

West of it there is a strong Work much larger, but not so perfect; yet enough to shew it was made to secure a Power, that might lie there to bridle those in the strong Camp, and prevent their making Excursions towards *Lewes*.

The Camps on the southern Limits of the *Downs* are *St. Rook's* near *Chichester*. *High-Down*, a small Square, four Miles East of *Arundel*, and in the Parish of *Goring*. *Cisbury*, four Miles South-west of *Steyning*. *Hollingbury* is the only one in the middle of the *Downs*, two Miles North of *Brighthelmstone*, and three Miles South of *Ditchling*; it is a Square; the *Portæ* still remaining; it contains about five Acres. A Mile East of *Brighthelmstone*, on the top of a Hill, half a Mile from the Sea, is a Camp, which has a triple Ditch and Bank; this also is a Square, only the Corners are rounding; the outmost Trench measures about three quarters of a Mile. In the Parish of *Telscomb*, about five Miles East of the last, are two, but most imperfect; the Cliff is a south Fence to one; the other is a Mile distant from it; their west Sides are both finish'd with very able Works; they were design'd for Squares, and to contain 12 or 15 Acres. At *Meeching* or *Newhaven*, on the Point of the Hill, which overlooks the Harbour's Mouth from the West, is a Fortification which they call *the Castle*; its Banks are very high, the Shape near half oval, containing about six Acres; formerly it might be much more, because the Cliff, which forms the Diameter, every Year more or less moulders away, and falls into the Sea. Near a Mile east of *Seaford* is another call'd also *the Castle*, bounded by the Cliff on the South; its Figure almost semicircular, the Trench and Rampart large, inclosing twelve Acres. Three Miles east of *Cukmere-Haven* is the last, near a narrow Pass coming up from the Sea call'd *Burling-Gap*; it incloseth a Hill named *Belltout*, of a half oval shape; the Works have the same Figure, and measure about three quarters of a Mile; the Cliff here also makes the Diameter.

Though neither History nor Tradition has handed to us any Relation when either of these Works were made, or by whom used, (except *Cisbury* by *Cissa*) yet from this View we may conceive the Calamity of War once raged in all these Parts; that the Ground was disputed Inch by Inch; that in the Attack, as well as Defence of it, the Pickaxe and Spade were as much made use of as the Sword; and lastly, that, unless the Aggressors were very numerous, eight Years was no long Time taken up in dispossessing the Inhabitants of this fast Country.

Some may imagine many of these Camps were made by the *Danes*; but by what may be observ'd from the History of those Times, that People seem'd not to be so formal an Enemy, as to prolong War by Encampments: Their Refuge was in their Fleets, that always attended them; so that when likely to be vigorously oppos'd, they betook themselves to their Ships, and suddenly invaded another Part, where was less Opposition; and what they could not carry with them, consum'd with Fire and Sword.

The Archdeacon of *Huntingdon*, in the Prologue or Dedication of his Annals, to *Alexander* Bishop of *Lincoln*, assures his Dioceſan that he compiled his History from Chronicles preſerved in ancient Libraries: No queſtion therefore, when ſpeaking of the *Saxons* here, he had good Authority to ſay (as above cited,) *magis magisque ſibi Regionis ſpatia capeſſentes*; and that no other Meaning could belong to it, than that they carried their Conqueſt from Weſt to Eaſt, *in longinquam*, length-ways. Had they entirely made themſelves Maſters of the Country, it would have been too late: But before they had wholly gain'd it, the *Britons* aſſembled againſt them; the *Saxon* Chronicle ſays *neah*, i. e. *propè*; *Ethelwerd*, *juxta*; or, as *Huntingdon* has it, *apud Mercredesburne*; where a Battel was ſo hard fought, that each Side had enough on't, and retired. The *Saxons* were ſo diminiſh'd, that *Ella* was oblig'd to ſend for more Forces. This Action was in the ninth Year after *Ella's* firſt Footing here, three Years before *Hengiſt's* Death, *Ann. Dom. 485*. It ſo weaken'd *Ella*, that we hear no more of him till he receiv'd his Supplies from *Germany*; which came not, according to *H. Huntingdon*, till the firſt Year of the Emperor *Anaſtaſius*, three Years after *Hengiſt's* Death, and ſix Years after the hard Battel, *viz. Anno Dom. 491*.

Being thus ſtrengthened, *Ella* mov'd again, beſieged *Anderida*, (in *Huntingdon's* Words, *Urbem munitiffimam*) at laſt forced the Place; and, by reaſon of the ſtout Reſiſtance the Defendants made, Savage like, left not a Soul alive, and razed the City, which in *Huntingdon's* time remain'd deſolate.

As to the Field where the Battel was fought, the *Saxons* extending their Power eaſtward, the Check that was given them, in all probability, muſt have been where they push'd on their Victories; and it being near *Mercredesburne*, this *Bourne* near *Pevenſey* may be the Place meant, ſince it ſounds like the latter Part of that Name (for there not being a *West-Bourne* that it relates to, the Name of it may rather be *Eſbourne* than *East-Bourne*; and likewise that *Anderida*, the *Britons* laſt Stake and Support, was not far from it. It is probable therefore, the Battel was fought on the *Downs*, between the Camp laſt mentioned at *Bourling-Gap* and *East-Bourne*; for there are no where on the *Downs*, that I have ſeen (and there are few Parts of them that I have not often view'd,) Marks of a greater Battle than there; becauſe from the Top of that very high Cliff, by the Inhabitants call'd *The three Charles* (and by Mariners *Beachy-Head*) to *Willington-Hill*, which is four Miles, the Ground is full of large *Tumuli* or Places of Burial; and in many Parts within that Track, where the Poſition of the Ground ſeems to offer, there are deep Trenches and Banks, which one would imagine were *Breaſt-Works* made to defend the Front of an Army; and the *Tumuli* on each ſide of them ſeem to ſhew there was no ſmall Struggle in forcing, as well as defending them.

Mr. Somner (n) dislikes, that the Site of *Anderida* should be fix'd at *Newenden*, and is inclin'd to assign some Place in *Suffex* for it: But from a Deference to the Opinions of the learned *Cambden* and *Selden*, he drops the Matter.

But let us see what our more elder Historians say of it. *Henry* of *Huntingdon*'s Words are: *Et quia tot ibi damna toleraverant Extranei, ita Urbem destruxerunt, quòd nunquam postea reedificata est. Locus tantum quasi nobilissimæ urbis, transeuntibus ostenditur desolatus. Matthew* of *Westminster* says, *Locus autem Civitatis usque hodie transeuntibus ostenditur desolatus. Mansit ergo ibidem Ella cum tribus Filiis suis, & Regionem illam, quæ usque hodie Anglicè Suchsex. Latinè autem Regio Australium Saxonum dicitur, colere cæpit.* From the Expressions above cited, it may be supposed the Ground where that City stood was not quite forgot in either of those Historians Days. *Henry* of *Huntingdon* being the elder by 200 Years (had *Newenden* been the Place,) his words might have been true, in saying it was desolate: But it is very improbable *Matthew* of *Westminster* should have said so likewise; or, at least, not taken notice of the Act of Piety and Charity of *Sir Thomas Albuger*, who, in his Time had newly erected a Monastery at *Newenden* for the *Carmelites*, who came from *Palestine*. But let that pass: What Authority *Mr. Cambden* had for saying (o) *Hengist* sent for *Ella* out of *Germany*, to help him reduce *Anderida*, is not to be found. From the Accounts above stated, and others that might be produced, it is clear, that *Hengist* was dead three Years before the Siege was laid to *Anderida*. In the Time of *Hengist*'s Life, we find for eight Years *Ella* had enough to do in *Suffex*; and the Blow he had given him the ninth Year at *Mercedsburne*, obliged him to be quiet the other two Years of *Hengist*, and till his Succours as (above-mention'd) came to him from *Germany*. Besides, we have not the least Hint from any of our *Historians*, that *Anderida* was an Eye-sore, either to *Hengist*, or his Son *Esk* after him; or that *Ella* assisted the *Kentish Saxons*, or the *Kentish Saxons Ella* in reducing it: Therefore this must be a Supposition only of *Mr. Cambden*, in order to give Strength to the Notion of *Anderida*'s being at *Newenden*. Taking no Notice therefore of that Supposition, we may consider *Newenden* is on the *Kent* side of the *Limen* (for so is the River *Rother* called (p) in the *Saxon Annals*, and by *Matthew Westminster*; and the Mouth of it nam'd *Portus Limeneus*, and *Limene* by *Ethelwerd* (q) and *Henry Huntingdon*;) and that *Kent* having been subdued by *Hengist*, and his *Saxons*, near forty Years before, the Town at the Mouth of the

Limen,

(n) Somner's *Roman Ports and Forts in Kent*, p. 106. (o) *Cambd. Brit. Kent. Edit. 1695. Col. 211.*

(p) *Chron. Sax. A. D. DCCCXCIII. Mat. Westm. Fl. Hist. A. D. DCCCXCIII.*

(q) *Ethelwerd. Lib. III. cap. iii, A. D. DCCCXCIII. Hen. Hunt. Hist. Lih. V. Afr. Reg. An. 19.*

Limen, and the rest, if any, up the Stream on the side of *Kent*, were also part of their Conquest.

Furthermore, after it had cost *Ella* so much time, and no doubt pains too, in reducing the plain Ground of *Suffex*, it is not likely he should call more Forces out of *Germany*, that he might lead them thirty Miles, through the Difficulties of the great Wood (which he must have done if *Newenden* were the Place,) to besiege a City, so far from his own, and within the *Kentish-Saxon* Limits, especially if there's any Heed to be given to the Words of *Matth. Westminster* before-cited; who, after relating the sad Fate of the Inhabitants and City of *Anderida*, immediately subjoins, *Mansit ergo, &c. Ella and his Sons resided there (i. e. in that Part of Suffex where Anderida was,) and began to cultivate and improve the Country.*

In the last Place, from the Use made of *Anderida* by the *Romans*, it is not likely (as *Mr. Somner* (*r*) judiciously hints) its Place was at *Newenden*; for being one of the Stations, under the *Præfectus litoris Saxonici*, where Forces were quarter'd, to have a watchful Eye on the Sea, whenever the *Saxon* Pyrates came to infest the Coast, we may suppose it like the rest of the Garisons under that Officer, conveniently situated for the same purpose; as were *Branodunum*, (*s*) *Brancafter*, at the North Point of *Norfolk*; *Gariannonum*, North *Yarmouth*, or very near it; *Othona*, *Ithanchester* in *Dengy* hundred, in *Essex*, some Ages since swallowed up by the Sea; *Regulbium*, *Reculver* in *Kent*; *Rutupis*, *Richborow*; *Dubris*, *Dover*; *Lemanis*, (which from the *Saxon Chronicle* (*t*) we must look for, four Miles East of *Appledore*) probably *New Romney*, all situate near the Sea, on Ground which had a full Prospect of the Sea: Whereas *Newenden* lies low, at least eight Miles within *Appledore*, on a Turning of the River, where the Land eastward must have cut off any Prospect of the Sea. To all this may be added, that the *Romans* having a *Numerus*, Cohort, or Battalion of the *Turnacenses* in Garison at the *Portus Lemanis*, on the Mouth of the Haven, we may suppose they knew how to husband their Strength to better purpose, than to place another Garison to watch the Motions of the *Saxon* Rovers, twelve Miles up the little River, quite out of sight of the Sea, where they could be of no Service.

Those who would have the Seat of *Anderida* to have been at *Hastings*, let them look on these Words of *Henry Huntingdon*: (*u*) (*Haraldus rex Anglorum, eadem die reversus ad Couirwic, cum summa lætitia,*

(*r*) *Somner Rom. Ports and Forts*, pag. 103. cap. lxxiii. pag. 162.

(*s*) *Not. Imperii à Pancirol.*

(*t*) *Chron. Sax. Ann. Dom. DCCCXCIII. Tum appulerunt (sc. Dani) in Limeni ostium, cum CCL. Navibus. Super eum Fluvium traxerunt suas Naves usque ad Sylvam, quatuor millariis ab exteriori parte æstuarii; ibique expugnarunt quoddam munimentum (sc. Apuldre)*

(*u*) *Henr. Huntingdon, Hist. Lib. VI.*

tia, dum pranderet, audivit nuntium dicentem sibi, Willielmus dux Normannicæ littora Australia occupavit, & castellum construxit apud Hastings,) and they will conclude *Hastings* was not a desolate Place, in the Ages of the Historians, who affirm *Anderida* was. If at *Pevensey*, that Place was so far from being razed by *Ella*, that even after the *Noruan* Conquest it remain'd a strong Castle, where *Odo*, Bishop of *Bayon*, and his Forces sustain'd a six Weeks Siege; and for want of Provision were oblig'd to surrender to K. *William II.* At this Time there is so much of *Pevensey* standing, that perhaps 'tis the greatest and most entire Remain of *Roman* Building any where to be seen in *Great Britain*.

From the Arguments on the foregoing Authorities, *Anderida* must have been somewhere in *Suffex*, not in the West, but East part of it, and not far from the East end of the *Downs*, near the Sea. From the Bath, Pavement, Coins, and Bricks, 'tis sure the *Romans* had once an Abode, and not a short one, at this Place near *East-Bourne*: From the large Extent of Foundations about the Place where these were discover'd, that there was a large Town or City there: From the common Height those Foundations bear under the Surface of the Ground, that the Buildings they sustain'd were effectually levell'd or raz'd: And from the Coals dug up amongst the Rubbish, 'tis evident that Part was burnt; all which Circumstances well enough agree with the Account given us of *Anderida*.

The Situation likewise of a Town here, gives reason enough to suppose, it was a Place of Importance, and whence it had its Name; no Part hereabouts being any way so convenient for a secure Settlement, or for such a Use as the *Romans* might have occasion to make of it. We are inform'd by *Cæsar*, that the Maritime Parts of *Britain* (speaking of what he saw, which was the South-East) were inhabited by People from *Belgium*; and (w) that they call'd their Settlements by the Name of the Places from whence they came. It was the Opinion of *Tacitus* also, that (x) those who inhabited next to *Gaul*, came from *Gaul*. And *Bede* says, the Tradition in his Time was, that the Southern Part of the Isle was peopled (y) from *Bretaign*. In the third and seventh Books of *Cæsar's* Commentaries, mention is made of the *Andes*, a City and People belonging to it among the *Celtæ*, inhabiting on the Sea-Coast. Time varying the Names of Things, near two hundred Years after *Cæsar*, *Ptolemy* calls the City *Anderidum*: And near 250 Years after him, when the *Noti-*

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tia

(w) De Bell. Gall. Lib. V. Qui omnes, ferè iis nominibus civitatum appellantur, quorum ex civitatibus eo pervenerunt.

(x) Tacit. Agric. cap. xi. In universum tamen æstimanti, Gallos vicinum solum occupasse credibile est.

(y) Bedæ Hist. Eccles. Gent. Angl. Lib. I. cap. i. In primis hæc Insula Britones solum, à quibus nomen accepit, incolas habuit; qui de tractu Armoricano (ut fertur) Britanniam advecti, Australes sibi partes illius vindicarunt.

tia Imperii, now extant, was in use, that *Classis Anderetianorum* (z) is register'd; and the Residence of their Admiral fix'd at *Paris*. From whence 'tis to be inferr'd, that tho' the Capital of the *Andes* might have been *Angers* near the *Loyre*, yet their Country had on the North the *British* Channel, and on the East the *Seine* for its Bounds. The *British* Coast about *East-Bourne* is the nearest of any to the Mouth of the *Seine*: Therefore, according to the Usage before *Cæsar's* Time, the Name of *Anderida* there is already accounted for. Moreover, this Place seems most naturally seated, for giving an Appellation to the great Wood, to which it is adjoin'd: For, as itself is on the Shore, so also the *Sylva Anderida* here, came very near the Shore; and a large Part of it might be seen from the Sea before it: Indeed, on the Sea off of *Romney*, it might be discover'd; but then the Distance was great: At all other Parts of the Coast, the Sight of it from Sea is hinder'd by Hills, or high Cliffs.

Setting aside the Want of a navigable River, the Spot of Ground where this old Town stood, yields to none in the County for Importance and Pleasure; for here, like a Wedge, ends the firm Soil of the *Downs*; Nature has shap'd it like an Equilateral Triangle, having each Side half a Mile in Length: Towards the Sea, on the southern Side, 'tis fenc'd by a low Cliff, of 12, 15, and in some Places 20 Foot high, (in which Cliff is now to be seen a strong Foundation, that has acute Angles, which shews it to have been for a Fort, rather than a Dwelling-house. On the Northern Side is a Morass, with a large Rivulet of very good Water. Between the West-side and the *Downs* lies a small Valley, by which Advantage, there was formerly a Harbour, capable of a small Fleet; the Banks on each Side of it are an Evidence it was sunk by Industry; but by Weeds and Gravel from the Sea, and by Mould annually added, as is observeable † in Valleys, it is now so rais'd, that 'tis never flow'd but at high Spring-Tides, when a strong Wind forces the Waves into it. This Harbour must have been a good Security to part of the West-side; what other Works might have been to guard it, from the End of the Harbour to the Morass, cannot be said, by reason the Ground between has for many Ages been in Tillage. It is easy to imagine of what Importance a Town fortified at this Place must have been in those Ages, when the only Pass by Land from the West to the East End of the Country was through it; for other there could not be in many Miles North; unless the Lands in that Tract, which are still very oozy and tender, had been well drain'd.

As the Situation describ'd render'd this Place strong, it is very pleasant withal; for the Ground is high enough for a good Prospect of the Low Lands adjoining, and the Country towards *Battel*; besides,

† *Vid. supr.*
V. iv. P. ii.
C. iii. S. viii.

