Lu-
nenberg.*

- ε. 23. *Ex Agro Bononiensi. Mr. Bourguet.*
 ε. 24. *Digg'd up near Paris. Dr. Fussiën.*
 ε. 25. *Ex Hetruria, prope s. Quirico. Mr. Bourguet.*
 ε. 26. *Ibid.*
 ε. 27. *Ex Montibus Asolanis, Ditionis Tarvisini. D. Zanichelli.*
 ε. 27^x. *Cochlea exigua ex Monte in Agro Wirtembergico effossa.*
Misit Rosinus lentilias Archiater Duc. Wirtemberg. Vide Epist. ejus.

RHOMBI.

- ε. 28. *Digg'd up near Paris. Dr. Fussiën.*
 ε. 29. *Effossus prope Pagum Harleshausen, in Hassia. Mr. Rosinus.*

CYLINDRI.

- ε. 30. *Ex Loco vulgo dicto il Mavignone. Mr. Bourguet.*
 ε. 31. *Ex Monte Mario prope Romam. D. Zanichelli.*
 ε. 32. *Effossus juxta Parisios. Dr. Fussiën.*

BUCCINA, non rostrata, Clavicula brevior.

- ε. 33. *Turbinata auriti, ex Rivo (vulgo) di Ziavaro Ditionis Bononiensis. S. Zanichelli.*
 ε. 34. *Ex Loco vulgo dicto il Mavignone. Mr. Bourguet.*
 ε. 35. *Ex Montibus Asolanis, Ditionis Tarvisina. D. Zanichelli.*
 ε. 36. *Effossus prope Pagum Harleshausen, in Hassia. D. Rosinus.*

BUCCINA, non rostrata, Clavicula productior.

- ε. 37. *Ex Montibus Asolanis, Ditionis Tarvisina.*
 ε. 39. *Ex Agro Bononiensi. Mr. Bourguet.*

BUCCINA, rostrata, Clavicula brevior.

- ε. 40. *Buccinum striatum; in Hassia, prope Pagum Harleshausen, effossus. Mr. Rosinus.*

BUCCINA, rostrata, Clavicula productior.

- ε. 41. *Effossus juxta Parisios. Dr. Fussiën.*
 ε. 42. *Ex Montibus Asolanis, Ditionis Tarvisina. D. Zanichelli.*
 ε. 43. *Digg'd up in Virginia with ε. 21. I have seen several of this Kind digg'd up in Maryland.*
 ε. 44. *Ex Monte Mario prope Romam. D. Zanichelli.*
 ε. 45. *Effossus in Loco d. il Mavignone. Mr. Bourguet.*
 ε. 46. *Ab eodem Loco.*
 ε. 47. *Effossus juxta Bononiam, Halia. Dr. Scheuchzer.*

BUCCINA, bilingua.

- ε. 48. *Ex Montibus Asolanis Ditionis Tarvisina. D. Zanichelli.*
 ε. 49. *Ex Loco vulgo dicto il Mavignone. Mr. Bourguet.*
 ε. 50. *Ex Monte Mario juxta Romam. D. Zanichelli.*

BUCCINA, ampullacea.

- ε. 51. *Ex Val del Molin, prope Ronca, Ditionis Veronensis. Mr. Bourguet.*
 ε. 52. *Ex Monte Mario prope Romam. D. Zanichelli.*

Umbilicus marinus.

ε. 53. *Turbinatorum Opercula Umbilici marini dicti. Ex Scandianensibus Collibus, Ditionis Mutinensis. Mr. Bourguet.*

Conchylia bivalvia. Pectines.

ζ. 1. The Bottom Valve of a very large Pecten, digg'd up, at the Depth of several Yards, 20 Miles from Sea, near *James River Virginia. Mr. Miller.*

ζ. 2. Another, less; of the same Kind. *Virginia*, found with the foregoing.

ζ. 3. Another; having the Bottom of a *Balanus* affix'd upon it: found with the preceding.

ζ. 4. Three, of the same Species. Digg'd up in the *Morea* [*Pe-loponnesus.*] *D. Zanichelli.*

ζ. 5. Another. *Ex Monte Creazo, Ditionis Vicentina. Monf. Bourguet.*

ζ. 6. Another, digg'd up near *Corinth. M. Bourguet.*

ζ. 7. Three, of a somewhat different Species. *Ex Agro Bononiensi. M. Bourguet.*

ζ. 8. Of the same Species. *Pecten fossilis Marino, & Colore, & Figura integra, prorsus similis, Striis vel Fasciis latiusculis parum elevatis: Coloris sunt nigricantis vel terrei. Ex Argilla Loco dicto Co di Bò erutus, Bononia. Dr. Scheuchzer. Mus. Diluv. p. 69. N. 585.*

ζ. 9. Two small Pectines. Digg'd up *prope Hildesiam. M. Rosinus.*

O S T R E A.

η. 1. The Bottom Shell of an Oyster, found, in *Virginia*, with ζ. 1. *supra.*

η. 2. The upper Valve of a small Oyster crenated within near the *Cardo, Virginia. Found with the foregoing.*

η. 3. The upper Shell, very crass, of a Bivalve of the Oyster Kind, *Virginia. Found with the foregoing.*

η. 4. *Ostracites Bivalvis, à Corintho. D. Zanichelli.*

η. 5. *Ostracites, ex Insula Ægyna. M. Bourguet.*

η. 6. Both Shells of an Oyster. *Effossa prope Neapolim. Signior Zanichelli.*

η. 7. The lower Shell of an Oyster, digg'd up in the *Morea. Mr. Bourguet.*

η. 8. *Ostreon recurvum. Ex Ripa Fluminis Neostadiensis. Dr. Hugo.*

η. 8*. *Ostreus oblongi Valva inferior convexa. Ex Castronovo in Ditione Cadorina. D. Zanichelli.*

η. 8*. *Ostreus majoris Operculum, ex Foro julio. Mr. Bourguet.*

Ostrea Arborea.

η. 9. *Ostreum plicatum majus. Rumpffii Rariteit Kaamer. p. 156. Tab. 47. Tit. c. fossile ex Comitatu Badensi. Dr. Scheucher. Tho'*

I much doubt whether this be one. There are several *East-India* Shells found also in the *West-Indies*.

Ostrea Figura angusta Rostro longo recurvo.

n. 10. *Concha rugosa*, frequens, ad Pagum Winkelhaid, Agri Altdorf. Dr. Bayer. This is of the same Kind with those found commonly in England. See the Catalogue of Extraneous English Fossils, f. 181. & seq.

O S T R E I D E S.

n. 11. Two Bivalves, twirl'd at the Cardines, digg'd up, in *Virginia*, with the Pectines 2. 1, 2, 3. *supra*. There are of the same Species found, in great Numbers, in the Cliffs betwixt *Limington* and *Christ-Church*; a Thing very remarkable. See the Catalogue of these at N^o 7.

Concha anomia, Fab. Col. laevis.

θ. 1. *Concha anomia*, c. *Entrochis effossa*, in Ducatu Wirtembergensi. M. Rosinus.

θ. 2. *Concha anomia*, ex agro Quersurtensi. Dr. Kifner.

θ. 3. *Dux Concha anomia*, ex Antro Nebel-loch, Wirtemberg. Dr. Kifner.

θ. 4. Ex Territorio Wirtembergensi. Dr. Kifner.

θ. 5. *Concha anomia* Fab. Col. Species; eruta prope Coburgum Saxoniae. Dr. Kifner.

θ. 6. Ex Agro Buxovillano, in Alsatia. Dr. Kifner.

θ. 7. *Concha anomia*, ex Comitatu Badensi. Dr. Scheuchzer.

θ. 8. Ex Agro Veronensi. M. Bourguet.

Concha anomia sulcata.

θ. 9. *Pectunculus striatus* amplo in Ora media sinu donatus, Cortice albo Margaritarum instar splendente adhuc vestitus. Ex Comitatu Neocastrensi passim, & prope Oppidum in Marga caerulecente. Dr. Scheuchzer. Mus. Diluv. p. 63. N. 487.

θ. 10. *Pectunculus Neocastrensi major*, dense striatus, ad mediam Oram sinuatus cinerei Coloris, lapideus. Montis Legerii; reperitur & in Kandij Monte. Dr. Scheuchzer. Mus. Diluv. p. 63. N. 494.

θ. 11. *Pectunculites striatus*; prope Biennam. Dr. Scheuchzer.

θ. 12. *Pectunculus striatus*. Ex Monte Legerio; Ditionis Tigurinae. Dr. Scheuchzer.

θ. 13. *Pectunculus subsphaericus*. List. de Cochlit. Angl. Tit. 55. Ex Comitatu Badensi. Dr. Scheuchzer.

θ. 14. *Concha anomia Sulcata* Agri Altdorf. Dr. Bayer.

θ. 15. *Concha anomia sulcata*. Found in Burgundy, France. Signior Benedetti.

θ. 16. Nuclei *Ostreopectinum* globosiores striis duplicibus ad Marginem quidem paucis sed eo crassioribus, versus Verticem vero copiosioribus & simul subtilissimis obducti. M. Rosinus.

θ. 17. *Concha anomia sulcata*, ex Agro Buxovillano, in Alsatia. Dr. Kifner.

θ. 18. *Concha anomia sulcata*, ex Tractu Hildesiensi, & quidem Loco Marvel-Kukle dicto. Dr. Kifner.