(z) *Panciroi. Comm. in Not. Imp. Cap. XC. pag. 179, 180.*

it has a commanding View over that Bay, which is between *Beachy-Head* and *Hastings*. If the Use made of it by the *Romans* was to guard the Coast, there was this Advantage belonging to it; that a Centinel on the Top of *Beachy*, not two Miles from it, in a clear Day, without turning his Body, might see the *Isle of Wight*, the Hills in *France* near *Bologn*, and the *Nefs* in *Kent*; so that from the *Nefs* to *Selsey* it must have been a small Sail that could escape his Eye.

XXIII. About four *English* Miles N. W. from *Gibraltar*, at the End of the Bay, there are considerable Ruins. The Place is called at present *Rocadillo*, and consists of a few Huts, and a modern square Tower, which appears to have been raised on the Foundation of a much greater Pile. The Walls of the old City are very easy to be traced. They seem to have been about two *English* Miles in Circumference, and were built upon the Brow of the rising Ground. The Space within is cover'd with Ruins, among which were a great many Pieces of very fine Marble well wrought; and innumerable Fragments of Vessels of that kind of red Earthen Ware, which *Ambrosio Morales* in the first Chaper of his *Discurso de las Antiguiedades de las Ciudades de Espanna*, lays down for a certain Mark of a *Roman* City, and takes to have been a Composition of the Clay of *Saguntum*, often mentioned among the *Romans*.

The Situation of the Ancient Carteia; and other Roman Towns near it; by J. Conduit, Esq; n. 359. p. 903. Fig. 58.

Ficta Saguntino pocula malo luto. Mar. Lib. VIII. Ep. 9.

Sume Saguntino pocula ficta luto. Lib. IV. Ep. 108.

There are Remains of a rude semicircular Building, raised on Arches, which descends gradually into an Area, and seems to have been a kind of Theatre. I brought away with me a Marble Pedestal of a Statue, dug up near to the square Tower. The Marks, where the Feet and the Extremities of the Drapery were fasten'd to it, are still to be seen, and the following Letters finely cut, V A R I A M A R C E. It was given me by the Owner of the Ground, who said he had read upon it formerly three other Letters L L A since broken off. There are other Inscriptions, but so defaced and ill cut, that they do not deserve a particular Mention. I have a considerable Number of Medals, that were found among these Ruins; most of them have a *Caput turritum* with CARTEIA in very legible Characters. The Reverse is generally a *Fish*, a *Neptune*, or a *Rudder*. Towards the West there is an easy Descent to the River *Guadارانque*, which takes its Source at *Castellar*, about four Leagues in the Country, and is very deep at *Rocadillo*. There is a Bar where the River falls into the Bay; but it does not hinder the Entrance of Vessels of 15 Tun, to load Charcoal and other Necessaries, that are shipt off from thence for *Ceuta*. Along the side of the River there is still a

great

great deal of Stone Work, and visible Remains of an ancient Key. At a small Distance to the East, upon an Eminence, there are considerable Ruins of a square Castle, which appears to have been an ancient Building of very great Strength. The Country People now call it *Castillon*, but the *Corrigidor* of that District told me he remember'd it call'd *Torre Cartagena*. The Situation agrees exactly with the Tower of that Name, mention'd in the 274th and 316th Chapters of the Chronicle of *Alphonso XI. of Castile*; a Book of great Authority among the *Spaniards*, who are generally of Opinion that it was formed upon the Memoirs of *Fernando Nunnez de Valladolid*, a Favourite and Minister of that King, though it goes under the Name of another Person.

All the *Spaniards*, who live about the Ruins I have been describing, say they are the Remains of a City of the *Gentiles*, called *Cartago*. The Corruption of *Carteia* into a Name so much more talk'd of, might easily happen in an Oral Tradition of so many Years; and I cannot help thinking, that where other Circumstances concur, an Account deliver'd down from Father to Son is an Evidence not to be slighted in Matters of so much Obscurity.

Frequent mention is made of *Carteia* by the ancient Geographers and Historians. I build so much on two Passages of *Livy*, that I shall insert them at Length. The first is Lib. XXVIII. cap. 30. (*Livy* does not mention from what Port *Lælius* sail'd for *Carteia*; but by what goes before, it seems to have been from *Cartagena* at that time *Scipio's* Head Quarters)—*Lælius* in the mean time, passing from the Streights into the Ocean, arriv'd with the Fleet at *Carteia*. (This City is situated upon that Part of the Sea Coast, where the Streights first expand themselves into the Ocean.) There was great Reason to hope, as I said before (from Persons who promis'd it, coming voluntarily over to the Roman Camp) that *Cadiz* would be surrender'd by Treachery without any Resistance. But the Plot was discover'd before it was quite ripe, and *Mago* having laid hold of all the Conspirators deliver'd them to *Adherbal* the *Prætor* to be sent to *Carthage* *. *Adherbal*, having put the Conspirators into a five oar'd Galley, and sent it before, because it was slower than the three oar'd ones, he himself followed with eight of the latter at a proper Distance. The five oar'd Galley had now enter'd the Streights, when *Lælius*, who had set out from the Port of *Carteia* in one of the same kind, followed by seven three oar'd ones, made up towards *Adherbal* in his three oar'd Galley, believing that the five oar'd one being got fairly into the Streights, could not return against the Current. *Adherbal* hesitating a little in so sudden an Affair, was uncertain whether he ought to follow the five oar'd Galley or turn about towards the Enemy. His deliberating took it out of his Power to delay the Engagement, for now they were within Reach of one another's Darts, and the Enemy was close upon them on all sides. The Current

* Now *Carthage*.

likewise took it out of their Power to guide the Vessels, nor did it resemble a Sea Fight, because there was nothing voluntary, nothing of Art or Design in it. The unruly Streights and Tide manag'd the Contest as they pleas'd, dashing the Vessels against one another, mingling them together, and tossing them up and down in spite of the Rowers; so that you might sometimes see a flying Vessel driven back full against the one in pursuit of her, and the one that was pursuing fly from the one pursued, just according as the Tide and Waves directed. Just as soon as one Galley was going to drive against another with its Beak, the other would dash its Prow against it while thus turn'd oblique: And another now presented with its broad Side to the Enemy, being immediately turn'd about would hit her with her Prow.

The other Passage is Lib. XLIII. Cap. 3. — And there was another Deputation came from Spain of a new Race of Men, about four thousand in Number, who said they were begot upon Spanish Women by Roman Soldiers, but without being married, and requested that they might have a Town to live in. By a Decree of the Senate they were ordered to give in their Names to L. Canuleius; and if he made any of them free, he was desired to send them to Carteia by the Ocean. And they who had a mind to remain at Carteia should be numbred amongst the Inhabitants, and have a Piece of Ground allotted them. That it should be a Latin Colony, and call'd that of the free Men.

The best Spanish Authors, and Ortelius and Cellarius trusting to them, take this Carteia of Livy to be different from that which was the next to Calpe, and place it generally about Conil. Rodrigo Caro, in his *Convento Juridico de Sevilla*, C. 24. applies the Carteia in the XLIII Book of Livy to Rocardillo, and in Cap. 74. to Carteia near Lepe. It is surprizing he takes no notice of the Passage in the XXVIII Book; for the particular mention of *ad Oceanum*, and *Urbs ea in ora Oceani sita est*, implies they both relate to the same Place; perhaps it was because he could not reconcile it with his Carteia near Lepe. Cellarius makes Bæsisippo this Carteia of Livy, Lib. ii. c. 1. Bæsisippo, *quæ videtur Carteia Livii esse, extra fretum & columnas posita. Aliam pro Livio Carteiam non invenio*; tho' in all the ancient Geographers Bæsisippo is mentioned by itself as a distant Town. I am so far from seeing any Necessity of erecting a new Carteia in the Ocean for these Passages in Livy, that I take that in Lib. XXVIII. to be rather a Proof that the City there mentioned stood at Rocardillo. It certainly agrees much better with that Situation, than with Conil or Carteia near Lepe. It is not to be reconciled with the latter, because that lies North West of Cadiz, from whence Adherbal set out for Carthage, and is a good way up the Country, on the Side of a River, and not in *ora Oceani*. Neither can Conil be said properly to be situated *ubi primum è faucibus angustis panditur mare*; for the Sea widens considerably before it reaches the Capes Spartel and Trafalgar, and becomes an Ocean where that Town stands. It is observable that Mela applies Words of the same Import with those of Livy to the Sea between
Calpe.

Calpe and Abila. Barbesul; Aperit deinde angustissimum pelagus. There is no Harbour at Conil, or any other Place between Cape Trafalgar and Cadiz. If the Carthaginian *Quinqueremis* had only been going into (*intrabat*) the Mouth of the Streights between Cape *Spartel* and *Trafalgar*, *Lælius* could not have believed it *satis deprehensam rapido in freto, in adversum æstum reciprocari non posse*, for there is no such strong Current there; and the Action between him and *Adherbal's* *Triremes*, which were at some distance behind the *Quinquere-mis*, must have happened *Westward* of those Capes; which is inconsistent with the Description *Livy* gives of it; because in that Part of the Ocean there are none of those Eddies, that appear to have had so particular an Effect on both the Fleets, during the Engagement, and are peculiar to the middle of the Gut.

This general Mistake seems to have been occasioned by giving too easily into the Opinion, that *Livy* understood by the *Fretum* all the Sea between the Capes *Spartel* and *Trafalgar*, and the Rock of *Gibraltar*, and *Apes-Hill*; when it is more probable that he termed strictly so only the narrowest Part, which was generally reckoned to be between the two latter. *Mela. Proxima Africæ & Europæ littora montes efficiunt Calpe & Abila.* *Pliny* takes *Mellaria* to be nearest to *Africk*, and therefore places there the *Fretum ex Atlantico mari, Lib. 3.* which is an Argument his *Fretum* was not the same with our Streights, and that he carried the Atlantick Ocean much farther *East* than the Capes *Spartel* and *Trafalgar*.

Other Authors seem to make the Pillars of *Hercules* the Boundary of the *Mediterranean* and the Ocean. *Marcianus Heracleotes.* Ἐνταῦθα πέρασ ἔχει τῆς Βαιτικῆς Ἰσπανίας τὸ μέρος τὸ παρῆκον παρ' ἑκατέρας τὰς θαλάσσας τὰς περὶ τὸν Ἡράκλειον πορθμὸν πυγχανέους, τὴν τε καθ' ἡμᾶς καὶ τὴν ἔξω, τῶν ἔστι τὸν Ὠκεανόν. *Hic finem habet Hispaniæ Bæticæ pars contingens utraque maria circa fretum Herculeum, tam mare nostrum quam mare exterius, h. e. Oceanum.* Τῆς μὲν Βαιτικῆς τὸ πλεῖστον παρὰ τῆς καθ' ἡμᾶς κεῖται θαλάσσης, τῶν Ἡρακλειῶν ἐπὶ τὸν Ὠκεανόν, μέρος δὲ π' παρὰ τὸν Ὠκεανόν. *Bæticæ quidem pars maxima prætenditur nostro mari, Herculeas intra columnas, pars vero quædam occidentali Oceano.*

Polybius, L. III. Καλεῖται δὲ τὸ μὲν παρὰ τὴν καθ' ἡμᾶς παρῆκον ἕως Ἡρακλειῶν σιλωῶν, Ἰβηρία. Τὸ δὲ παρὰ τὴν ἔξω καὶ μεγάλην περὶ σαυρορευομένην κορυφὴν μὲν ὀνομασίαν ἔχει, διὰ τὸ περὶ σφάτως κατοικεῖσθαι. *Quæ porrigitur secundum mare nostrum portio ad columnas usque Herculis Iberia nominatur; quæ secundum mare externum quod & magnum appellatur, communem appellationem nondum invenit, quia non diu est cum fuit explorata.*

Appian, L. II. Ἐμφυλ. παρὰ τε τὰς σήλας τὰς Ἡρακλειῶν τὸν Ὠκεανόν ἐπίγειον. *Trajecto ad Columnas Herculis Oceano.*

Florus. Lib. IV. Cap. 2. *Varus and Didius the Deputies engaged in the very Mouth of the Ocean, but the Conflict with the Sea was greater than that of the Ships with one another. For the Ocean, in order to chastise, as it were, the Romans for their Madness, shipwreck'd both the Fleets.*

Fleets. What a horrible Action must it be, where the Winds, Waves, Men, Ships and Tackle were all confusedly engaged? Add to these the Fear of the Situation itself, the Shores of Spain and Africa joining almost into one; a Sea both within and without, and Hercules's Pillars hanging over their Heads; while all around was raging with the Storm and Fight. Here the Pillars of Hercules are made the very Mouth of the Ocean. If you understand the *Fretum* of *Livy* in this Sense, and reckon it to signify only the Sea between *Calpe* and *Abila*, and the Ocean to begin from thence Westward, the Passage in the 28th Book is an accurate Description of *Rocadillo*. *Lælius interim freto in Oceanum evertus ad Carteiam classe accessit. Urbs ea in orâ Oceani sita est, ubi primum è faucibus angustis panditur mare.* And allowing *Lælius* to set out against *Adherbal* from thence, every Circumstance mentioned by *Livy* is so easy to be accounted for, that it is needless to make Application. A Passage in *Dion Cassius*, Lib. XLIII. induces me to believe the Vessels anchored in the *Guadaranque*, and that that River, and not the Bay, was properly *Portus Carteia*. *Ἐνταῦθα δὲ ὑπὸ τοῦ Διδίου περὶ Κραντίαν ἐναυκρατήσθαι, καὶ εἶγε μὴ φοροαταφύγων ἐς τὴν γῆν, ἀγκυρας ἐς τὸ σῶμα τοῦ λιμένος ἄλλας πρὸς ἄλλαις προσενεβέλλει καὶ περὶ αὐτὰς οἱ πρῶτοι τῶν Διωκόντων σφᾶς, ὡς περὶ περὶ ἔρμα ἐπτοήκεισαν, πᾶν ἂν τὸ ναυτικὸν ἀπολωλέκει.* *Varus vero à Didio apud Crantiam navali prælio superatus in terram evasit, coniectisque in introitum portus anchoris, ita ut una ab alia teneretur, cum ad eas, tanquam ad septum quoddam, primæ insequentium naves offendissent, periculum totius classis amittendæ declinavit.* This cannot be understood of the Bay, because that is three Leagues over at the narrowest part, and much too deep for a Work of such a nature, which might easily have been effected upon the Bar of the River *Guadaranque*.

There is no room to doubt of the Emendation *Luis Nunnes*, in his *Hispanica*, has made here of *Καρτηία* for *Κραντία*; for no antient Author mentions any other Town or Harbour thereabouts of a Name like that; and *Carteia* was the Place which held out the longest for the younger *Pompey*, and where he kept his Fleets.

Florus, in the Passage I have already quoted, relating the same Action between *Didius* and *Varus*, represents in very lively Colours the very Scene near *Rocadillo*. *Adde situs ipsius formidinem, vergentia in unum hinc Hispaniæ inde Mauritanicæ littora; mare intestinum & externum, imminentesque Herculis speculas, &c.*

Hirtius, in the latter end of his Book *de Bello Hispanico*, says *Cn. Pompeius ad navale præsidium parte alterâ contendit Carteiam, quod Oppidum abest à Corduba millia passuum CLXX.* which Distance, as well as the Circumstance of *navale præsidium*, agrees with the Situation of *Rocadillo*. The ancient Geographers place *Carteia* next to *Calpe* Westward. *Pomponius Mela*, after having given us a perfect Picture of *Calpe*, and described those lasting Marks, in which so many Centuries have made no Alteration, says—*Sinus ultra est, in eoque Carteia.* *Strabo*, L. III. *Ἐνταῦθα δὲ ὄρεος ἐστὶ τῶν Ἰβήρων ἢ Καλπή, &c. καὶ πρὸς αὐτὸ Καλπή*

Καλιπὸ πόλις ἐν τεσσαρῶντι σταδίοις, ἀξιόλογος καὶ παλαιά, ναυαθμῶς ποτε
 γνομένη τῶν Ἰβηρῶν. Ἐνιοὶ δὲ καὶ Ἡρακλέως κτίσμα λέγουσιν αὐτὴν, ὣν ἐστὶ καὶ
 Τιμοσθένης, ὃς φησὶ καὶ Ἡρακλείαν ὀνομάζεσθαι τὸ παλαιὸν, δεικνυσθαί τε μέγα
 πείβολον καὶ γεωσίκως. *Ibi mons Hispaniorum est Calpe, &c. Et ad XL
 inde Stadia Urbs Calpe vetusta Et memorabilis, olim Statio navibus Hispa-
 norum. Hanc ab Hercule quidam conditam aiunt, inter quos est Timosthe-
 nes, qui eam antiquitus Heracleam fuisse appellatam refert, ostendique ad-
 huc magnum murorum circuitum Et Navalia. Casaubon, in his Notes on
 this Passage, is of opinion it should be Καρπία πόλις. Legendum censeo
 Καρπία πόλις, nam eam urbem hic intelligi res ipsa docet; Et ex eo colligi
 potest, quod toties eam infra nominans nihil tamen de ejus situ alidi dixisse
 reperitur. At Calpen Urbem nemini Veterum ne nominatam quidem reperio.*

*Marcianus Heracleotes makes Carteia 50 Stadia from Calpe. Either
 of these Distances agrees with Rocardillo, according to the part of the
 Rock from which they reckon; for it is above six Miles from Europa
 Point to Rocardillo.*

*Bochart, in his Geographia Sacra, Lib. I. cap. 34. strengthens Casau-
 bon's Opinion. Nec frustra Heraclea Carteiæ fuisse vetus nomen, tan-
 quam ab Hercule conditore. Herculem enim suum Phœnices Μέλκαρθον
 appellabant. Philo Biblius ex Sanchoniathone apud Eusebium, L. I.
 Præparat. Τῷ δὲ Δημαρῶντι γένεται Μέλκαρθος ὁ καὶ Ἡρακλῆς. Ex Demarunte
 autem natus est Melcarthus qui Et Hercules. Μέλκαρθος autem est מלך
 קרחה Melech Kartha, Rex urbis, i. e. Tyri. Idem Græcis Melicertes
 sive Palæmon Maris Deus, quem Cadmi nepotem esse fingunt. Hinc
 Hesychius rursus Μάλικα ἢ Ἡρακλέα Ἀμαθέσιοι. Omnino igitur ex Melcar-
 tho, vel מלך קרחה Melech Kartha. Urbs quam ad Calpen condidit
 Hercules Phœnicus, primo Melcartheia vocata est, Melech Karthia,
 quasi Ἡρακλείαν dixeris; deinde per Αφæρεςιν Cartheia vel Carteia. Apud
 Hæbreos frequens est hæc Αφæρες in nominibus locorum compositis. Tale
 Sittim pro Abel Sittim, Salem pro Jerusalem, &c.*

I have some Medals that were dug up at Rocardillo, with the Head
 and Club of Hercules upon them; which seem, in some measure, to
 support that great Man's Assertion. Upon the reverse are Tunny Fishes,
 which according to Strabo and Pliny abounded formerly near Carteia,
 and are still taken in great Quantities near the Shoar of the East Sea, at
 a small distance from Rocardillo.

*Bernardo Aldrete, an Author of great Weight, in the second Book
 and second Chapter of his Antiquedades de Espanna, accounts for the
 Addition of eia to Cartha; which in the Syriack and Chaldean signifies
 Pulcher, Formosus, and was affixed to the Name of this City, to di-
 stinguish it from the Cartha in Syria, mention'd in the 21st Chapter
 and 34th Verse of Joshua.*

By all Accounts the Phœnicians founded most of the Cities on this
 Coast, and probably Carteia was one of their earliest Settlements;
 for it lies very near Africk, in a most inviting Situation, having on
 one side a Bay, and on the other a River, which waters a rich Coun-
 try. Its Height gave it Strength and a very beautiful Prospect, Cir-
 cumstances

cumstances which seem to justify *Aldrete's* Interpretation of the latter Part of its Name.

In the Itinerary of *Antoninus*, it is *Calpe-Carteiam*; not *tanquam duæ urbes diversæ*, as *Casaubon* intimates in his Notes on the third Book of *Strabo*, for then it would be *Calpen Carteiam*; nor, according to *Surita's* Comment on that part of the Itinerary, *ut significet non rectâ iter ex Suel Carteiam deduci, sed paululum ad Calpen deflecti*; because *Calpe* stands at the end of a narrow Neck of Land, which projects to the Southward a great way from the rest of the Continent; and consequently is quite out of the Road from *Suel* to any other place Westward of it; probably *Calpe-Carteia* is for *Carteia ad Calpen*, to distinguish it from the other *Carteia* in *Celtiberia*, mentioned in the 21st Book and 5th Chapter of *Livy*: For, as *Caro* observes, there is no Necessity for the Alteration *Sigoneus* has made in that Passage of *Althæa* for *Carteia*, from the Text of *Polybius*; because *Livy* never mentions the other *Carteia*, without adding *ad Oceanum, Urbs ea in ora Oceani sita est*; which distinction were needless, had there been only one City of that Name. *Strabo*, in his third Book, mentions a City called *καρταλίαις*, and places it near *Saguntum*, which is agreeable to the Situation given this *Carteia* by *Livy*.

I am very much surprized that *Mariana*, and several others, should take the present *Gibraltar* to have been the ancient *Heraclea*, when neither *Pliny*, who resided so long in those Parts, *Mela*, who was born there, nor any antient Geographer or Historian that I have met with, makes the least mention of such a City thereabouts, except *Strabo*, and he places it 40 Stadia from *Calpe*, at the foot of which *Gibraltar* is situated. The *Spanish* Historians give good ground to believe there was no Town upon that Mountain till the *Moors* invaded *Spain* under *Tariff*, who gave it the Name it has retained ever since. I shall not enter into the detail of the Reasons of those Authors who place *Carteia* at *Tarifa* or *Algezeira*: The true one seems to have been, their not knowing any other Place which agreed better with the old Accounts of *Carteia*, or where the Ruins of a City, which made so great a Figure, could be buried: The common Practice of Authors who describe Places they have not seen. This appears to have been the Case of most of those, especially *Mariana*, who, had he been in these Parts, would not have been guilty of the Oversight he has committed, Lib. XVI. Cap. IX. where he places two Bays in the Streights, one at *Gibraltar*, and the other at *Tarifa*; which Error he was probably led into by another. For, giving into the Opinion that *Tarifa* was the ancient *Carteia*, and finding that City placed in a Bay by *Mela*, he concluded there must be one at *Tarifa*, which is an open Road, and so much exposed, that in the least bad Weather the smallest Vessels must be hauled ashore. Which Circumstance alone is a sufficient Proof of its not being *Carteia*, by all Accounts a famous Harbour.

Though there are very great Ruins at *Algezeira*, they are not such as

give any room to believe they are the Remains of a *Roman City*. For neither Pieces of Marble, nor Inscriptions are found there, nor any *Roman Coins*. The Circumstance of *Varus's* shutting up the Mouth of the Harbour of *Carteia*, and the distance of 40 or 50 *Stadia* from *Calpe*, are not applicable either to *Tarifa* or *Algezeira*; and if one of those Towns was *Carteia*, to what City belong those Ruins I have been describing? since all the antient Geographers make *Carteia* not only the nearest Town to *Calpe*, but the only one in that Bay. There is better ground to believe *Tarifa* stands on the Ruins of another Town, as I shall shew.

Ruins at
Ximena.

I shall first mention some Ruins I saw at *Ximena*, an inland Town, about five Leagues North from *Gibraltar*, situated on a rocky Hill, at the Bottom of which to the Eastward is a very plentiful Country, washed by the *Josgarganta*, a small Branch of the River *Gaudiaro*. On the top of the Hill is the old Town, which by the Arches and Vaults appears to have been built by the *Moors*. On the Right-hand Corner of the second Gate of it, there is a coarse Stone with Mouldings on the Edges, which has the following Inscription.

L. HERENNIO HE
RENNIANO
L. CORNELIVS HEREN
NIVS RVSTICVS
NEPOS EX TESTA
MENTO POSVIT
NONIS MARTIIS
SEX. QVINILIO CON
DIANO SEX. QVIN
TILIO MAXIMO COSS.

Rodrigo Caro, in his *Convento Juridico de Sevilla*, C. 13. says he saw the beginning of this Inscription in *Bejer de la Miel*; but when I was in that Town, I was informed by a very intelligent Person, that there is no *Roman* Inscription in any part of it. The Author of *Cadiz el Emporio del Orbe*, when he inserts this Inscription, makes it SEXOVINTILIO CONDIMIO; but the Dash of the Q is very plain, and the other Word seems rather CONDIANO. The *Latin Fasti* in A. U. C. 903. place Consul.

SEX. QVINTILIVS GORDIANVS
SEX. QVINTILIVS MAXIMVS.

But the learned Dr. *Bentley* has observed to me, that the *Greek Fasti* and *Dio* call him *Kordians*, which Reading is confirmed by this Inscription.

I have brought with me from this Town a Piece of Marble with the following Words upon it.

AVCTINVS

Antoninus makes no mention of *Julia Traducta*, and *Pliny* places it on the African Coast, which *Hardouin* endeavours to account for, pag. 227, in his *Nummi Illustrati*. *Strabo* calls it *Juliam Jozam*, which, as *Bochart* observes, *Lib. i. Cap. xxiv.* signifies the same in the Phœnician Language as *Traductam* in the Latin. *Ptolemy* calls it *Transducta*. He places *Barbesula* between that and *Carteia*. But all the other old Geographers put both the Town and River of that Name Eastward of *Calpe*. I saw some Ruins on the east Side of the River *Guadiaro*, four Leagues East of *Gibraltar*, which I take to be the Remains of the antient *Barbesula*. For I find in the *Cadix Emporio del Orbe* mention made of two Pieces of Marble, brought from thence to *Gibraltar*; on one of which was $\overline{\text{MM}}$ BARBESVLANI. I was credibly informed they were used for the Fountain on the Parade. The Letters probably were either sawed off, or turned inwards, for they do not appear. This *Barbesula* is probably the *Barbariana* placed in the Itinerary X. M. P. East from *Carteia*.

Pomponius Mela, who was born in those Parts, and therefore is most to be depended on, gives the following Account of the Coast, according to the Edition of *Gronovius*. *Beyond that is a Bay, in which Carteia is situated, as some People imagine, sometime Tartessus, and inhabited by the Phœnicians, who were transported from Africa; and hence arises our Tingentera. Then Mellaria and Bælo, and Bælippo takes up the Sea-Coast as far as Juno's Promontory.* The Text of *Mela* has occasioned great Disputes amongst the Learned. *Casaubon*, in his Notes upon *Strabo*, says, *but I read—and hence arises our * Tingis opposite to Mellaria.* For that *Mela* means *Tingis* here I am very well persuaded; first, from examining the antient reading of it, which is, as I said, *Cingenteratum*; or even, as the learned *Elias Vinetus* found it in his Books, *Tingentera*; so that there can be no doubt about it. Besides, I observe *Mela's* manner to be this, *viz.* to mention the Places on the opposite Coasts. Thus elsewhere: *They possess the greatest Part of Sabeam, next to the Straits, and opposite to the Carmani of Maca.* Nor needs any one be surprized that some make *Tingi* opposite to *Bælo*, and others to *Mellaria*; for *Bælo* and *Mellaria* are so nigh one another, that it might very easily happen. *Salmasius*, whose Opinion is approved by *Bochart*, makes it *Tingis altera, tunc Mellaria, &c.* and takes the preceding *transvecti* to denote *Julia Traducta*. *Casaubon* seems to have been of the same Opinion. But *Strabo* seems to follow *Ptolemæus*, who, on this Coast of Spain, mentions a certain Town called *Transducta*, inhabited by those People of whom *Strabo* now speaks; and I have sometimes doubted whether they are not the same meant here by *Mela*, where he says, *in which Carteia is situated, as some People imagine, sometime Tartessus, and inhabited by the Phœnicians, who were transported from Africa.* For it appeared plain enough that *Transducta* was used by way of Periphrasis by *Ptolemy*. Now I agree with those who refer these Things to *Carteia*. The Opinion of *Salmasius* seems to be the most probable; for

* Now Tangier.

for *Bælo*, and not *Julia Traducta* is said to be over against *Tingis*. *Marcianus Heracleotes* makes the two former about 250 Stadia distant from one another, and *Mellaria* is generally placed between them; therefore they could not be so near one another as *Casaubon* insinuates. Though *Carteia* was originally founded by the *Phœnicians*, it had been erected into a *Roman Colony* long before *Mela's* Time, and therefore he could not very properly say, *Carteia, quam Phœnices habitant*; and had he intended to take notice of the Founders of that City, it is probable that one, whose Style is so pure and accurate, would have made use of another Word, or at least another Tense. Besides, if *Julia Traducta*, according to *Casaubon*, is not meant by that Passage, it must have been entirely omitted by *Mela*; which is very unlikely, considering he was born in or near it; and that it is mention'd by *Strabo*, who lived before him, and *Ptolemy* and several others who were after him, and appears to have been remaining at the Time the *Vandals* were in possession of *Spain*; for *Greg. Turon.* lib. ii. says, *Prosequentibus Alamannis usque ad Traductam, transito mari, Vandali per totam Africam ac Mauritaniam sunt dispersi*. The Letters of *Tingi altera* come nearer the *Tingentera* of *Elias Vinetus*, and the *Tinge Hieria* of *Gronovius*, than *Casaubon's Tingi contraria*, or *Tingi è regione sita*. The *É* and the *atque* by making the Stop at *Tartessus* instead of *habitant*, may very well relate to the same Place; and it is not improbable that *Mela* was desirous to illustrate the obscure Place of his Birth by a *Periphrasis*, and a Name of some *Eclat*, tho' it has happen'd, the Method he took to do honour to it, has been the Occasion that we are in doubt even of its Name.

I met with two Medals of *Julia Traducta* among the Brass *Spanish Coins*; but as I cannot ascertain where they were found, I will not pretend to form from thence any Judgment of the Situation of the Town to which they belong. But I presume in Matters so dark a Conjecture may be offered. It does not seem very improbable that *Julia Traducta* stood where *Tarifa* is at present. The *Spanish* Authors reckon that Town to have been built by *Tariff* at his second coming to *Spain*. I cannot see what could invite him to settle on a Spot which has neither the Convenience of a River nor a Harbour, and is commanded by a rising Ground; unless he found some Tenements standing, or Ruins to serve for Materials to build. I have several *Roman Coins* that were found there, after great Rains, in the common Sewer; which is some slight Inducement to believe it was formerly a *Roman Town*.

About a League and half to the West of *Tarifa* is a Place which goes now by the Name of *Val de Vaca*. The Country People have a Tradition among them that it was once a considerable Town, since swallow'd up by the Sea. There is a small Brook called *el Arroyo de Juan Francisco*, which serves to turn some Mills, that a Priest of that Name was encouraged to build there, by finding an antient Stone-Channel for the Water. I saw some other small Ruins, and was credibly assured there are visible Remains of an old Town a good way under water. There is a Shoal almost

almost off this Place that runs pretty far into the Sea, on which a *Hamburgher* was lost some Years ago. Perhaps *Mellaria* stood hereabouts.

Wherever it was, the Ruins of it must be a considerable way in the Sea, if Credit is to be given to *Pliny*, who, upon the Testimony of one born there, reckons only five Miles from thence to *Afric*. *Lib. iii.* whereas it is at present five Leagues over at the narrow Part. *Casaubon* is mistaken in that Note on *Strabo*, *Lib. ii.* where he says, *At Maris Mediterranei ostium vix LXX Stadia latum est ἢ στενέτατον.*

I cannot help observing that the best Honey in all *Spain* is made in these Parts, and that the same Cause, to which the ancient *Mellaria* ow'd its Name, still subsists, and has given a modern Appellation to several Places hereabouts, as *Playa de Orimel*, *Rio de la Miel*, *Bejer de la Miel*. The latter of these is generally reckon'd by the *Spaniards* to be the old *Mellaria*, for no other reason that I can see, but the Name. For it is at least two Leagues from the Coast of the *Streights*, and, by what I could judge when I was on the Spot, as near the Ocean; and therefore may as well be ascribed to the one as the other. Whereas *Mellaria*, according to the old Geographers, was situated on the Seaside in the *Streights*, and is reckon'd by *Pliny* the nearest Town to *Afric*; a plain Proof that it was not what is now *Bejer de la Miel*.

About a League and a half further West, in a small Bay, there are very great Ruins, which appear evidently to be the Remains of a *Roman* Town. A League Eastward from that Place, upon an Eminence, are to be seen the Quarries from which the Stone was fetch'd for building it; and all the Way from thence are large Remains of an Aqueduct, of which, in some Places there are entire Arches still standing. Among the Ruins of the old Town, I saw the Body of a *Roman* Statue of fine Alabaster, something bigger than the Life. Our Guide said his Father had seen it entire; but as it was an Idol of the *Gentiles*, they like good Catholics, had broken it to pieces. He likewise told us that Urns of old Coins had been found there; but not being current in *Spain*, they had thrown them away. The Place is called *Balonia*. It is over-against *Tangier*, and frequently infested by the *Moors* from thence; on which account it is uninhabited. A small River, call'd *Alpariate*, runs by it; all which Circumstances correspond with the ancient Accounts of *Bælo*. I have a Medal was given me at *Tarifa*, with the following Letters upon it, BAILO, which probably belonged to this City, called by *Ptolemy* Βαίλων. *Martianus Capella*, *Lib. vi.* mentions it under the Name of *Velonensis Bæticæ Civitas*. The Itinerary of *Antoninus* places *Bælo* VI. M. P. West of *Mellaria*, which is about the Distance of these Ruins from *Val de Vaca*.

About five Leagues farther is the Cape of *Trafalgar*; the Sight of which immediately brought to my Mind *Mela's* Description of it. *Illud jam in Occidentem & Oceanum obliquo jugo excurrens, atque ei, quod Ampelusium esse dixeramus, adversum, &c.* Near the Cape's Point are the Ruins often mention'd by the *Spanish* Authors, under the Name of

Aguas

Aguas de Mecca. I was not there, but was assured at *Bejer de la Miel*, that there were still some Ruins on the Shore, and more in the Sea, that run all along under the Cape; particular Remains of a Mole, which must have made it a tolerable Harbour. These Ruins seem to be the Remains of old *Bæsippo*. *Plin. Lib. iii. Portus Bæsippo. Mela; Bæsippo usque ad Junonis Promontorium oram freti occupat.*

The placing of Watch-Towers along the Coast of *Spain* to alarm the Country, upon any Descent, seems to have been a Practice of a long standing, *Livy, Lib. xxii. cap. 19. Multas & locis altis positas turres Hispania habet, quibus & speculis & propugnaculis contra latrones utuntur: inde primo, conspectis hostium navibus, datum signum Asdrubali est, &c.*

XXIV. At *Castle-doe* in *Ireland* I was told of an Urn that was found within a Mile of that Place. That Man that had found it carried me into a little Island, surrounded with Bog, where his Cabin stood: The Island was very dry, light, sandy Ground, which he had plowed. The Plow running in some Places over flat Stones, cover'd above with Earth, made the Man curious to search. In taking up the Stone he found a Cavity under it, which I believe may be called a Sepulcher, or Tomb: In it he found an Urn, which he broke, because nothing was in it but Bones and Ashes. In the same Tomb there were some Bones of one about ten or twelve Years old. The Tomb stood E. and W. the Urn was found in the West-End; it was the smallest Urn I have seen, but the Cavity wherein it lay was near five Foot long, two Foot and a half broad, and about the same Depth: It was made up of six coarse flag Stones, viz. one on each Side, one at the Head, another at the Foot, one above and one below: The Bones were much wasted, and but few of them. Whilst I staid there we open'd three more, which the Man quickly found out, because he had made his Marks by the Plow. These three were much larger than the former; one of the three was near the Center of the Island, and biggest of all, but all alike made. There was no Urn in either of them, and but Bones in one, which was the biggest. The Bones seem'd to be of a Man of an ordinary Stature: If there had been any in the other two, they were consumed. This seem'd to be a common Burying-place, there being so many of that kind of Tombs in it; and one may gather from thence, that at that time they burnt some, and others they did not, because there was an Urn found with Bones burnt, and there were Bones unburnt. This Island is situate on an *Isthmus* about half a Mile over, between the Bay of *Dunfannaghan* and the *Logh of Kinnevier*.