9. 19. Three small *Concha anomia sulcata*. Ex Agro Veronensi. Mr. Bourguet.

9. 20. Two *Concha anomia* Rostro pertuso eleganter striata, non descripta. Agri Altdorfini. Dr. Bayer.

Concha, Anomiis affines.

1. 1. *Ostreopectinita quadratam adfectans Figuram subtilissimis striis ornatus*. Nuclei huiusmodi *Ostreopectinitarum* quibus Apophyses longa & acuta Figuram hysteroideam imprimere solent, ea propter *Hysterolithi* appellati fuere. Hic & sequentes *Ostreopectinita* ubivis cum *Entrochis* reperiuntur. M. Rosinus.

1. 2. *Ostreopectinita alatus*, Figurâ circumscriptus trigonâ, strias pariter subtiliores sortitus. M. Rosinus.

1. 3. *Ostreopectinita*, paulo convexioris Figura, & Margine qua Vertici opponitur depressiori atque inflexo. M. Rosinus.

1. 4. *Ostreopectinita*, itidem striatus, ovuli quodammodo referens Figuram. M. Rosinus.

1. 5. *Ostreopectinita decirciniti magis Ambitus*, subtilissimis striis dotatus. M. Rosinus.

1. 6. *Ostreopectinita paucioribus*, iisque crassiusculis, & velut imbricatis striis. M. Rosinus.

1. 7. Similes ferme, striis crebrioribus & subtilioribus insignes. M. Rosinus.

1. 8. Striis acutioribus distincti. M. Rosinus.

1. 9. *Ostreopectinita flabelliformes subtilissime striati*. M. Rosinus.

1. 10. Duo *Ostreopectinita convexiores*, & prorsus laeves, alis instructi brevioribus obtusioribusque. M. Rosinus.

1. 11. *Pectunculus densissime*, ac subtilissime striatus, subrotundus, Valvis magis compressis, aequae Convexis plerumque sinuatis. Ejusdem Loci. Dr. Scheuchzer. Mus. Diluv. p. 68. N. 571.

1. 12. *Hysterolithos alatus*, sive *Ostreopectinita nucleus*, Testâ suâ, in Vertice praesertim *Hysteromorpha*, nudatus. M. Rosinus.

1. 13. *Hysterolithus* prope Coblenz, Archiepiscopatus Trevirensis. This Body is cast or moulded in a Bivalve.

1. 14. *Ostreopectinita rarioribus quidem sed simul crassioribus obductus striis*. M. Rosinus.

1. 15. Strictioris Figura & Alarum longiorum, Specimen. M. Rosinus.

1. 16. Exemplar aliud breviorum quidem Alarum, sed Striis copiosioribus, tenerioribusque ornatum. M. Rosinus.

1. 17. Duo quorum Vertices sursum erecti ab inferiore Testa longius distant; qua in re ab omnibus aliis qui Vertices aduncos, atque ab inferiore, ut ita dicam, Testa non adeo remotus obtinere solent, plurimum differunt. M. Rosinus.

1. 18. *Pectunculus rarioribus striis*, sinu à Cardine ad mediam Oram per Dorsum integrum excurrente donatus. Geroldstein, in Confinio Trevirensis ac Luxemburgensis Territorii: pertinet Locus ad Comitatem de Manderscheid. Dr. Scheuchzer. Mus. Diluv. p. 68. N. 567.

1. 19. Duo, quodammodo Flabelliformes, Semicirculis Vertici ob-

tenfis pluribus, qui striis subtilissimis ubiq; intersecantur curiosius distincti. M. Rosinus.

1. 20. *Conchites polyginglymus*, insolita prorsus Patellamque emulante Figura ab aliis quibusvis longius recedens. M. Rosinus.

1. 21. Tales operculo, sive Testâ alterâ adhuc occlusi. M. Rosinus.

1. 22. *Pectunculus* Dorso valde convexo, & media Lacuna sinuato, Ventre seu Valva altera potius concava, ad Latera utrinque veluti alatus. Budinga in Luto, unde *Bufcephali* Krotenstein Nominis accepi. Dr. Scheuchzer, Mus. Diluv. p. 69. N. 579.

Polyleptoginglymi Figura subrotundâ.

1. 1. *Concha Polyleptoginglyma*, ex Palatinatu Weinheimensi; de his Geierus de Montibus conchiferis, 4^o. Dr. Kifner.

1. 2. *Chama Polyginglyma maxima*, cum adnatis, quæ Piscem olim Testâ connectebant, Ligamentorum nerveorum reliquiis, è Monte Hoberg prope Alzey Palatinatus. M. Rosinus.

1. 3. *Chama Polyginglyma*, Colore nativo quodammodo adhuc imbuta, in Hassia prope pagum Harleshausen effossa. M. Rosinus.