Urns and Sepulchral Monuments in Ireland, by Mr. F. Neville, n. 337. p. 252.

There were three the like Urns found in three small Stone Chests, under a great Kern, or Heap of Stones, near to *Ban-Bridge* in the County of *Downe*; which Heap being removed to help to build that Bridge, they were discover'd.

There were the like Urns found near *Omagh* in the County of *Tyronne*, in the like Chests, under two Heaps of Stones, which were removed to build some Houses in the said Town. There

There was one Urn found in a little sandy Hill near *Cookston*, on the Road to *Liffon*, in the County of *Tyrone*: It was covered with a great rude Lime-Stone; which being removed in order to make Lime, the Urn was discover'd in a Hole encompass'd with six Stones of equal Bigness, which made a Hexagon, in which the Urn stood. The Water that had fallen on the Urn from the Lime-Stone, or the Air condensing, had petrified, and made a stony Crust on the outside thereof. There were some Bones and Ashes found in it.

At *Dungannon*, in the same County, a Servant of mine working in a Sand-Pit near the Town, struck on an Urn, which was the largest I ever saw. It was found with the Mouth whelm'd downward, the Bones and Ashes on a flat Stone, and the Urn covering them: It would have held about three Quarts, and had been better burnt in the Fire than they usually are: It was broke by the Spade before the Man was aware, and had no Stones about it as the others, but was buried in the Earth about a Foot under Ground. As they dug the Bank for Sand, the Place where the Carcass was burnt was discover'd by the Coals and pieces of Bones, which spread a great way, about a Foot under Ground.

Near to the same Town in a Town-land call'd *Killimeille*, (which in *English* is *Loufey* Cell, or *Loufey* Burying-place,) there are on the Top of the Hill two Circles of dry Stone about twenty Yards in Diameter each; they meet on two sides, and make the Figure of Eight. I suppose, when first form'd they made a dry Wall for two distinct Burying-places, one for the Men, the other for the Women, or rather two Repositories for Urns. One *James Hamilton*, wanting Stones to build a House, drew off most of them from this Place. When he had enter'd within one of the Circles, he found three Urns in three several Holes, set about with six Stones, and cover'd with flat Stones, and other Stones thrown on the Top; he broke what he found, not finding what he expected. Mr. *Knox* and I went there to see the Place, and saw the Holes and broken Urns; but the Man's House being finish'd, there were no more found; but I am persuaded there are many more, because these three were found near together.

On the same Hill, about thirty Yards distance to the Eastward of these Circles, upon search we found the Altar whereon they used to burn their Dead, overgrown with Earth and green Sod, which we caused to be uncovered: It was made of dry Stone, eight Foot long, and four broad, the Coals and Bones fresh among the Stones, and the Stones burnt with Fire. At the East-End of this Altar there was a Pit, which was likewise over-grown with Earth and green Sod; which we open'd, and found it to be the Receiver, where they swept in all that remain'd on the Altar after burning. We search'd deep, and the Substance was all alike, black and greasy: It had tinged the Hill in a strait Line from the Pit to the Bottom of the Hill, and discover'd itself to our View, the Land being then plough'd.

I shall add only one more that I have seen, besides the many that are yearly discover'd, to shew that this was the Way the *Irish* had for burying

burying in Heathen Time, though the People know nothing of it by History or Tradition.

In the County of *Farmanagh*, upon a Hill over *Wattle-Bridge*, there has been a mighty Heap of Stones, the Basis incircled with very large Stones standing on end. This Heap has been removed to pave our Ways, and build that Bridge; under which there were some Urns found in Stone Coffins, and I believe there are some remaining. These were, I suppose, the Urns of some great Personages. The Heap was so big, and the Stones about it so large and so many, that it cost great Pains to bring them there: Or perhaps there might have been a Fight there, and some of the great Officers might have their Bones interr'd there, and the Army made that great Work over them; for it seem'd to be a Work done by many. I have seen several such Heaps in this Kingdom, and I doubt not but they are all Monuments for the Dead.

XXV. About half a Mile from *Elmbam*, in a Close called the *Broom-Close*, some Labourers were repairing the Fence on the South-side of the Close, and in the Bottom of the Ditch accidentally pitch'd upon a Pot, which they expected to have been full of Money; but finding nothing but Dust and Ashes, went to their Work again, and digging on, found two or three more, but the Contents the same. The Report of this put some Persons of more Curiosity upon a further Search: And digging first under the Hedge, afterward further into the Close, found great Quantities of them, and several very near together. One Man, who has been chiefly employ'd in this Search, has taken up, since the first Discovery, almost 120, and yet the Compass of Ground turn'd up on this Occasion does not amount to more than a Rood of Land, (*i. e.* one Quarter of an Acre.) The Close where they are found is high Land, and this Place the highest Part of it; the Soil a sharp Gravel, and very dry, and lies next to a Highway. As for the Urns themselves, they are generally of the same Shape, but of very different Sizes.

— Urns found
in Norfolk,
communicated
by Mr. P. le
Neve. n. 337.
p. 257.

The Shape of these is conformable to the Representations usually exhibited in the Descriptions of Urns, *viz.* the Bottom narrow, a little flatted (and in some quite round) wider upward; the Top contracted to a narrow Mouth; the Earth coarse, the Work rough and uneven, but generally well burnt; some of them slightly wrought and indented (the Work expresses very little Skill or Care) and some plain, of which last Sort I have one perfectly entire (not yet open'd.)

The Size is various, some of the Capacity of a Quart, some two, some three Quarts, and one I have (unopen'd yet) that I believe will contain a Gallon.

The Pots are very tender when they come first out of the Ground, and frequently suffer by the Spade: They are most of them broken (more or less) in the taking of them up, and hardly any that have not

their Mouths broken, of which many of them seem to be done as they lie in the Ground, by the Weight of the Earth pressing upon them, or the Feet of Horses going over them, as appears by the broken Pieces of several of them found a good Way down among the Earth.

The Urns are found at uncertain Depths, some very near the Surface, some two, some three Spits deep.

As for the Contents, they are generally the same. I have open'd several of them, and found in all of them plenty of Pieces of broken Bones, some black with burning, and some turn'd to Ashes, with some Pieces of coarse Glass run and sticking to the Bones, which, whether it proceeded from any thing of that kind burnt with the Body, or only the sandy Earth vitrified with the Strength of the Fire, is doubtful. I found some Pieces of Brass, some run, some much burnt, and some not injur'd, with some Pieces of Iron, but so decay'd with Rust, that their Figure or Use is hard to judge of. I have some Knives and other odd Things, but much eaten and decay'd with Rust: But the Brass, which is not burnt to Pieces, remains generally firm and entire. One thing is remarkable, we find a great many Pair of small Nippers (such as we pull out Hairs with) commonly of Brass, and most of them so perfect and good, that the Edges are full square, and the Spring as strong as any we can make of the Metal. As for Coins, we meet with none. I hear, of two in the Hands of a Person at *Elmham*, but had not an Opportunity of examining them: But when they were found or taken up, I can't tell. I have one found the other day in an Urn, but very imperfect; what remains of the Impression looks more like *British* than *Roman*; but by the Shape of the Coin and Metal, it should be the latter. As it is pretty sure the Urns are *Roman*, and consequently that the Number must denote a Station or Colony of that People, so it is worth enquiring where that Station was appointed, or Colony planted; upon what Occasion, and at what Time.

Two of these Urns of different Sizes, with Pieces of Bones, Ashes, Teeth, and part of an old Brass Instrument (supposed to have been a Roman Fibula) contained in them, were presented to the Society by Mr. Le Neve.

Ancient Brass
Instruments in
Yorkshire, by
Mr. R. Tho-
resby. n. 322.
p. 393.

XXVI. 1.] Weapons of Brass having been discontinued for many Ages, I shall give an Account of some that were lately found in these Parts.

As the Servants of Mr. *Ellis* of *Kiddal* were plowing in a Place called *Osmond-thick*, near *Brambam-Moor*, they discover'd five or six Brass Instruments, which are of different Sizes, from little more than three to four Inches and a half in length, and from one and a half to two Inches and an half in breadth: They are somewhat in the Form of a Wedge, as proceeding from a thin Edge, which after so many Ages is tolerably sharp, to one and an half or two Inches at the thicker End, where they are wrought hollow to put upon a Shaft. Each
of

of them has an Ear or Loop [Fig. 54. is the Figure of one of them in its exact Size.] Some suppose them to have been *Arrows-heads*, or *Axes* of the ancient Britons; others, those of the Roman *Catapulta*; but I think they are as much too heavy for the first as they are too light for the last. I should rather take them to have been the *Heads* of *Spears*, or *Walking-staves* of the civilized Britons; and tho' of a somewhat different Form from those described by *Speed* (*Hist. of Great Brit. cap. vi.*) in their Portraitsures, taken I presume from ancient Manuscripts, yet by the Loop in the Side we may better conceive how those ornamental Labels were fastened, than by the Pictures there exemplified.

That *Swords* or *Daggers* were used of the same Metal in old Time, as well in *Ireland* as *Great-Britain*, (of which there are several described in the last Edition of the *Britannia*) I conjecture from some that were found there of late Years, one of which proves of a middle Size, viz. eighteen Inches long in the Blade; whereas of those found in *Wales*, some were but twelve, others twenty-four. The Hilt or Handle probably was of Wood, (as is that of an old Sword that I have now by me, which is five Foot and a half long) for that it is wholly consumed: They have been fasten'd together by four larger or two less Nails, as appears by the Holes in the Brasses, which are yet entire.

I have too an ancient Spur, that is no less than six Inches and an half long, from the Heel to the Middle of the Rowel; but this, which is gilded, and of nicer Workmanship, I suppose to be of a much later Date.

A large Spur.

2.] From the great Variety of *Ancient Monuments* continually found in these Islands, 'tis plain that vast *Improvements* might be made to the *Accounts* that have been hitherto given of the *British Antiquities*. Divers *Places*, that were of *Note* in the Times of the *Romans*, but are now quite destroy'd, have been found out, which *Mr. Cambden* knew nothing of in his Time for want of these *Discoveries*. The *Antiquity* too of some other *Towns* may be carried by these *Helps* much higher than he has done; and particularly *Witney*, within seven Miles of *Oxford*, appears to be of *Note* long before *Edward the Confessor's* Time, as I gather from *Roman Coins* lately found there, some of which I have had communicated to me by the Reverend *Dr. Ralph Trumbull*. The best of those sent to me is one of *impure Silver* (according to the *Custom* of that Time) in honour of *Julia Mammæa*, Mother of *Alexander Severus*. That which makes it the more likely that here was a *Town* so early, is this, that the *Ickenild Way* passed not far from it on the right Hand in its Course to *Cirencester*, where all the four *Great Ways* cross'd.

— A Discourse on these Ancient Brass Instruments, by Mr. T. Hearne, *ibid.*

Witney a Roman Town.

The *Instruments* *Mr. Thoresby* speaks of are of *Brasses*, and are five or six in Number, but of different *Sizes*, from a little more than three to four Inches and a half in *Length*, and from one and a half to two and a half in *Breadth*. They are somewhat in *Form* of a *Wedge*, as proceeding from

The Instruments, &c.

a *thin Edge* to one and a half or two *Inches* at the *thicker End*, where they are *hollowed* to put upon a *Shaft*. Each of them has an *Ear* or *Loop*. From his Relation, 'tis plain that they are just like that we have in the *Repository* adjoining to the *Bodleian Library* at *Oxford*. This has been kept there for several *Years*; but where 'twas discover'd, there is not the least *Memorial* to inform us. Perhaps it might be procured by *Dr. Plot*, when he was writing the *Natural History of Staffordshire*, where he has (a) mention'd several *Instruments* of the same kind dug up in that *County*. It is *Mr. Thoresby's* Opinion that these *Instruments* were the *Heads of Spears* or *Walking-Staves* of the *civiliz'd Britons*, and for *Confirmation* of it, refers to *Mr. Speed's History of Great Britain* (b), where he has publish'd the *Figures* of the *ancient Britons* both before and after they were *civilized*. He acknowledges however, that the *Tops* of the *Spears* there, are *somewhat different* from those we are now considering. And indeed they are not only *somewhat*, but *altogether different*, being exactly of the same *Make* with those we find in the *Columna Trajana*, and the *Books* that represent to us the *Military Instruments* of the *old Romans, Greeks, &c.* But had they been of some *Resemblance*, yet I cannot see that those *Figures* in *Speed* are of any *Authority*. For tho' he guesses that they were copied from *old MSS.* yet I could never yet meet with any *MSS.* of our *British History* that have any such *Figures*. If ever any one had them, we have reason to presume that other *Books* upon the same *Subject* would have retain'd them, at least we ought not to doubt it of *Copies* of the same *Author*. That is the *Method* observed in other sorts of *MSS.* The *Illuminators* were generally left at liberty as to the *Ornamental Parts* of the *Great Letters*; but when any *Figures* were to be *depicted* that should illustrate and explain the *Author*, there they were to be *exact* and *punctual*, and they had no more Allowance to *alter* them, than they had to *alter* and *interpolate* the *Text* of the *Author* himself. Hence I am inclined to think that these *Figures* are *Modern*, and are owing to *Mr. Speed* himself. 'Tis also what himself insinuates in the same *Chapter*, acknowledging that they were adapted to the *Descriptions* given of the *Britons* in *ancient Authentick Authors*. But not to examine other *Particulars*, the *Form* of the *Spears* in their *Hands* is not countenanced by any *Authority* of Note. For tho' *Herodian* has acquainted us, that they used *short Spears*, yet he is silent as to the *Make* of them. Nor indeed have we any where a good Account of the *Military Arms* of the *Britons*. The *Authors* transmitted to *Posterity* by them are *Modern* in comparison of the *Roman Writers*, and are withal *Romantick*, and not to be rely'd on. And as for the *Bards*, they took no Care to transmit to *Posterity* these *Weapons*, or to give us *nice Relations* of their *Countrymen*. 'Tis true, there have been,

(a) See Chap. X. Sect. 19, &c.

(b) L. 1. c. 7.

been, and are still found several *Instruments* made of *Flint*, which the best Judges esteem to be *British*. The *Flint Heads* of their *Arrows* are commonly called in *Scotland* *Elf-Arrows*, as being supposed to have an *extraordinary Virtue* against the *Elves*, and to drop from the *Clouds*. There are other *Flints* somewhat in Form of *Axes*, and these *Dr. Plot* calls (c) *British Axes*; but *Dr. Leigh* thinks (d) they are *Indian*. *Sir William Dugdale* inclines to the Opinion embrac'd by *Dr. Plot*, and he acquaints (e) us with several of about four Inches and a half in Length, curiously wrought by grinding. But they might as well have been *Roman*, the *Romans* having used *Flint Weapons* as well as the *Britons*; and 'twas from the *Romans* that the *Britons* learnt the Art of working them. That which also seems to make us believe that they might be *Roman*, is, that those mention'd by *Sir William* were found at *Oldbury*, *Aldbury*, or *Ealbury*, which was a *Roman Fort*, and is the same in Signification with *Alcester* in *Oxfordshire*; *Alcester* being nothing else but *Eald ceaster*, so call'd by the *Saxons*, to shew that 'twas a *Place* of *Antiquity* even in their Time. And tho' the *Anonymous Author* of the *Antiquities* of *Alcester*, at the End of the *Parochial Antiquities* of *Ambrosden*, derive it from *Allectus*, as if he were the *Founder*; yet there is no *Authority* either from *Coins*, *Inscriptions*, or *Books*, to countenance the *Conjecture*.

Now since there are no *Authentic Authors* by which we may learn what Arms were made use of by the *Britons* in their Wars, I can think of no properer Method for finding this out, than by seeing what Arms were in use among those People from whom they immediately had their *Original*. *Mr. Sberingham* inclines to the Story of *Geoffrey of Monmouth*, who deduces the *Britons* from the *Trojans*. And this is the Opinion too of several other learned Men. But whatever their *Abilities* and *Authority* might be in other respects, yet in this they must be reckon'd *partial*; and I rather strike in with those other *Writers* of more *Authority*, who derive the *Britons* from the *Gauls*; amongst whom *Mr. Cambden* is chief. He has diligently and nicely prov'd that the *Gauls* and *Britons* had the same *Religion*; that they both had their *Bards* and *Druids*, enjoy'd the same *Form* of *Government*, used the same *Method* of *Fighting*, had the same *natural Genius*, were equally *candid* and *innocent*, were addicted to *change* when provok'd, were *compassionate* to their *Relations*, and always ready to partake in their *Vindication*. He has withal shew'd that they both affected *great Numbers* of *Servants*, that their *Buildings* were alike, and were surrounded with *Woods*, that they both usually wore *Chains* of *Gold* about their *Necks*, and had *Rings* on their *Middle-fingers*; that they both wore *long Hair*, and that the *Garments* call'd *Brachæ* were common to each. These things he confirms from

(c) Loco supra citat.