1. 4. Exemplar Bivalve, ejusdem Loci. M. Rosinus.

1. 5. *Chama*, ex Monte Mario prope Romam. S. Zanichelli.

1. 6. Digg'd up in Virginia, along with 1. 1. This is of the same Species with those in the Catalogue of the English Extraneous Fossils, f. 420, 421, which were digg'd out of Harwich Cliff. They are found in great numbers, on the Coasts of Barbadoes, Jamaica, and the Bahama Islands. They were also found on the Shores of England.

1. 7. *Chama rotunda seu circinata ventricosior transversim striata* Coloris flavescentis; Arenâ flavâ & Testaceorum aliorum Fragmentis repleta. Ex Monte Winterkasten prope Weissenstein, haud longe Cassellis. Dr. Scheuchzer. Mus. Diluv. N. 379. p. 56.

1. 8. *Chama Polyginglyma differentis Magnitudinis ad Pedem prædicti Montis Hoberg effossa*, è quarum Contemplatione Geyerus in Tractatu de Montibus Conchyferis Alzeyensibus, recte quidem colligebat, per Incrementi successivi Gradus varios, in minoribus hujusmodi Conchis observandos, maximas tales ad summam quam assequuntur sunt, Magnitudinem olim pervenisse. Ast quæ, de Modo quo id factum sit, ibidem tradit, insulsissima sunt, & à Veritate etiam Historica maxime aliena. M. Rosinus.

1. 9. *Concha Polyleptoginglyma* perforated by the *Purpura*. Digg'd up, in Virginia, along with 1. 1.

1. 10. Another, leis, found with the precedent, in Virginia.

Polyleptoginglymi Figura oblonga.

1. 11. Ex Monte Mario, prope Romam. Signior Zanichelli.

1. 12. A Bivalve out of a Mountain near Certaldo, the Town where Boccacius was born, in Tuscany, M. Misson. This Gentleman formerly offer'd his Thoughts, concerning these Bodies, in the *Voyage d'Italie*. Vol. II. Lett. 30. p. 312. & seq. 4th Edit. But he frankly now acknowledges, that, upon Perusal of the

Natural

Natural History of the Earth, he has changed those Thoughts, and believes these Bodies Remains of the universal Deluge.

α. 13. Digg'd up, in *Virginia*, with ζ. 1. and ζ. 3.

Pectunculi laeves.

λ. 1. *Concha ex Agro Bononiensi. S. Zanichelli.* This Species is found living on the Coasts of *England*: and is also digg'd up at *Richmond. Vid. Catalogue of the Extraneous English Fossils, f. 433.*

λ. 2. *Ex Rivo di Zivarò Ditionis Bononiensis. S. Zanichelli.*

λ. 3. *Conchites in hujus Speciei Testa formati. Ex Rivo del Inferno in Ditione Bononiensi. S. Zanichelli.*

λ. 4. *Nucleus Chamae laevis lapideus, prope Hildesiam inventus. M. Rosinus.*

λ. 5. *Chamites laevis Minerâ Ferri infarctus, ex Arena fodinâ Teutenti Hassiacâ. Mr. Rosinus.*

λ. 6. Found near *Paris, Dr. Fossieu.* This Species is also found in *Harwich-Cliff.* See the *Catalogue of the English Extraneous Fossils, f. 447.*

PECTUNCULI fasciati.

λ. 7. *Ex Monte Mario prope Romam. S. Zanichelli.*

λ. 8. *Tellinites Bayeri Oryctogr. pag. 75.*

λ. 9. Digg'd up in *Virginia* along with ζ. 1. *supra.* This Species is also found in *Harwich-Cliff.* See the *Catalogue of the English extraneous Fossils, f. 489.*

PECTUNCULI a Cardine ad Marginem striati.

λ. 10. *Pectunculus subtiliter striatus. Ex Arenafodina Teutenti Hassiacâ. M. Rosinus.*

PECTUNCULI à Cardine ad Marginem sulcati.

λ. 11. *Pectunculites integerrimus striatus, ex Peloponneso. M. Bourguet.*

λ. 12. *Pectunculus juxta Parisios effossus. Dr. Fossieu.*

λ. 13. *Pectunculus ex Agro Herbipolensi. Dr. Kifner.*

λ. 14. *Ex Saxo prope Sancto-Gallum. Dr. Scheuchzer.*

λ. 15. *Ex Monte Mario prope Romam. S. Zanichelli.*

λ. 16. *Ex loco dicto il Mavignone. M. Bourguet.*

λ. 17. A Pair of *Pectunculi* digg'd up in *Virginia* along with ζ. 1.

PECTUNCULI Figura oblonga, à Cardine ad Marginem protensi.