(d) *Natural History of Lancashire*, lib. 1. p. 181.(e) *Antiquities of Warwickshire*, p. 778.

from the best and most approved Authors. And as the chiefest Argument, he has alludg'd Variety of Instances to shew that they spoke the same Language. Mr. Sberingham was aware of this; and therefore to evade the Force of the Argument, he makes (f) the Trojans to come through Gaul, which being then thinly inhabited, he says Brute and his Companions soon conquer'd it, built a City, and continued there 'till such time as they had well peopled it; after which they pass'd over into Britain, and by that means the Britons came to have the same Language. This does not seem consistent with the usual Prudence, nor with the other wise Acts that are ascrib'd to Brute. For no one that rightly considers, can think that Brute would voluntarily leave so large a Country as Gaul for one that was so much less. It is therefore more likely that the Britons had their immediate Original from the Gauls. Cæsar himself thought so as to those that inhabited more near the Coasts, notwithstanding his Observation that the Midland People were Aborigines. Nor will Boxhorn's Assertion, that the Gallick Tongue was the same with the Scythian, overthrow this Hypothesis. For it may very well be supposed that the Gauls came first from the Scythians, who are in Justin (g) observ'd to have been the most ancient People, and to have contend'd with the Egyptians on that score. This will exactly agree with what Camden and others have asserted concerning the Gauls being descended from Gomer, the eldest Son of Japhet. I know that Mr. Sammes derives the Scythians from Magog the second Son of Japhet. But (not here to take notice of his contradicting himself in this Point) since Strabo (h) and Stephanus (i) mention a City call'd Gogarena, between Colchis and Iberia; and since the City Hierapolis in Cælo-Syria, according to Pliny (k), was call'd by the Syrians MAGOG; 'tis more probable that Magog reated himself in those Countries, near to which 'tis agreed his Brethren settled, than that he wander'd so far out of the way from them. Here I cannot but take notice that the Britons were like the Scythians, a frugal People, and their long Lives (they often living to the Age of 120 Years) might in great measure be ascrib'd to their Temperance, and their Milk-Diet, (just like the Hippomolgs mention'd by Homer (l)). And as Æschylus tells us that the Scythians were *ἰσχυροὶ βοτῆται ὄνομασται*, a just Nation, and addicted to the feeding of Horses; so the same may be said of our ancient Britons, who were very religious, and observ'd the Rules of their Priests, and took extraordinary Delight in Cattle, whence perhaps they might affect to have the Figures of Beasts cut upon their Bodies. From what has been laid down, I hope 'tis plain that the Gauls and Britons were of the same Original. The next Enquiry is what Arms were used by the Gauls. There are several

(f) See his Book de Origine Gentis Anglor. p. 7, & seq.

(g) Hist. lib. ii. c. i.

(h) Lib. ii.

(i) De Urbib. voc. Γογαρένη.

(k) Nat. Hist. lib. v. c. 23.

(l) Il. xiii. v. 3.

ral Authors that have written of the Nature of them, and particularly Cluver and Boxhorn. Their Names are *Spatha*, *gessum*, (*gesum* or *gæsum*) *lancea*, *sparum*, *cateia*, *mataris*, or rather *materis*, (not *malaria*) *machæra*, *maeis*, *maies*, *maeis* or *maæis*, (m) *thyreos*, and *cetrum* or *cetra*. I shall not here insist upon the Signification or Reason of the Names; but only observe in general, that the *gessum* was a *Javelin*, the *sparum*, *cateia*, and *mataris* were different sorts of *Darts*, and that the *thyreos* was an *oblong*, and the *cetrum* a *short* sort of *Shield*. So that the *Spatha* only remains (for the Nature of the *Lance* is well known) to be compar'd with the Weapons we are considering. 'Tis call'd by the *Italians* *SPADA*, and by the *Spaniards* *ESPADA*. From the Description that *Isidore* has left us of it, we are inform'd that 'twas a *two-edg'd* *Sword*, with which they *cut*, and did not *thrust*. Whence 'tis plain these Arms had not *sharp* *Tops*, agreeable to what *Livy* (n) has related, that their *Gladij* were *prælongi*, *ac sine Mucronibus*. And *Polybius* has the same Reason why they did not *push* with them. Hence it is clear that our *Instruments* which have not *two* *Edges*, but are *dull* like *Wedges*, were not *Spathæ*; and since they do not agree to any of the other *Gallick* *Instruments*, we must examine whether they agree with any of the Arms of some other *ancient* *Nation* that made a *Figure* in *Britain*.

Our Ancestors the *Saxons* will have no Share in this Enquiry. For 'tis plain from the History of them given by *Verstegan*, and the Figures publish'd also by him, that *Spears*, *Halberds*, *Shields*, *Cross-bows*, *Swords*, (which were *broad* and *bowing*, somewhat in fashion of a *Scythe*) and *Hatchets*, which they call'd *Bills*, were the Arms made use of by them; nor did the Weapons of the *Danes* that succeeded them much vary, if at all. Coming from the *same* *Parts*, they used the *same* *Customs* in their *Military* *Undertakings*. For tho' the *Normans* endeavour'd to make an *entire* *Alteration*, yet they found the Attempt impracticable, and they were forc'd to acquiesce, and lay aside their Proposals, which thwarted so very much those ancient Customs that were here generally entertain'd and receiv'd. But however, notwithstanding these Instruments do not resemble either the *Saxon* or *Danish* *Military* *Arms*, yet I find in *Wormius's* *Museum* (o) two *Cimbric* Instruments with which they have some Likeness. These he tells us were of *Brass*, and he calls them *Wedges*. The larger of them was five Inches in Length, and three in Breadth. He is of Opinion that they were used in the Wars, especially when the Armies were very near each other. If they had Holes by which they might have been fix'd to *Helves*, he would have believ'd them to be *Battle-Axes*; but being neither *hollow* (as ours are) nor having no other way of being fasten'd to other Instruments, he concluded that the Name of *Wedges* might be most proper. An ingenious Gentleman some time since

(m) See *Livy*, l. viii. c. 24. Edit. Oxon.

(n) *Lib.* xxii. c. 46. Edit. Oxon.

(o) Page 354.

since inform'd me, that much such Instruments had been found in the *Isle of Man*, and that a great many Urns had been also discover'd there, as likewise divers Inscriptions with strange Characters. I do not question but the Inscriptions are *Runick*. And 'tis highly probable that the Instruments were like those in *Wormius*, but if they agree exactly with ours, they will, from what I shall say by and by, appear to be *Roman*. For notwithstanding it be commonly held that the *Romans* never were in this *Isle*, yet I see no other reason why it should be thought so, than that the *ancient Authors* now remaining do not mention it. This is only a *negative Argument*, and what we ought not to lay a very great Stress upon. The Urns seem clearly to evince that they were here. I know indeed that 'tis said that these Urns must be perfectly *Danish*, by reason of the *small black Bones* and *Ashes* found in them; which however is no sure Ground to go upon. For I have seen in the *Bodleian Repository* a Piece of a *Roman Urn*, which was dug up several Years ago at an old *Roman Town* in *England*, with many others, some of which were of different Figures. 'Tis now in a Box, and with it are *little black Bones*, *Ashes*, &c. wrapt up in two Pieces of coarse Linnen. This Linnen is in the same Figure with the Urn, but the Urn for one of the Pieces is wanting. The Smallness of the Bones shews that they are the Relicks of Children. It was customary among the *Romans*, after the Bodies were burnt, to wash the Bones with Wine and Milk, and afterwards the Women wrapt their Children in Linnen, dry'd them in their Bosoms, and then put them into Urns to be buried. This Custom was also peculiar to the *Danes*, who learnt it from the *Romans*, from whom likewise they receiv'd *Urn-Burial* itself. Such Urns too are mention'd by *Sir Thomas Brown* to have been found at *Old Walsingham* in *Yorkshire*. Nor is the *Roman History* altogether silent of the *Isle of Man's* being known to the *Romans*. For *Plutarch* expressly tells us, that one *Demetrius* sail'd hither, as well as to other *British Isles*, in the Reign of *Adrian*. 'Tis no wonder that *Runick Inscriptions* are discover'd in the Places where *Roman Urns* are found. Those Inscriptions might have been made upon other Occasions, after it became in future Ages inhabited by *Danes* and *Norwegians*. The same Accident has sometimes happen'd in *England*. And *Mr. Camden* particularly relates in the Close of his Discourse concerning *Stone-henge*. that in the Time of King *Henry VIII.* was found at *Stone-henge* a Table of mix'd Metal, on which were engrav'd many Letters; but the Character was so strange, that neither *Sir Thomas Elyot*, nor *Mr. Lilly*, the School Master of *St. Paul's*, could tell what to make of them, and so there was no Care taken to preserve the *Monument*; the Loss of which was afterwards much lamented by *Olaus Wormius*, who thought it to be *Runick*, as without question it was; and yet *Stone-henge* itself is a *Roman Work*.

Having shew'd that these *Instruments* were not *military Arms*, either of the *Britons*, or of the *Saxons*, or of the *Danes*, I shall now endeavour to prove that they are owing to the *Romans*. I once thought
that

that they were a sort of Axes which the *Romans* made use of in their Sacrifices, of which Dr. *Plot* takes notice of two sorts, the *Secures Lapideæ*, and the *Secures Cupreæ*, though Dr. *Leigh* will have his Instances to be both *Indian*. Upon a more narrow Consideration of the *Roman* sacrificing Instruments, I have quite changed this Opinion, not finding the least Footsteps of such *Axes* in any of the Books of *Roman* Antiquities I have hitherto consulted. On the contrary, they are in the *Suovetaurilia* or *Solitaurilia* of the *Columna Trajana* represented in the same Form, and fastened in the same Manner, that we use at this Day. And so also in other Sacrifices, as may partly be seen in the Gems, Rings, &c. published out of the Studies of *Augustinus* and *Gorlæus*, as well as in the Monuments of *Gruter*, *Reinesius*, *Spon* and *Fabretti*, to omit the Authors collected upon this Subject by *Grævius* in his large Body of *Roman* Antiquities. Neither could they have been the Heads of Spears, as is manifest from the same Authorities. The *Roman* Spears and Javelins occur very frequently, and yet not one of them either on their Coins, or elsewhere, is to be met with in the Figure of these Instruments. It is true, some of their Spears had two Heads; so they might use either End uppermost, as they pleased. We have one of these in *Augustinus* (p). The Heads differ from one another, but they neither of them answer our Monuments. Nor are the most ancient Spears of the *Romans* we meet with, different from those they made use of in more modern Times, as may in some measure be seen in the famous *Shield* lately published at *Oxford* (q), which is certainly authentic. It may here be farther added to what is there alledged, that *Lucius Florus* gives (r) us the first Instance of the *Romans* fighting upon Horses without Bridles; and in the *Columna Trajana* (s) the Horses are placed in full Speed with their Riders, without any Bridles, or other Curbs to restrain or guide them; a great many of the *Romans* having made themselves Masters of this Method of Fighting, that they might, like the *Numidians* (who were famous for it) be the less incumbered in the Battle, and rush upon the Enemy with the more Force. Their *Desultores* also are Proof enough of its being practicable.

But now though these Instruments are not properly *Roman* military Weapons, such as they used in their Battles; yet they were of service amongst the Soldiers, and good Numbers of them were constantly provided to be carried about in the Army. For I believe that they are *Roman* Chissels, and that they were used to cut the Stones, and other Materials that were judged serviceable for building their Camps. This is not Conjecture only, as appears from the *Columna Trajana*, where (t) the Soldiers are represented polishing the Stones for the *Roman* Tents in the *Dacic* Wars with such sort of Chissels made of Brass.

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O

These

(p) *Gemm. & Sculpt. antiq. ex Edit. Jac. Gronovii, Franeg. 1694. Part. num. 155.*

(q) *Vide Livii Edit. Oxon. Vol. VI. p. 195.* (r) *Lib. I. c. 9.* (s) *Num. 199.*

(t) *In Num. 167.*

These Chissels they beat and worked into the Stone, and other Materials, with Mallets of the same Metal. We have other Instances of it in the same Pillar, which is one of the best Monuments we have by which to judge of the several Instruments made use of by them in their military Enterprizes. These Chissels were of admirable Service in making their *Aggeres*, which consisted of *Earth, Stones, and Timber*. The Stones were sometimes thrown together without any polishing; but that was more rarely, and it was looked upon as a better Security to have them worked that they might lie even. By this Account the Reason will be easily perceived why these Instruments are hollow, namely, to fasten Handles to them for more Convenience in driving them. If they had been Wedges, it would have been a great Inconvenience to have had them hollow. Besides, the Wedges, by being drove into the Wood or Stones, would have been strangely worn on the Sides, and have received considerable Alterations; whereas the Sides of ours in the *Bodleian Repository* (and I suppose these are so too) are just as they were at first, and there is not the least Change, unless it be on the Edge, which is very blunt and much broken, which I guess to have proceeded from the Stone. As for the Ears or Loops, it is probable they might be put on, that thereby the Handles might be fix'd the better; or perhaps they were designed for the Ease of the Soldiers, who in their Journeys might by this means fasten them to their Girdles. For I believe most, if not all the Soldiers, had such Instruments, which they were obliged to make use of when Necessity required. I know that it is the Opinion of most, that there were a few particular Persons always in the Army to whom these Works were committed, and that they were exempt from the Office of Soldiers, and that they were *Marmorarij, Quadratarij, Tignarij, and Structores*. These may be called all by one Name *Fabri murarij*, though that is commonly reckoned only another Name for *Structores*. But this is a wrong Persuasion; and *Fabretti* has (*u*) well observed, that there are no *Fabri murarij*, as they are taken for Artists, distinct from Soldiers, on *Trajan's Pillar*. This Observation he has made in Opposition to *Santi Bartoli*, who calls them expressly *Fabri murarij*. *Fabretti's* Remark, as it is very just with respect to this sort of *Artists*, so it must be noted that there were no other distinct *Artists* that were freed from the *Duties of Soldiers*. Even the *Artists* that had received liberal Education are to be comprehended in this Observation, I mean their *Physicians*; which is the Reason that in *Fabretti* we have (*w*) the Picture of a Physician fortified with a *Lorica* or *Coat of Mail*, and moving his Hands to a sick Person that was his Patient. The *Lorica* shews he was one of the *better sort* of *Soldiers* called *Evocati*, those of the *inferior Order* being allowed only a *Pectoral* of *thin Brass*. It withal points out to us that he was, after he had finished these Offices to the Sick,

(*u*) Syntagm. de Columna Trajana, p. 208.

(*w*) Loco cit. p. 217.

Sick, bound to betake himself to the other Offices of a *Soldier*. This was sometimes intermitted ; but in *Trajan's* strict Discipline it was always observ'd, he being resolved to imitate and bring into Fashion the Severity that had been made use of in the more *ancient Times*. For this Reason we see the Soldiers in this Pillar duly exercising and performing, when there was any Need, all the Offices of Tradesmen, it being at this Time customary to list Tradesmen amongst the Soldiers for this Intent.

Besides the Uses these Instruments were put to in forming the *Roman* Camps, they were moreover employed in making and repairing the High-ways, which swallowed up a large Quantity of Stone, especially in such Places as were marshy and fenny. The *Pomptin* Marshes were vastly large ; and yet at such time as the Soldiers were too many to be used against the Enemy, a Motion was made that they should be employed to drain them, which was so well approved, that the Senate immediately gave Orders for it ; and the Soil was so rich and fertile, that great Numbers came and settled here, insomuch that there were no less than thirty-three Towns built upon the Ground. The Waters however afterwards got Strength again, and it was in a manner wholly drown'd ; which made *Julius Cæsar* entertain some Thoughts of draining them afresh, and of carrying the *Appian Way* through them, whereas it had before went about them ; but he fail'd in his Design, and it was left for the Emperor *Trajan*, who, after he had cleansed the Fens, caused a Stone-Way to be made through them, whereon were built large Inns and magnificent Bridges for Conveyance of the Water which was in the upper Part of the *Marsh*. For Memory of which, he had a *Monumental Stone* erected with a proper Inscription, by which it appears that the Way was 19 Miles in Length, there being placed at the End of every Mile a Mile-stone, and from thence the Way itself was in succeeding Times called *Decennovium*. I might from hence take occasion to mention other Works of the *Romans* in *Italy* of this Kind, in which *Chissels* were absolutely necessary for cutting the Stones ; but at present I shall only remark, that as *Trajan* was diligent about the Ways in *Italy* and other Parts, so it seems he was no less careful of these Affairs in *Britain*. For notwithstanding some tell us that the four Great Ways in *Britain* are owing to *Molmutius*, one of the *British* Kings, and *Belinus* his Son ; yet Mr. *Cambden* and others have shewed that they are rather to be attributed to the *Romans*, being repaired and made as it were quite anew (whereas before they were very mean) by *Trajan*, after he had reduced the *Britons* to Obedience. Besides which Ways he also made divers other lesser ones here ; and perhaps these *Chissels* may be some of those used by the Soldiers in his Reign, though before his Time Acts of this kind had been performed by the *Roman* Soldiers, who also forced the *Britons* to undergo the same *Drudgery*, which occasioned them to complain to *Agricola*, as if they were too severely and hardly dealt with.

If it be asked how it comes to pass that these Instruments are of Brass rather than of any other Metal? It may be replied, that they, as well as the People of other Nations in former Times, thought there was an extraordinary Virtue in Brass. Whence it was, that they used brass Instruments when the Moon was in an Eclipse (x), thinking that by beating of them she would the more easily be recover'd from her Labour; which Custom almost universally prevailed. And it was upon Account of this peculiar Virtue supposed to be in Brass, that the Instruments made use of in the sacred Offices were in the more early Times all of Brass, that the *Tuscans* used Brass Plow-shares when their Cities were built, and that the Priests of the *Sabins* were shaved with Brass Razors (y.) *Hesiod* himself tells (z) us, that the Ancients used Brass Instruments before Iron ones:

χαλκῶ δ' ἐργάζοντο μέλας δ' οὐκ ἔσκε σίδηρος.