λ. 18. A Stone cast in a *Pectunculus*, found above 20 Foot deep, above 20 Miles from Sea, by *Lyons-Creek, Virginia.*

λ. 19. A Valve of a *Pectunculus*, very large and crass; with the *Labia* undulated. Found in *Virginia* along with ζ. 1. This and the following nearly approach the Class of the *Cunei.*

λ. 20. Another, found with the preceding.

λ. 21. *Ex loco d'il Mavignone. M. Bourguet.*

λ. 22. *Ex Agro Quersfurtensi. Dr. Kifner.*

CUNEL.

α. 23. *Conchites bivalvis transversim striatus*. Ex Territorio Basilienfi. Dr. Scheuchzer. There are of this Species found very commonly in Gloucestershire. See the Catalogue of the English extraneous Fossils, f. 572, & seq.

α. 24. *Muites fluviatilis major*. Agri Altdorfini. D. Bayer.

TELLINÆ.

α. 25. Digg'd up in Virginia along with ζ. 1. α. 19, 20. Mr. Miller.

SOLENES.

α. 25^x. *Solenes minimi*, ex Tractu Hildesienfi. Dr. Kifner.

PINNÆ.

α. 26. *Pinna*, ex Blancano Monte Bononiæ. M. Bourguet.

Conchyliæ multivalvia.

μ. 1. A *Balanus* digg'd up, in Virginia, along with ζ. 1. *supra*. Mr. Miller.

μ. 2. Several *Balani* growing on the Shell of a *Pecten*. Ex Monte Blancano, Agri Bononiensis. M. Bourguet.

Echini spatagi.

ν. 1. *Echinita*, *Chelonites dictus*, ex Schio Ditionis Vicentina. Mr. Bourguet.

ν. 2. *Echinus Brissoides*, ex Agro Veronensi. Mr. Bourguet.

ν. 3. *Alius*, ex eodem Loco. Mr. Bourguet.

ν. 4. *Alius*, ex eodem Loco. Mr. Bourguet.

ν. 5. Ex Agro Veronensi. Dr. Scheuchzer.

ν. 6. Ex Agro Altdorfino. Dr. Bayer.

ν. 7. *Echinites spatagus*. Ex Territorio Neocastrensi. Vid. Specim. Lithogr. Helvet. Dr. Scheuchzer.

ν. 8. *Echinus exiguus*, prope Pagum Reichmanshof, Agri Altdorfini. D. Bayer. This is of the same Species with the *Echinus Discoides* in the Catalogue of the extraneous English Fossils, Class 5. Part 1. Sect. 2. Artic. 2. Divis. 2. Found in Oxfordshire and Gloucestershire.

ν. 9. *Echinites major* ex Canali Herrenhawsensi, Anno 1719. in Usus Machinæ hydraulicæ factus. Dr. Hugo.

ν. 10. *Echinites Wagricus Siliceus*, è Littore Maris Baltici ad Pagum Niendorf collectus, D. à Melle Lubecensis. Qui Epistolam de *Echinitis Wagricis* edidit 4°. Lubeca 1718.

ν. 11. *Echinites Wagricus*. Ibid. D. à Melle.

ν. 12. Ab eodem Loco. Idem.

ν. 13. Ab eodem Loco. Idem.

Echini Ovarij.

ξ. 1. *Echinus*, ferè orbicularis, viginti Papillarum seriebus obsitus. *Hildeſienſis*, è Monte Galgonberg dicto. M. Roſinus.

ξ. 2. *Echinus ovarius* Vertice rotundiore, ſtriis & tuberibus quibusdam grandioribus conflatis donatus, ex Ovis anguinis quorundam. Liſt Cochlit. Angl. Tit. 21. Ex Agro Baſilienſi. Huic reſpondet *Echinus* Rumphij Hiſt. Amboyna, TAB. XIV. B. Dr. Scheuchzer Muſ. Diluv. p. 85. N° 805.

ξ. 3. *Lapides Judaici*, found at the Foot of Mount Lebanon, 14 Miles from Tripoli in Syria. Capt. Price. Theſe appear plainly to have been clavated Spikes of ſome kind of *Echinus Ovarius*. There are of theſe found in England. See the Catalogue of the extraneous *English* Foſſils, Claſs 5. Part 2.

Corpora quadam Echinis, ut videtur, affinia.

o. 1. The *Stella Marina* of M. Roſinus, ſent by Mr. Linck, found in Rubble-Stone commonly made uſe of and burnt for Lime, together with Scalops and other Sea-Shells, *Aſteria*, and *Entrochi*, at the Depth of 6, 12, or more Ells, at Querford between Brunſwick and Wolfenbotle. There is an Account, but a very wild and romantick one, given of it by Mr. Roſinus in his Book *de Lithozois* 4°. - - - 'Tis of the ſame Conſtitution with the Shells of the foſſil *Echini Ovarij*, and doubtleſs have ſerv'd as Trains or Appendages to ſome like Bodies; as the *Entrochi* and *Aſteria* have of others. This appears to have had an Hollow in the middle, which is ſince filled with grey Spar.

o. 2. Another, from the ſame Place, tho' ſomewhat compreſs'd, is near intire; and retains the firſt Joint of the *Pedunculus*, by which this Body was held and tack'd to the Shell.

o. 3. Another, from the ſame Place.

o. 4. *Pentagonum ſtellare*, quale Tab. II. Tentam. de Lithozois, N° 1. exhibetur à Cl. Auctore M. R. Roſino. This is the Baſis of one of theſe Bodies. There are with it four ſmall Joints of the ſame Body.

o. 5. *Modiolus ſtellatus* Luidij, Spec. Lith. Helv. p. 10. Fig. 13 a. Ex Monte Randio. Dr. Scheuchzer, Muſ. Diluv. p. 97. N° 982. Theſe Bodies are found in various Places in England; and are Joints of Trains belonging to ſome Body of the ſame Tribe with the foregoing.

Entrochi. Trochita.

π. 1. *Entrochi*, Montis Legerij, deſcripti in Specim. Lithograph. Helvet. Dr. Scheuchzer.

π. 2. *Trochi*, & *Entrochi*, ſpecierum variarum; quos, nescio quo Jure, *Aſterias* appellat M. Roſinus; & deſcribit in Tent. de Lithozois. Reperti in Ducato Wirtembergico.

π. 3. Alij, diverſarum adhuc ſpecierum, deſcripti in eodem Tentamine. Horum nonnulli, incisi & laevigati, ſubſtantiam interiorem oſtendunt

ostendunt quasi Seleniticam, & Figuras Pentaphylloides, seu Stellares, etiam intimas Medullas, permeantes. In Duc. Wirtemberg. These, with the Pentaphyloid Figures, are the Entrocho-Asteria. M. Rosinus.

π. 4. Alij, etiam diversi. Descripti in eodem Tentamine. Hi Trochi effodiuntur simul cum diversi Generis Conchylijs Marinis. Ibid.

π. 5. Alij, adhuc diversi. Ibid.

π. 6. Exordia Radiorum sigillatim emissorum ad Trochos pertinentium. Ibid. These are Parts of the Shells, with the first Joints of the Entrochi, which are Appendages or Trains to them.

ASTERIÆ.

ρ. 1. Asteria ab ebulliente, quem liquidum altius olim imbiberunt, Pyrite, mirum in modum aucta atq; extumefacta. Ex Ducatu Wirtemberg. D. Rosinus.

ρ. 2. Asteria, ex Comitatu Neocastrensi. Dr. Scheuchzer.

PISCIIUM PARTES.

σ. 1. Piscis in Lapide fissili, Osterodensi. Dr. Hugo.

σ. 2. Piscis Fragmentum in Lapide præduro. Ex Agro Veronensi. Mr. Bourguet.

σ. 3. Pisciculus in Lapide, Agri Veronensis. D. Zanichelli.

σ. 4. Piscis in Lapide, à Canobine Montis Libani. D. Sherard.

σ. 5. Lapilli istis persimiles qui Piscium Capitibus circa Exortum Spina Dorfi innasci solent. Ex Arena-Fodina Tententi Hassiaca. M. Rosinus.

QUADRUPEDUM PARTES.

τ. 1. Os fossile erutum prope Marienbornam Comitatus Ysenburgici. Dr. Kifner.

τ. 2. A boney Substance, digg'd up at - - - in France. Mr. Beavor, the Queen's Jeweller. He says it becomes of a blue Colour if heated at a Flame or Fire. See the Catalogue of the Second Addition of English Native Fossils, aa. 8.

τ. 3. Turcois d'Auvergn en France. They were originally all white: and have been brought to these Colours in the Fire. Mr. Beavor.

τ. 4. Part of a large Bone found lodg'd in a pale brown Stone, in Spelunca Baumaniana Hercyniæ. Dr. Hugo.

τ. 5. A small Bone in like Stone, out of the same Cave. Dr. Hugo.

τ. 6. Part of a Bone yet smaller, out of the same Cave. Dr. Hugo.

τ. 7. Dens Lupi fossilis, ex Spelunca Baumaniana. Dr. Hugo.

τ. 8. Dens, forsan Apri, ex Crypta Baumaniana. G. Frid. Milius.

τ. 9. Two Teeth, in Part of a Jaw Bone, digg'd up near Constadt, in the Dutchy of Wirtemberg. M. Valkenierg.

τ. 10. Two Teeth digg'd up, near *Constadt*, in the Dutchy of *Wirtemberg*, along with the precedent, and various Sea-shells. Mr. *Valkenier*. I am not without some Doubt whether this Gentleman was not impos'd upon in these.