At which Time not only their Arms, but their Houses were likewise of Brass.

Τοῖς δ' ἦν χάλκεια μὲν τείχεα, χάλκιοι δὲ πύργοι. (a)

The Custom might prevail as well in *Britain* as elsewhere, Iron being not so very plentiful in the first Time of the *Romans*, however it might increase afterwards when the *Bath-Forge* was erected, and all proper Methods used upon that Occasion. Nor ought it to be wonder'd how the *Brass-Chissels* could be applied to the Stone without breaking to pieces immediately, any more than that the Plough-shares did not suffer the same Damage in casting up the Ground, and grating against the Stones with more Violence. The Brass in those early Times was of a different Nature from ours, and so tempered as to endure much longer with less Inconvenience in the several Operations to which it was employed.

A Danish
Spur.

As for another Piece of Antiquity, which Mr. *Thoresby* speaks of, namely, a Spur that is no less than six Inches and a half long from the Heel to the Middle of the Rowel, which he takes to be of a much later Date than the other Monuments, we have one in the *Bodleian Repository* of much the same Length, of which I have made mention in my *Additions* (b) to Sir *John Spelman's* Life of King *Ælfred*. There have been several others found in *England*, and Mr. *Thoresby* has justly guessed his to be more modern than the other Instruments. For these Spurs are certainly *Danish*, as appears from *Wormius's Monumenta Danica* (c), where he has given us the Figure of one, and there is an Account

(x) See Liv. l. xxvi. c. 5. Edit. Oxon.
l. xix. c. 10.

(z) Εργ. ἡμ. l. i. v. 150.

(y) Vide Rhodigini antiq. Lect.

(a) Ibid. v. 149.

(b) Page 43.

(c) Page 50.

Account of divers others towards the latter End of his *Museum*, one of which is a Foot and some odd *Inches* in *Length*.

XXVII. Some ancient Trumpets were found in the County of *Tyrone* in *Ireland* about seven Years since: There were eight of them found together, four of one Make, and four of another; two of which are represented *Fig. 56*, and *57*. they are of cast *Brass*, of the thickness of an *English* Half-Crown.

Figure 55, is 24 *Inches* long, according to the Turn or Arch it makes, and is three *Inches* in diameter at the large End; and at the small End it is solid for about two *Inches*, with a Loop at the top to hang it by, and another Loop between the solid Part, and the Mouth-piece. The Mouth-piece is oval, five *Inches* from the solid End, one *Inch* and three quarters long, and one *Inch* wide: The Sides thereof are smooth, round, and even easy for the Lips of a Man, but will not admit of any Sound by Blast, as a Horn does, but by the articulate Voice of tooting it will: One may raise his Voice in it to the highest Pitch, and bring it the deepest Bass.

Fig. 56, is 26 *Inches* long, one *Inch* wide at the small End, and three *Inches* at the other; but seems to be imperfect for want of a Mouth-piece: The small End seems to be fitted to receive one. On the Back at *a* there is a Hole, and another under the Moulding at *b*; the first I believe was to fasten the Mouth-piece, the second I imagine was to stop or open with the Finger to alter the Sound at Pleasure. But as it is now, it cannot be sounded; for it is no way fitted for the Mouth, it being thin and sharp.

I cannot find in any *Irish* Story, or by Tradition, any Account of this sort of Trumpets, nor indeed of any other; from whence I gather they are of great Antiquity: For had they been of use at, or since the first of the *English* Conquests, there would have been some Hints of them. And therefore I conclude they were of use when the Country was *Pagan*, and not in Martial Affairs, but by their Priests at their Funeral Rites when they buried their Dead, and bore a Part with those who cried at those Funerals, or made an howling sort of a Noise; which sort of Noise is used among the Natives to this day.

Fig. 57, is an Instrument of much better Metal, being fine Gold; but what to call it, or of what use I never could meet with any could tell me. There have been five found in different Places, three of which I have seen. One was found near *Cootbill*, in scowring a Ditch, under the side of a large Stone; which Stone was one of three which were placed triangular-wise; whether set in this Form as a Mark to find this Thing when hid, or whether for any other use, I cannot guess; but I have seen Stones in several Parts of this Kingdom set in this Order. It is reported, that there were some other Pieces of Gold found with this; but I could not see them.

One,

Ancient
Trumpets,
&c. in Ire-
land, by Mr.
F. Nevile. n.
337. p. 250.
Fig. 55.

Fig. 56.

Fig. 57.

One, I was told, was somewhat like a Scepter, about 18 Inches long; and another was round like a large Medal, as thick as two Crown Pieces, and as broad as the Palm of a Man's Hand, with strange Characters on it. The Beauty and Colour of this, which I saw, surpassed any Gold I had seen: It had been cast, and not wrought with the Hammer. The two Cones were two Inches in diameter each, and two Inches asunder from each other. The Bow or Handle was made like an Arch, about a quarter of an Inch thick: The Handle was round, tapering towards both Ends, where it was fixed to both the Cones. The Goldsmith told me, that when he had wrought part thereof, he could not bring the Gold to the right Colour again, though it was in fineness equal to our Standard. This could be no Ornament for the Body; perhaps it might be of some religious use; but whether Popish or Pagan, I leave to better Judgments.

XXVIII. Papers omitted.

- n. 306. p.
2230. 1. An Extract from Mr. Baxter's *Glossarium Antiquitatum Britannicarum* (since publish'd) concerning *Veroconium*, or *Wroxeter*.
- n. 337.
p. 80. 2. De *Legionibus* Epistola, ad Virum Clarissimum Doctissimumque *Hans Sloane*, M. D. Regiæ Societati à Secretis, Coll. Med. Lond. Sodalæ, & Medicum Regium, data à *Guil. Musgrave*, M. D.
- n. 337.
p. 145. 3. De *Aquilis Romanis* Excerpta ex Epistolâ *Guil. Musgrave*, M. D. & utriusque Societ. Reg. Socii, ad Virum Clariss. *Gisb. Cuperum*, Consulem *Daventriensem*.
- n. 337.
p. 157. 4. *Inscriptio Tarraconensis*: Cum Commentario *Guil. Musgrave*, M. D. Coll. Med. & Societ. Reg. Lond. Socii.

XXIX. Account of Books omitted.

- n. 300.
p. 2012. 1. *Olaii Rudbeckii, Atlanticae sive Manhemii Pars Secunda*. In quâ Solis, Lunæ & Terræ Cultus describitur, omnisque adeo Superstitionis hujusce Origo parti *Sueoniæ* Septentrionali, Terræ puta *Cimmeriorum* vindicatur, ex quâ deinceps in orbem reliquum divulgata est, &c. Accedunt Demonstrationes certissimæ, quæ Septentrionales nostros, in maxime genuinum Solis & Lunæ Motum, indeque pendentem accuratissimam Temporum rationem, multo & prius & felicius quam gentem aliam ullam penetrasse declarant. *Upsalæ*. Folio.
- n. 301.
p. 2057. 2. *Olaii Rudbeckii Atlanticae, sive Manhemii Pars Tertia*. In quâ Vetusissima Majorum nostrorum *Atlantidum* lapidibus, fago, æri, sive cortici *Runas* suas incidenti ratio, una cum tempore, quo illa primo cœperit, exponitur. Necnon *Aurei Numeri* singulis Annis tributi, & Signorum Cœlestium, quæ abhinc ad *Græcos* & *Latinos* sunt translata, vera Origo & Significatio traditur. Et illa à Diluvio *Noachi* primæ Ætates, atque in illis prima *Atlantidum* nostrorum forma describuntur; quæ

quæ Migrationes & Bella sub *Boreo*, seu *Saturno*, ejusque filio *Thoro* seu *Jove* gesta sunt, recensentur: & denique *Scytharum*, *Phœnicum*, & *Amazonum* his Ducibus in *Indo-Scythiam*, & *Phœniciam*, seu *Palæstinam* è *Sueoniâ* factæ Expeditiones enarrantur. Quibus omnibus Mythologiæ perplures, quarum sensus in hunc usque diem incognitus, hic demum detectus prodit, jucundæ sane & perquam utiles adjunguntur. *Upsalæ*. Folio 1698.

3. *Edmundi Dickenson*, M. D. *Physica Vetus & Vera*, sive Tractatus u. 277. de naturali veritate *Hexameri Mosaici*. Per quem probatur in *Historia* p. 1083. *Creationis* cum *Generationis* *Universæ* *Methodum* atque *Modum*, tum veræ *Philosophiæ* *Principia*, strictim atque breviter tradi. *Londini* 1702. 4to.

4. A Letter from Mr. *William Baxter* to Dr. *Hans Sloane*, R. S. Secr. n. 311. containing an Account of a Book entitled p. 2438.

Archæologia Britannica, giving some Account, additional to what has hitherto been published of the Languages, Histories and Customs of the original Inhabitants of *Great Britain*, from Collections and Observations in Travels through *Wales*, *Cornwall*, *Bas Bretagne*, *Ireland* and *Scotland*, by *Edward Lbuid*, M. A. of *Jesus College*, Keeper of the *Ashmolean Musæum* in *Oxford*. Vol. I. containing, 1. A Comparative Etymology, or Remarks on the Alteration of Languages. 2. A *Latin Celtic* Dictionary; or, a Vocabulary of the original Languages of *Britain* and *Ireland*. 3. An *Armoric* Grammar. 4. An *Armoric English* Vocabulary. 5. Some *Welsh* Words omitted in Dr. *Davies's* Dictionary. 6. A *Cornish* Grammar. 7. A Catalogue of *British* Manuscripts. 8. An Essay towards a *British* Etymologicon. 9. A brief Introduction to the *Irish* or ancient *Scottish* Language. 10. An *Irish-English* Dictionary. *Oxford*. Printed at the Theatre for the Author, M DCC VII. Folio.

5. *Julii Vitalis Epitaphium*; cum Notis Criticis Explicationeque V. n. 337. C. *Hen. Dodwelli*, & Commentario *Guil. Musgrave*. *Iscæ Dunmoniorum*. p. 283. Sumptibus *Philippi Yeo*. M DCC XI.

The Author of the *Commentary* (here) observes, that it is not represented aright by the Editor of the *Bibliothèque Choisie*, Tom. XXV. premiere partie. For pag. 225, and 6, He says, [*Belges, qui des Provinces Septentrionales, du Continent des Gaules étoient transportez en Angleterre, autour de Bath & Wells*.] whereas the *Commentary* affirms no such thing, and in all likelihood *Wells*, and perhaps *Bath* too, is much later than the settling of the *Belgæ* in *Britain*. In the second place he observes, that whereas the *Bibliothèque* affirms of the *Bath* Fabric [*ce que l'on avoit ignoré jusqu'à presen*] the *Commentary* quite otherwise says [*Fabricam Aquis, quod Orbi Literato jam diu latuit, fuisse Calidis*] pag. 189. Lastly, speaking of the round-bottom'd U, invented (as *Cellarius* affirms) about a hundred Years ago; this, says the *Bibliothèque*, is true, as to *Inscriptions* [*Celà est vrai à l'égard des Inscriptions*.] [On the other hand

had (the Doctor affirms) *quod hujus contrarium est verissimum*; there being now to be seen in *Cornwall* an old Inscription with a round U.

n. 346.
p. 385.

6. *Guilbelmi Musgrave* Reg. Societ. utriusque Socii *Geta Britannicus*. *Accedit Domus Severianæ Synopsis Chronologica: & de Icuncula quondam M. Regis Ælfredi Dissertatio.* 8vo. *Isca Dunmoniorum.* M DCC XV.

n. 349.
p. 502.

7. *Dissertatio de Dea Solute*, in qui illius Symbola, Templâ, Statuæ, Nummi, Inscriptiones exhibentur, illustrantur. Auctore *Guilbelmo Musgrave* G. F. è Coll. *Exon. Oxonii.* Typis *Leon. Litchfield,* Impensis *Phil. Yeo,* Bibliopolæ *Exon.* M DCC XVI.

n. 344.
p. 304.

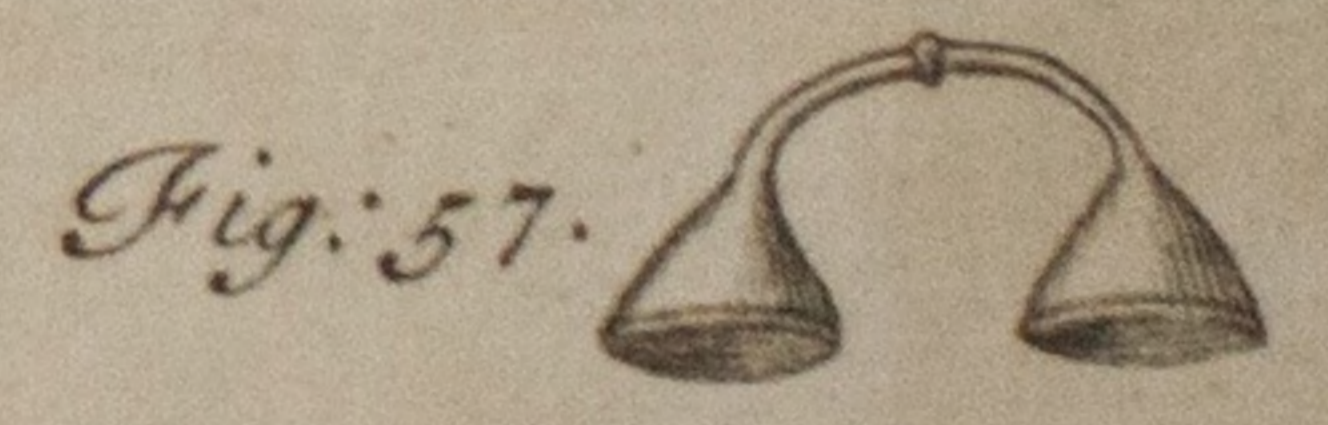
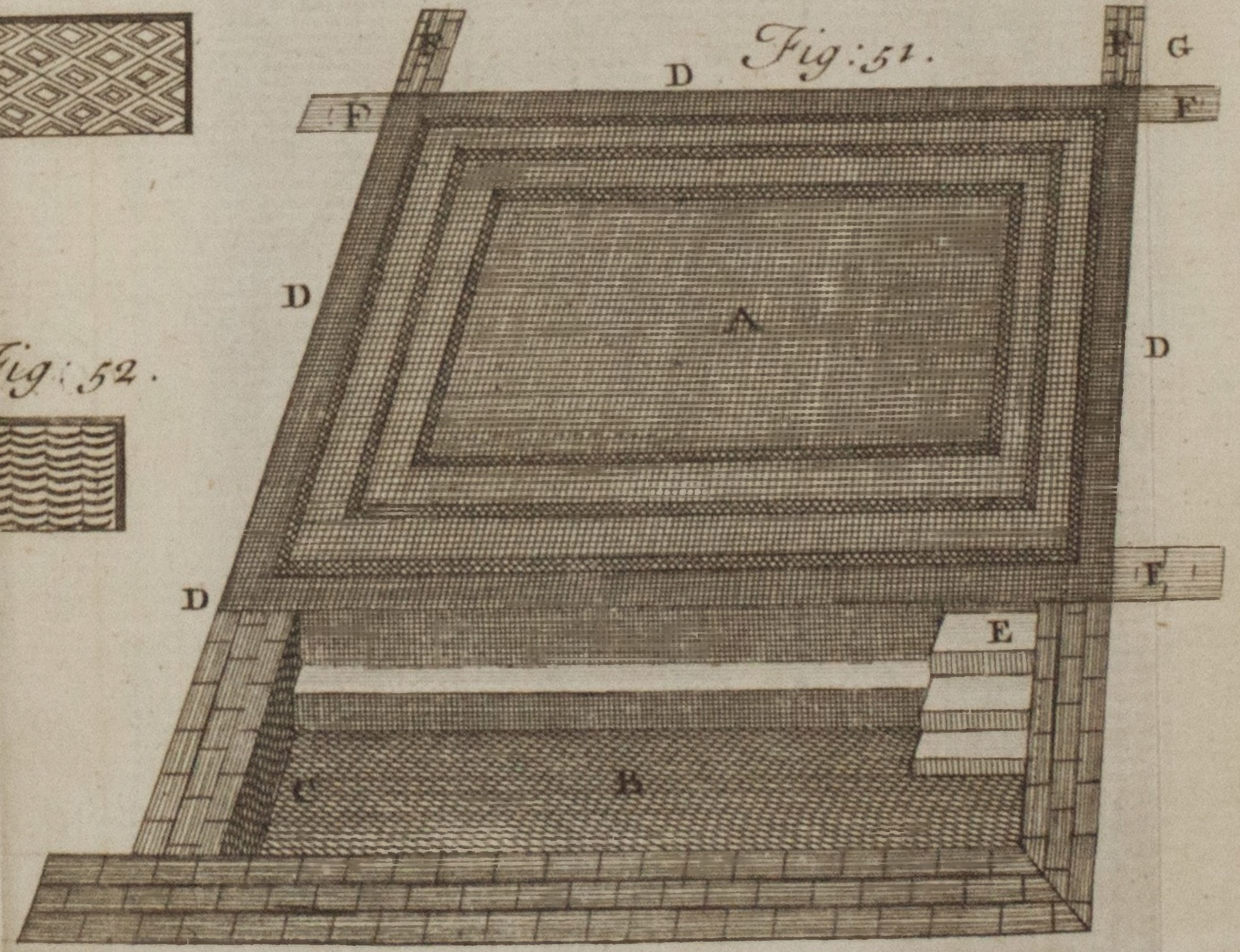
8. *Ducatus Leodiensis*, or the *Topography* of the ancient Town and Parish of *Leeds*, and Parts adjacent, in the County of *York*, &c. by *Ralph Thoresby*, Esq; F. R. S. *London.* Folio 1715.