τ. 11. A Piece of the Tooth of an Elephant broke off a Segment that was eleven Inches in Circumference, and two Foot long, but broke in Carriage from *Holland*, whence 'twas sent me by Mr. *Valkenier*, with the following Account. *Un Unicornu fossile du Longueur environ d'une aune, qui a été trouve sous la terre à Constadt dans le Duchè de Wirtemberg en Suabe, ou l'on trouva, il y à sept ou huit ans, cinquante cinque de ces Espèces, dont il y en avoit du longueur d'onze pieds, que j'ai vu dans l'Antiquatre du Duc dans sa Residence à Stutigard.* Of these, at the Request of Mr. *Valkenier*, there was an Account publish'd at *Schaphousen* in 4^o 1701. by Dr. *David Spleissius*, under the Title of *Dissertatio de Cornubus & Ossibus fossilibus, Constadt*. This was a Frustum of the middle Part of the Tooth; so that doubtless it was very large. Why the *Germans* call this *Unicornu*, is not easy for me to imagine. I thought, before I had seen it, by this Account, and others I had formerly seen in the foreign Gazettes, that these Bodies had been Horns of the *Narwhale* or *Unicorn Fish*. But this may pass amongst many other Instances of the Carelessness of the Writers of Fossils, and of their Prejudices, which indeed have hitherto been such, that any Man is much more like to be misled than inform'd by what has been hitherto publish'd on that Subject. I believe the Tooth μ. 40. in the Catalogue of foreign extraneous Fossils, was found with this here: and consequently may be rather the Grinder of an Elephant, than of some Cetaceous Fish, as Mr. *Valkenier* imagin'd.

τ. 12. *Frustum Dentis Elephantis fossilis Agri Romani. S. Zanichelli.*

Conchylia Massa Saxea confertim immista.

υ. 1. *Cornua Ammonis in Lapide Scissili. Ex Hildesiensi Episcopatu. Dr. Hugo.*

υ. 2. *Congeries Pectunculorum varij Generis, ex Montibus Belunensibus Forojulij. Dr. Zanichelli.*

υ. 3. A Pholas, with other Bivalves, in a reddish brown Stone, having in it Sparks of Talc. *Frankforti ad Manum. Dr. Kisner.*

υ. 4. Iron-Stone, said to be rich, having various Bivalves and Impressions in it. From *Deuten* three Leagues from *Cassel* the Capital of *Hesse*.

υ. 5. *Massa lapidea, Chamis Turbinibusque referta, è Litore Maris Balthici, ad Pagum Niendorp. D. à Melle.*

υ. 6. *Lapis, præter plurimos Ostreopectinum, præsertim alatorum, nucleos, & impressa Vestigia, talem etiam Figuram cujus Imagines Tab. vi.† sub Littera A depicta exhibentur, continens. Frustum est aliud prae grandis Lapidis, qui ante Annos aliquot in Monte ad Rhenum prope Arcem Ehrenbreicstein sito inventus fuit, atque quia*

† Tentam. de Lithozois.

ob ingentem Molem integer Loco moveri haud poterat, ab Operariis multo Labore diffusus fuit, qua Ratione intus latentes, & solidissimo lapideo Cortice utrinque involuta hujusmodi Conchitarum Figura felicissimo casu detectæ fuerunt. M. Rosinus.

v. 7. Conchula innumera in Saxo Neostadiensis Ripæ.

v. 8. Alia largiores in Saxo ejusdem Ripæ.

v. 9. Congeries Conchularum, ex Rivo (vulgo) del Mercato Ditionis Bononiesis. D. Zanichelli.

v. 10. Turbinata innumera in Massa saxeæ, ex Ripa Neostadiensis. Dr. Hugo.

v. 11. Marga Scissilis, s. foliata, Conchylia compressa, friabilia, & quasi calcinata, continens. Ex Neostadiensis Ripa, ubi miranda hujus Terræ laminosa Varietas Labrum Ripæ constituit. Dr. Hugo.

v. 12. Lapis valde durus innumeros continens Strombos, prope Neoburgum Comitatus Hoyæ.

v. 13. Conchyliorum bivalvium & turbinatorum Congeries in Saxo ex Istria. Mr. Bourguet.

v. 14. Turbinata & Bivalvia plurima in Massa saxeæ Weissenburg, prope Moguntiam.

v. 15. Congeries Conchyliorum Massa saxeæ commissorum ex Litore Veneto. D. Zanichelli.

v. 16. Conchylia in Massa saxeæ juxta Parisios effossa. Dr. Jussieu.

v. 17. Saxum Pectinibus refertum. Heldeziense. Dr. Hugo.

v. 18. Pectines in Massa saxeæ effossa prope Heldeziam.

v. 19. Massa saxeæ Conchylis minutissimis referta in nova Munimentum Moguntini extensione reperta. Ex simili substantia tota Strata constant. Dr. Kifner.

v. 20. Congeries Bivalvium in Saxo, ex Rivo del Mercato Ditionis Bonon. S. Zanichelli.

v. 21. Bivalvia in Massa saxeæ, ex Monte dicto il Sasso Bononia. Mr. Bourguet.