CHAP. III.

Travels. Voyages.

Observations
in Natural
History in
Shropshire,
by Mr. G.
Plaxton. n.
310. p. 2418.

I. **A**NNO 1673, I was presented to the Vicarage of *Sheriffe-Hales*, and also to the Rectory of *Kinnardsey*; the former in the Counties of *Salop* and *Staffordshire*, the other wholly in *Shropshire*. *Novemb. 6.* I was inducted into the Parsonage of *Kinnardsey*, where I was Incumbent for 30 Years and upwards. At my Induction I found a great many aged People in the Parish; upon which I took the Number of the Inhabitants, and found that every sixth Soul was sixty Years of Age, and upwards; some were 85, and some 90. This I could not but wonder at, considering that the Town was surrounded with a large Morass, overflowed in Winter, and that you could not come into the Parish any Way upon Arable-Land. At my Entrance there, I found neither Gentleman nor Beggar, nor any sort of Dissenter from the Church; there had been no Law-Suit amongst them in the Memory of Man; nor was any commenced during my Incumbency as Rector there, for above thirty Years together. They have but one Way to the Town and Parish, the rest they hire from Lords of the adjacent Manours. The Morasses or Moors are of a great Extent, and the Parish was surrounded with them; the Village was called *Kinnardsey* or *Kinnardus bis Island*; *ei, ea, ey*, all these are watry Terminations. Thus the next Parish was *Eyton*, the Town upon the Waters; *Edney*, or *Edwyney*, *Edwin's Island*; *Buttery* or *Butterey*, the Island of Butter, being a long grazing Tract of Land; with some others of the like ending. All that vast Morass was called the *Weald-Moor*, or the *Wild-Moor*, that is, the *Woody-Moor*. Thus the *Wood-Lands* of *Kent* are called the *Weald* of



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of Kent; the *Wolds* of *Yorkshire* most probably have been woody formerly, and called the *Wealds*, for the word *Weald* or *Wold* is by our *Saxon* Masters rendered *Woody*; and I have been assured from aged People, that all the wild Moors were formerly so far overgrown by Rubbish Wood, such as Alders, Willows, Salleys, Thorns, and the like, that the Inhabitants commonly hanged Bells about the Necks of their Cows, that they might the more easily find them. These Moors seem to be nothing else but a Composition of such Sludge and Refuse as the Floods left upon the Surface of the Ground, when they drained away, and yet this Sediment is full three or four Foot thick; for I have often observed, that the black Soil cast up by Moles, or digged out of the Ditches, was a meer Composition of Roots, Leaves, Fibres, Spray of Wood, such as the Water had brought and left behind it. In digging they often find Roots and Stumps of Oaks three or four Foot under the Surface, and they are very common in the Bottom of the Ditches and Drains: The Soil is peaty, and cut up for Fewel in some part of the Lordship; in the Bottom of these Peat-Pits, they find Clay, Sand, and other Sorts of Earth. These Grounds have been formerly much higher: For I have observed Oaks and other Trees where the present Soil is so much shrunk and settled from them, that they stand upon high Stilts, and are supported from the great Fibres of the Roots, so that Sheep may easily creep under them.

That great Tract, called formerly *Vasta Regalis*, is now by draining become good Pasturage, and yields a considerable Rent: It yields great Quantities of *Hay*, though much of it is of such a Nature, that it will dry up a new Milch-Cow, starve an Horse, yet will it feed an Ox to admiration; and I have heard some Grasers say, they could not by their best Upland-Hay feed an Ox so fat, as the Moor-Hay would do. This, I suppose, proceeded from its dry and binding Quality, that made the Oxen drink much.

Within the Parish, about half a Mile from the Church, there is a pretty Farm called *the Wall*, which I judge was formerly a *British Fortification*; it is encompass'd with a Morass, and raised up from Sand, broken Stones, Gravel and Rubbish, to a great height and breadth, being (as I measured it) above 1900 Yards in Compass, and 16, 18, and 20 Yards in Breadth: In some Places it seems to have been built before the Moors became boggy; for I could never find any Way over the Moors, by which they could carry those vast Quantities of Earth, Clay, Sand and Rubbish, to raise that mighty Rampire. In that Parish I was the *sixth Rector* from the Days of *Henry VIII.*

As to my Rectory of *Donington*, to which I was presented *Anno 1690*, I found there as many *old People* as I did at *Kinnardsey*, if not more; and in the two Parishes I had but a difference of three in the Number of the People. At *Kinnardsey* I had 135 Souls, at *Donington*

138; of the 135 I had 23 aged 60 and upwards; of the 138, 24; both which Numbers multiplied by 6, the one at *Kinnardsley* was 138, the other at *Donington* would have been 144. I had nothing very remarkable at *Donington*, except the *Royal Oak*, which stood at *Boscobel* within the Parish, and the Owners thereof paid 6 s. and 6 d. yearly, in lieu of their Tythes and Offerings: The *Royal-Oak* was a fair-spread thriving Tree, the Boughs of it were all lined and covered with Ivy. Here in the thick of these Boughs the King sat in the Day-time with Colonel *Carlos*, and in the Night lodged in *Boscobel-House*; so that they are strangely mistaken, who judged it an old hollow Oak, whereas it was a gay and flourishing Tree, surrounded with a great many more: and, as I remember in Mr. *Evelyn's* History of Medals, there is one of King *James I.* or King *Charles I.* where there is a fine spread Oak with this Epigraph, *Seris Nepotibus Umbra.*

The People here live to great Ages; I saw in one House three healthful People, whose Ages numbred together made 278, and I think they lived some Years after; they were the Man and his Wife, and his Wife's Brother.

I was at *Donington* about 13 Years and some Months; in all that time I buried but 27 People, of which Number 4 came from neighbouring Parishes, 4 were young ones, and of the remaining 19 the youngest was about 60, and the eldest 96 Years of Age. I was there the fourth legal Incumbent in Succession from the *Reformation*; and, as I remember, at one Triennial Visitation of the Bishop, we had neither Burial or Wedding to return into the Registry at *Litchfield*. The Country is very healthful in those Parts, and though it seems to the Eye of a Traveller to be but of a moderate height, yet in riding between *Donington* and *Woolver-Hampton*, which is but five Miles, you cross four Rills or Brooks in the Compass of three Miles, two of which run into the South-West Seas, to *Severn* and *Bristol*; the other two hasten to *Trent* and *Humber*, and so into the Northern Ocean.

The poor Remains of the *Royal Oak* are now fenced in by an handsome Brick-Wall, at the Charge of *Bazil-Fitzberbert* Esquire, with this Inscription over the Gate, (upon a blue Stone) in golden Letters.

*Fœlicissimam Arborem quam in Asylum
Potentissimi Regis Caroli Secundi Deus Opt. Max.
per quem Reges regnant, hic crescere
voluit, tam in perpetuam rei tantæ
Memoriam, quam in Specimen Firmæ
in Reges Fidei, Mauro cinctam
Posteris Commendant Bazillius
& Jana Fitz Herbert.
Quercus Amica Jovi.*

It was put up about twenty or thirty Years ago, but the Place deserved a nobler Memorial: I have writ it in such Lines as they have cut it, and as the Letters now stand; a few Years will ruin both the Wall and the Inscription.

The emblematic Medal Mr. *Plaxton* alludes to, is the XLVIth in Mr. *Evelyn's Numismata*, which King *Charles I.* caused to be stamped in honour of the Installation of his Son, whereupon is the *Royal Oak* under a Prince's Coronet, overspreading subnascent Trees and young Suckers.

A Remark by Mr. R. Thoresby. ibid. p. 2422.

SERIS. FACTURA. NEPOTIBUS. UMBRAM.

Reverse within the Garter of the Order is this Legend,

CAROL. M.B. REGIS. FILIUS CAROL. PRINC.
INAUGURATUR. XXII. MAII. MDCXXXIIX.

The Inscription of *Boscobel* reminds me of one I had from the late Reverend Mr. *Illingsworth*, President of *Emanuel College* in *Cambridge*, which was inscribed upon a Pillar erected by the Sea-side.

*Siste, viator, iter, vestigia prima Secundus
Posuit hic Carolus, quum redit Exilio.*

II. In the Township of *North Bierley* in *Yorkshire*, one *Worsnape*, a poor Boy, lived till he was 17 Years old, and never made Water, and yet was in perfect Health, and vigorous and active. He had constantly a *Diarrhœa* upon him, but without much Uneasiness. The Obstruction must have been in his Kidneys, for he had never any Inclination to make Water. The serous Part of the Blood, which should have been thrown off by Urine, was discharged by the *Cœliac* and *Mesenteric* Arteries, by the Mediation of the Glans, into the Guts. He died of a Fever.

Observations in Natural History in Yorkshire, by Dr. R. Richardson. n. 337. p. 167. A Boy that never made water.

A remarkable Instance of old Age is to be taken notice of in *Martha Waterhouse* and *Hester Jager*, both born in the Township of *North-Bierley*, and Sisters. *Martha* married to *John Waterhouse*; *Hester* died unmarried. *Martha* died about two Years ago, in the hundred and fourth Year of her Age; and *Hester*, this present Year 1713, in the hundred and seventh Year of her Age. They had both of them Relief from the Township of *North-Bierley* nigh fifty Years. I should not have taken notice of their Age separately, it falling so far short of several Instances which have happen'd in this County; but jointly, I do not remember any that have come up to them.

Long Life.

About six Years ago, great Quantities of *Tench* were taken in a Fish Pond belonging to *Stephen Tempest* of *Broughton* in *Craven*, Esq; and were sent to the neighbouring Markets. The Fish were taken on *Monday* towards Night, and some brought to *Bradford* on *Tuesday* about the same time; and not being frequent in our Markets, six of them were sent to me by Mr. *Ferrand* the Vicar on *Wednesday*. I not

being

being at home, the Basket was set upon the Kitchen Table, not far from a good Fire; where it continued till *Thursday* Morning, (the Servants not knowing what was in it.) Upon opening the Basket, and looking upon the Fish, I thought the Eyes of some of them looked clear: I put two of them into a Pail of Water, and in less than two Hours time they swam very lively in the Water. The remaining four having no signs of Life upon them, I put them into the same Pail, and before Night they all swam about in it.

Burbolts being a Fish not frequently met with in the Southern Rivers in *England*, are often found in this County, especially in slow Rivers and standing Waters, as in the River *Foss* in *York*, and also in *Derwent*; but in no Place more frequent than in the Fen Ditches of the Levels, about four Miles from *Doncaster*.

I have been several times present, when plenty of small Trouts have been caught in the mountainous Lakes of *North-Wales* by Angling; and have, with no small Admiration, consider'd the difficult Access to these Places, where a good Footman can scarce climb up to them. That these Lakes are yearly supplied from the Brooks at the bottom of the Mountains I do not at all doubt, especially in spawning Time, when the Trouts endeavour to surmount all Difficulties, by passing up the small Rivulets, to deposit their Spawn, for the Preservation of their Species, where it is the most secure from the Violence of other Fishes, and there by Accident fall into these natural Ponds, where they continue all Summer; no Person having yet observed (that I know of) Trouts to breed in Ponds. Not only the Trouts that are taken in these mountainous Lakes are small, but also the *Charrs* that are taken as they ascend the small River out of the great Lakes nigh *Lhan Berys*, to deposit their Spwan in the Sands there. These very rarely exceed a fresh Herring in Magnitude, as I have been assured by Mr. *Evans*, Vicar of *Lhan Berys*, who has been present when hundrds of them have been caught; and by the Account he gives of them, they are in no respect different from those taken in *Winander-Mear*, except in Magnitude, where it is no rare thing to meet with them, of two Pounds Weight and upwards. The Smalness in Fishes I have some time thought to proceed from the Coldness of the Water, these Lakes being supplied with Snow Water from the Mountains eight Months in twelve. The *Minera* of Vitriol and Alum being often met with in the Hills through which some of the Water must drain, perhaps does not a little contribute to the Roughness and Coldness of the Water. The contrary we find in our Waters that run through the Limestone Rocks, where no rough Salts are found; the Trouts there are large and fat. An Instance of this we find in the Trouts in *Malham Tarr* in *Craven*, nigh *Settle*, where they are frequently found two Foot long.

Beasts.

I must correct one Mistake in Mr. *Ray's Synopsis Quadruped. &c.* p. 195. where he says, that *Mustela vulgaris* is called here a *Foumart* or *Fitchet*,

Fitchet. *Putorius* is called here a *Foumart*, quasi fowl Mart, or stinking Mart, in opposition to the Marts which emit a musky Smell, and are often met with in our Woods, and taken by the Hunters in Snows.

The *Ermin* is not unfrequently met with here in Winter, and looked upon, when they appear, to presage Snow. I should not here have taken notice of it, it being also met with in most Counties of *England*, but that I have had an Opportunity, in two or three Instances, of observing the Time of its Changes. It begins to change its Colour from brown to white about the beginning of *November*. I had one of them brought me about *November* was two Years, when I first observed this Change. I have seen one or two of them, that in the beginning of *March* were changing from white to brown. *Qu.* Whether these Animals do not always continue white in the more Northern Parts of the World?

The *Nut-batch*, or *Nut-jobber*, is not frequently to be met with in *Birds.* the South; yet is so common with us, that I have sometimes seen six or seven of them in one Day in my own Woods. This must be the Bird that *Dr. Plot*, in his *Nat. Hist. of Oxfordshire*, calls a *Wood-cracker*, and takes to be an undescribed Bird. I have with much Pleasure often observed these Birds to crack Nuts, which they do with very great Dexterity. I ordered one of my Servants, that was with me in a Wood last *Christmas*, to observe from whence she fetched her Provision: Which he soon discover'd in a hollow Tree, and cutting the Place open, brought from thence several Pints of very choice Nuts.

I met with a Nest of the *Regulus Cristatus*, in a thick Thorn-Hedge, in my own Orchard, which was built round, and a little Hole at the Side; the Outside was green Moss, the Inside Hair and Feathers, not much unlike that of the common Wren. The Eggs were small and white, with many brown Spots upon them. The Note of the Cock is very agreeable, not much unlike some of the *Parus* Kind. I do not remember that I have seen any of these Birds in Summer before.

Coclea pomatia major Gesneri; I never met with it in the North; but I found it in Plenty last Year about the middle of *May*, in *Stunsfield* Fields, amongst the Briers and Brakes, especially nigh the famous *Roman* Pavement.

III. 1. At *Snowdon* Hills we met with little or nothing additional to what is in *Ray's Synopsis*; only the *little Bulb* I found plentifully in Flower.

I searched diligently in the Mountains of *Glamorganshire* for figured Stones, but met with none at all, except cubical *Marchasites* and *Crystals*; whereof I found one about nine Inches long, and thicker than my Wrist, transparent as Glass for the better half, but opaque towards the Root like white Marble. Some small ones I met with of the Colour of a *Topaz*; and was informed of others purely

*Observations
in Natural
History in
Wales, by
Mr. E.
Lhwyd, n.
334. p. 462.*

purely Amethystine, found in the Valley of *Nant Pbranteon*. I find our Ancestors (for want of more precious Stones) made themselves Beads of opaque, or marble Crystal; for I have one given me, cut like a Lottery-ball, or perforated, found not long since in *Meirionysshire*. I desire to know, whether those transparent Stones figured by Dr. Plot, and by Dr. Lister [*Ph. Transf.* No. 201 †] by the Name of *Ombriæ*, &c. are so formed naturally. One of them was lately given me (set in Copper with a little Handle to it) by the Name of *Tlōs Owen Kyveiliog*, i. e. Owen of *Kyveiliog's Jewel*; so call'd, because found in an old *Crig* or *Barrow* near the Place where he lived.

† *Vid. supra*,
V. ii. C. iii.
S. lxii.

Welsh MSS.

Sir *William Williams* hath several *Welsh* MSS. (though I think no Dictionary) that would be of use to me. They are chiefly modern Copies out of *Hengwrt* Study in *Meirionysshire*, which I am promised free Access to; and have this time taken a Catalogue of all the ancient MSS. it contains. There are the Works of *Taliesyn*, *Aneuryn gwawdydh*, *Myrdbyn ab Morvryn*, and *Kygodio Elaeth*, who liv'd in the 5th and 6th Centuries; (but the small MS. containing them all seems to have been copied about 500 Years ago) as also of several others valuable in their Kind.

Quadrupeds.

We have neither the *Ibex* nor *Rupicapra* in *Wales*, nor any other Goat but the common. In our Language the Park Deer is called *Geivr Danas*: The former Word signifies *Goats*; but whether the latter implies *Danish* (as if Deer had come from *Denmark*) or somewhat else, we know not.

Fish;

Our Lakes (though they are very numerous) afford no Fish that I can hear of, besides Trout and Eel, and *Torgoch* and *Gwiniad*, i. e. *Shelley* and *Charre*. A Fisherman protested to me, that in a Lake called *Lbyn y Cwyn* near *Lhan Berys*, he had several times caught monocular *Trouts*, the Heads whereof were always somewhat distorted or contracted awry. They farther assured me, that the two highest Lakes of *Snowdon* (*Phynnon Urêch* and *Phynnon Las*) afford no Fish at all; and that the *Trouts* of the other Lakes differ much in Colour.

There is no *Brimstone* or *Pumice-stones* on the Tops of our Mountains, nor any thing else that I suspect to have been the Effects of *Vulcano's*. What seemed to me most strange, were waste confused Stones, and (to appearance) Fragments of Rocks, standing on the Surface of the Earth, not only in wide Plains, but on the Summits also of the highest Mountains.