Corpora Marina incognita, ex Tellure effossa.

Φ. 1. Cauda cujusdam Animalis fossilis Fragmentum. Spec. Lith. Helv. p. 66. fig. 88. Figuratum novum, prope examinandum: ex altissimo Glaronesium Monte Guppen, v. οὐρα Φ. Helv. A. 1705. Dr. Scheuchzer. Mus. Diluv. p. 97. N. 979.

Φ. 2. Lapides Frumentarii, seu Numismales, cum Concharum & Turbinatarum Congerie, ex Zopica, Ditionis Veronensis. Mr. Bourguet.

Φ. 3. Lapis Frumentarius, Agri Veronensis. S. Zanichelli.

Φ. 4. Lapis Frumentarius s. Numismalium Congeries. Ex Zopica, Ditionis Veronensis. Mr. Bourguet.

Φ. 5. Lapis Frumentarius pulcherrimus. Ex Zopica, à Boniolo Monte, Ditionis Veronensis. Mr. Bourguet.

Φ. 6. Lentes lapideæ candida in Saxo cinereo, copiose, & elegantissima. Ex altissimi Montis Aubrig, Snitensium, Jugis. Dr. Scheuchzer. Mus. Diluv. p. 94. N. 946.

Φ. 7.

Φ. 7. *Lapides numismales majores. Juxta Veronam.* Mr. Bourguet.

Φ. 8. *Lapis numismalis major. Ex Zopica, Ditionis Veronensis.* Mr. Bourguet.

Φ. 9. *Lapides frumentarij, ex Agro Veronensi.* S. Zanichelli.

Φ. 10. *Lapides numismales. Ex Zopica Ditionis Veronensis.* Mr. Bourguet.

Φ. 11. *Lentes lapideæ, albide, ex Saxis marmoreis ad Thermas Fabarias.* Dr. Scheuchzer. Mus. Diluv. p. 95. N° 959.

Φ. 12. *Lenticulæ fossiles, s. Lapides numismales vulg. circa Parisios frequentes.* Dr. Juslieu.

Φ. 13. *Lentes minores solutæ. Ad Pagum Issy prope Lutetiam Parisiorum.* Dr. Scheuchzer. Mus. Diluv. p. 96. N° 971.

Φ. 14. *Lentes lapidei, albi, sive numismales Lapides minores. Ex Coneglian, Forojulij.* M. Bourguet.

Φ. 15. *Lentes lapidei, ex Zopica Ditionis Veronensis.* Mr. Bourguet.

Conchyliæ fluviatilia, & lacustria, ex telluris Visceribus eruta.

Χ. 1. *Cochleæ olim Lacustres, seu fluviatiles, Spiris (ut in Ammonita fieri solet) in se invicem revolutis constantes, Margæ candidæ Mundensi in Montibus editissimis haud raro permixtæ.* Mr. Rosinus.

Χ. 2. *Ejusdem Censûs Turbines. Ex eadem Margâ.* Mr. Rosinus.

Χ. 3. *Opercula quibus prædicti Turbines olim claudabantur. Ex eadem Margâ.* Mr. Rosinus.

Χ. 4. *Buccina lacustria ventricosa. Ex eadem Margâ.* Mr. Rosinus.

Χ. 5. *Alia, magis oblonga. Ex eadem quoque Margâ.* Mr. Rosinus.

Χ. 6. *Musculus fluviatilis prope Arcem Herrenhausen ad viginti Cubitorum Profunditatem una cum alijs Conchylijs Belluarum prægrandibus Offis & Lignis, è Terra effossus.* Mr. Rosinus.

Χ. 7. *Musculus angustior, ex flavo viridescens, validus, umbonibus, acutis Valvarum Cardinibus velut Pinnis donatus sinuosus. List. Hist. Cochl. Fluv. Tit. 30. fossilis in Saxo cinereo, ex Turgovia $\frac{1}{4}$ Hora à Stekborâ, Testis veluti calcinatis, adhuc superstitibus.* Dr. Scheuchzer.

Cochleæ terrestres, ex telluris Visceribus eruta.

Ψ. 1. *Cochleæ terrestris candida, prope Vallen in Hassia effossa, cum alijs similibus.* Mr. Rosinus.

Ψ. 2. *Cochlites, ut videtur Cochleæ terrestris. E Latomia prope Nordlingam, Suevorum.* Dr. Bayer.