I have never seen any Lake or Spring on the Summit of a Hill. There are indeed on the Tops of some Hills, where stood anciently Castles or Forts, certain Wells called in Welsh *Pydew*; a Word of the same Signification as well as Sound with the Latin *Puteus*: But no Water runs out of these; and several of them I found quite dry.

ibid. p. 467.

2.] I have discover'd some new *Species* of *Glossopetræ*, and *Siliquastra*, (the first *Ichthyodontes*, I suppose that ever were observed

in

in Wales) on the top of a high Mountain, called *Blorens*, near *Aber Gavenni*. The *Siliquastra* were smaller than the generality of those I had observed in other Countries. Of the *Glossopetrae* we found one pretty large, but the rest very small; all black, or atro-rubent. The same Place afforded also some Variety of Fossil Shells, and plenty of *Cuthbert's* Fossils. Beads, which were very small in comparison of what are found throughout the North of *England*. We also found there a large Testaceous Body, not to be compared as to its Figure with any sort of Shell yet described; together with some embossed Representations of Pieces of the Skeletons of Eels, or some lesser Fish. All these were in Limestone; but,

Advancing about three Miles further into *Brecknockshire*, at a Place Mines. called *Lban Elbi*, we searched some Coal and Iron Mines. Their Coal-Works were not Pits sunk like Draw-wells; but great Inroads made into the side of the Hill, so that three or four Horsemen might ride in a Breast. The top is supported with Pillars left at certain Distances; and they make their By-lanes (as in other Pits) as the Vein requires. The Slate above this Coal afforded only Stalks of Plants, which we did not save, because it seemed impossible to reduce them to their several proper *Species*. However, close by the Pit we found a valuable Curiosity, viz. a Stone for Substance like those they make Lime of, of a compressed Cylinder Form, and as it were cut off even at each End; about 8 Inches long, and 3 in breadth: Its *Superficies* adorn'd with equidistant Dimples, like Dr. *Plot's* *Lepidotes*, *Hist. Ox. chap. 5. par. 55.* and in each Dimple a small Circle; and in the Center of each Circle a little Stud like a Pin's Head. This is the only Curiosity of the kind I have seen, and is not referable to any thing I can think of either in the Animal or Vegetable Kingdom. Among the Iron Ores of the same Hills we found some new Spars, and several Specimens of Ores shot into a constant and regular Figure, though not reducible to any Animal or Vegetable Bodies.

About 5 Miles thence, at a Place called *Pont y Pwl* in this County (where, as also at *Elban Elbi* there are Furnaces and Forges,) we found more Coal and Iron Mines, and collected some fair Representations of the Leaves of capillary Plants on the Iron Ore, but found no Branches. One Major *Hanbury* of this *Pont y Pwl* shewed us an excellent Invention of his own, for driving hot Iron (by the help of a rolling Engine moved by Water) into as thin Plates as Tin. They cut their common Iron Bars into Pieces of about two Foot long; and, heating them glowing hot, place them betwixt these Iron Rollers, not across, but their Ends lying the same way as the Ends of the Rollers. The Rollers (moved with Water) drive out these Bars to such thin Plates, that their Breadth, which was about 4 Inches, becomes their Length, being extended to about 4 Foot; and what was before the Length of the Bars, is now the Breadth of the Plates. With these Plates he makes Furnaces, Pots, Kettles, Sauce-

Sauce-pans, &c. These he can afford at a cheap Rate, (about the third Part of what is usual) and yet dares warrant them not less serviceable.

n. 335. p.
500.

3.] In a steep Rock called *Craig y Park*, others in the Parish of *Ystrad Dyvodog*, we observed divers Veins of Coal, exposed to sight as naked as the Rock; and found a Flint-Ax, somewhat like those used by the *Americans*.

Figured
Stones.

At *Goldcliff* in *Monmouthshire* we had some variety of formed Stones: But what pleased me most, was an *Asteria* or Column Star-Stone, beset with Sprigs the whole Length of it, issuing from the Commissures of the Plates.

This County abounds with *Entrochi*; one whereof I saw in a Rock at the Isle of *Barry*, above 15 Inches in Length; and another about 10 Inches long, but as thick as a Cane. We took their Figures and Dimensions, but could not get off the Stones without breaking.

Inscriptions.
Fig. 60.

At *Kaer phily* Castle the People shewed us an Inscription (as they supposed) on one of the Steps of the Tower, *Fig. 60*. I must confess I am not fully satisfied whether it were ever designed for reading, or for some kind of antique Ornament; but rather incline to the latter. The Stone was not designed for a Step, there being none of the same kind in the whole Stair-Case. The Marks were mostly worn out by treading; and 'tis possible they might be once more uniform; and some few Mistakes may have happened in the copying it as it is. I have sent the Stone to the *Museum* at *Oxford*, where the Curious may be satisfied. Were it the old *Celtic* Character, which *Cæsar* says was like the *Greek*, it were a noble Discovery: But I fear our Ancestors (if ever they had any Writing) have left us none upon Stones.

Fig. 59.

I also copied the Masons Marks on some Stones there; whereby perhaps some Persons, curious in Architecture, may judge whether it has been a *Roman*, or later *British* Building: I say *Roman* or *British*, because the *Saxons* and *Danes* never settled here; and it is older than the *Norman* Conquest.

Fig. 61.

Figure 61 represents certain Plates which frequently occur amongst the *Entrochi* of this County.

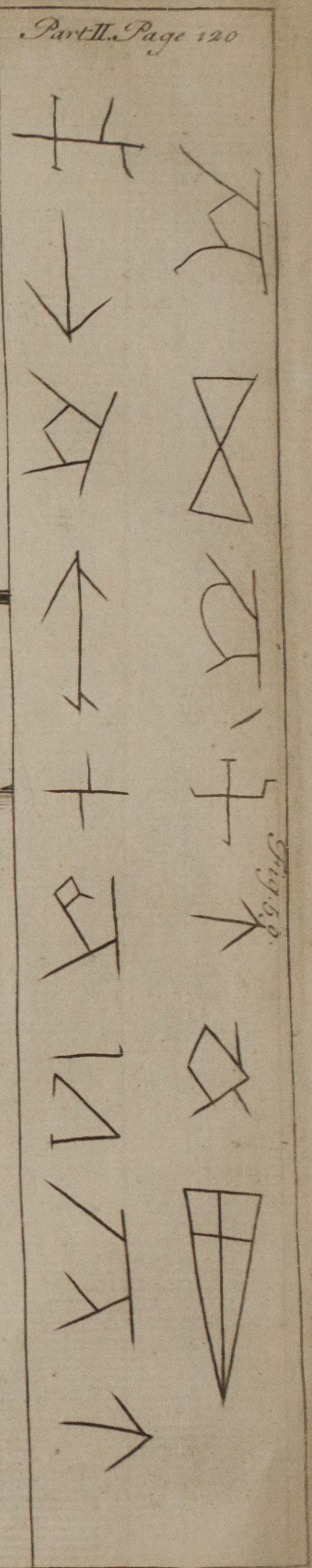
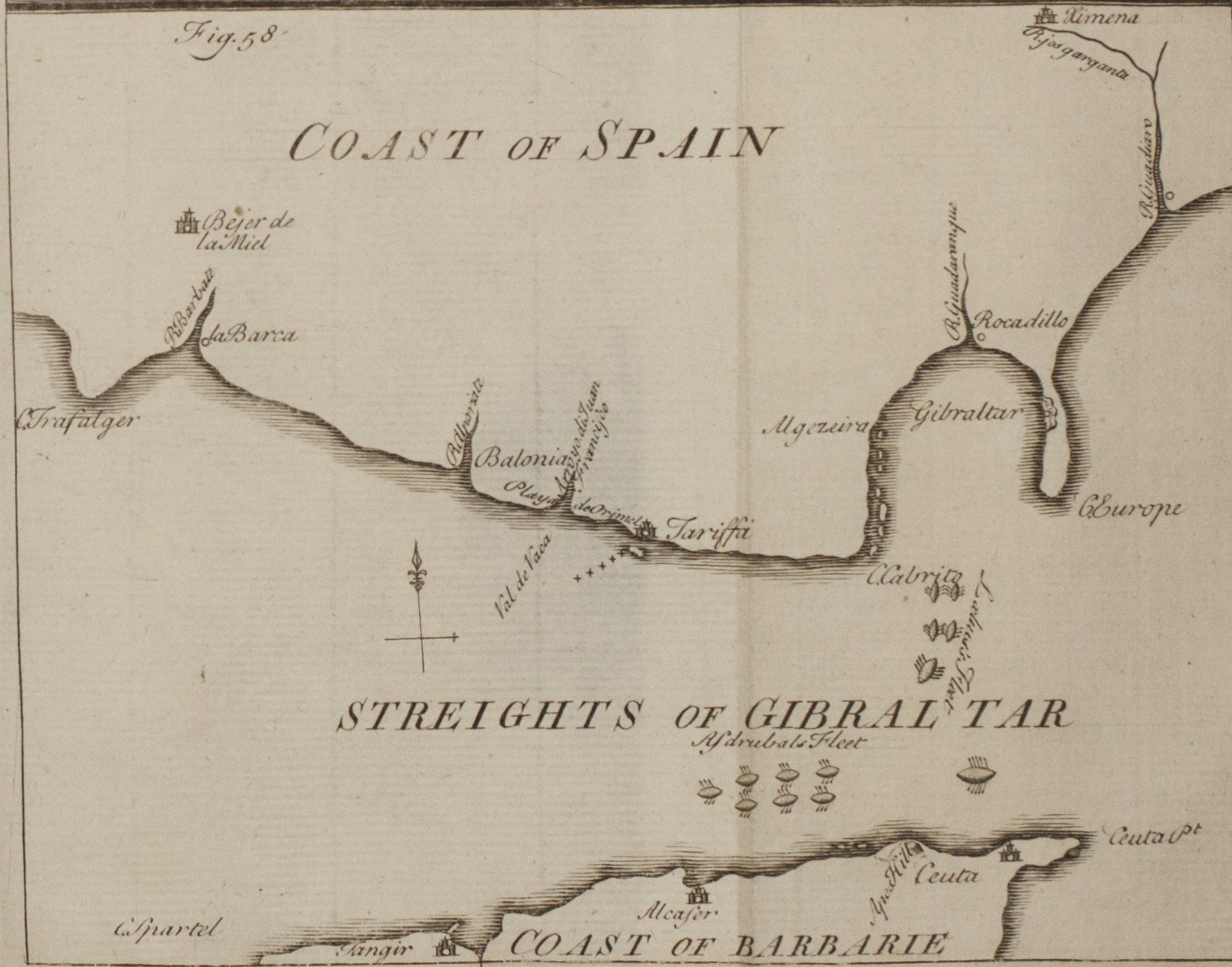
—in Corn-
wall. n. 336.
p. 527.

4.] I have met near *Penzans* with two or three *Stellæ*, and some other *Exanguia Marina*, which I have not seen before on our *British* Coasts.

We have also found some *Fuci*, which perhaps may be new, and I am told that the Fishermen sometimes take up the *Corallina Marina reticulata* by their Hooks.

n. 337.
p. 93.

5.] Amongst several others, I found one large Crystal above *Phynnon Urêch*, about 7 Inches long, and as thick as my Wrist. In *Monmouthshire* I met with large petrified *Vertebrae*, and some few formed Stones in each County.



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Fig. 60

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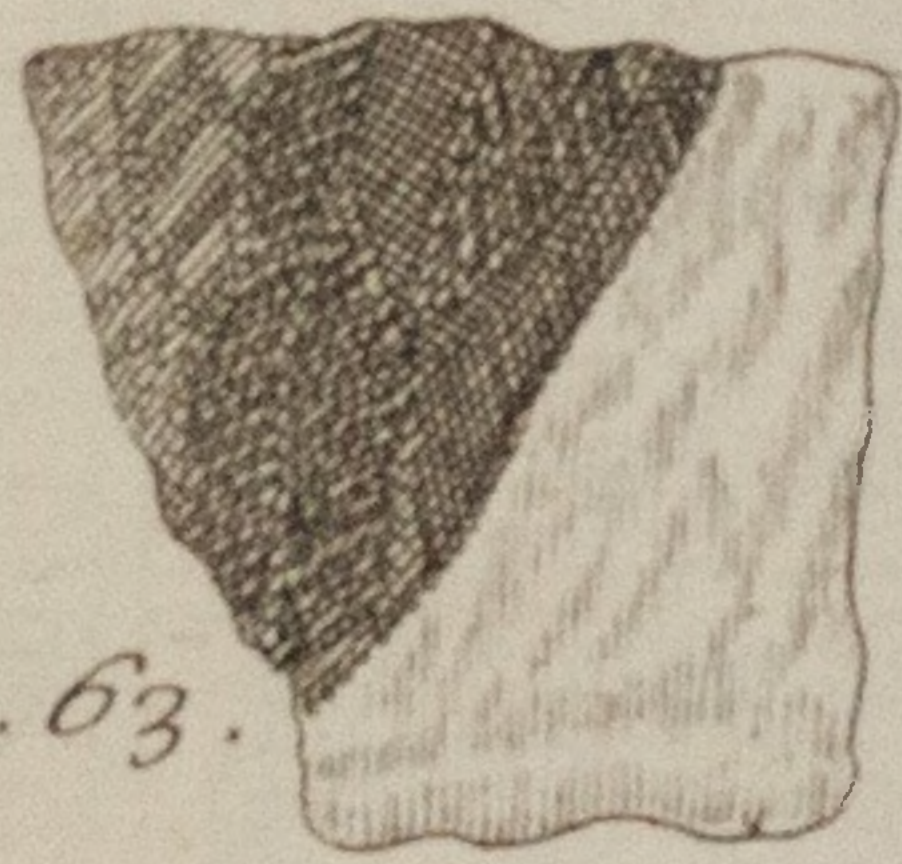


Fig. 63.

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Fig. 65.

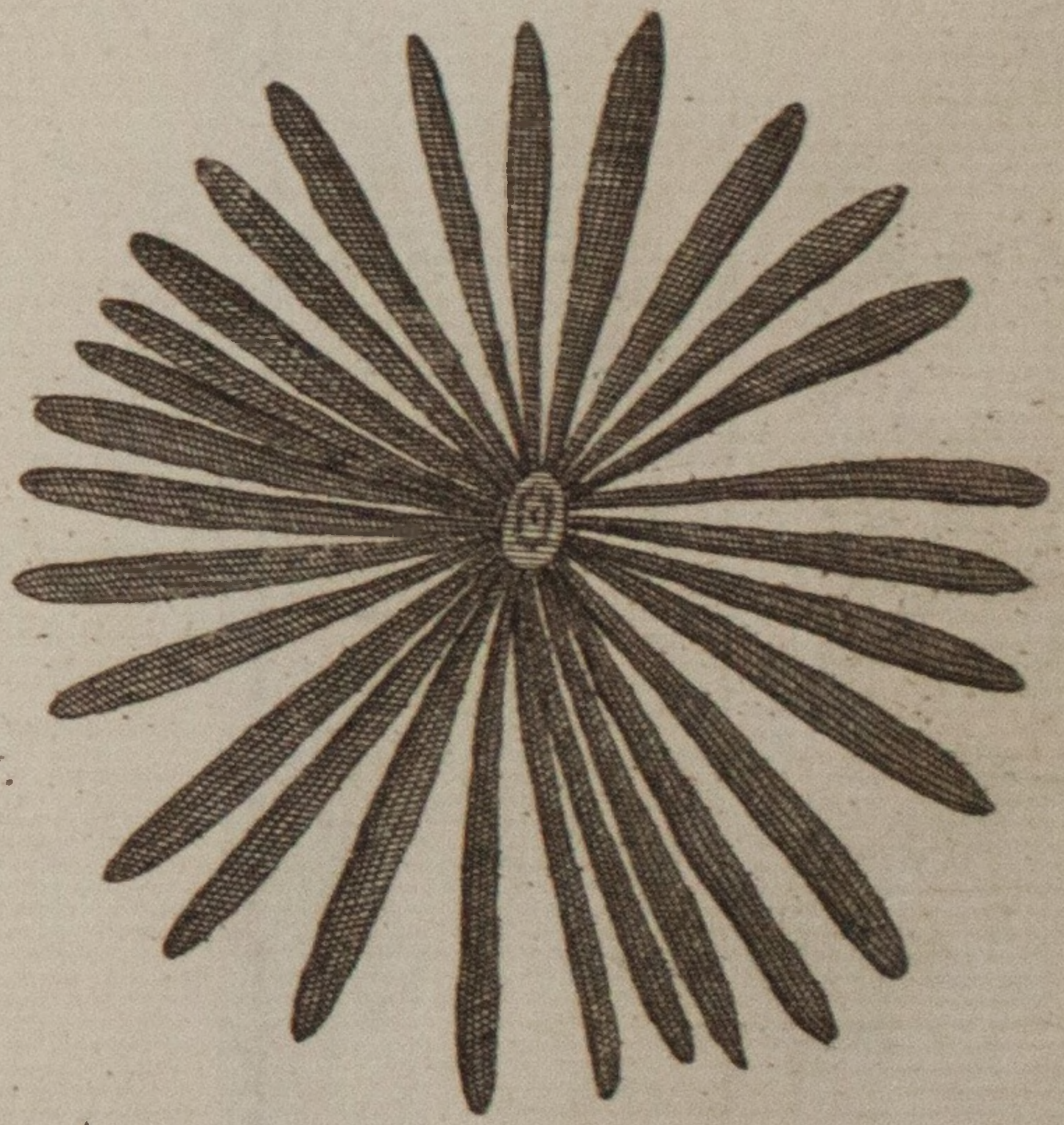


Fig. 66

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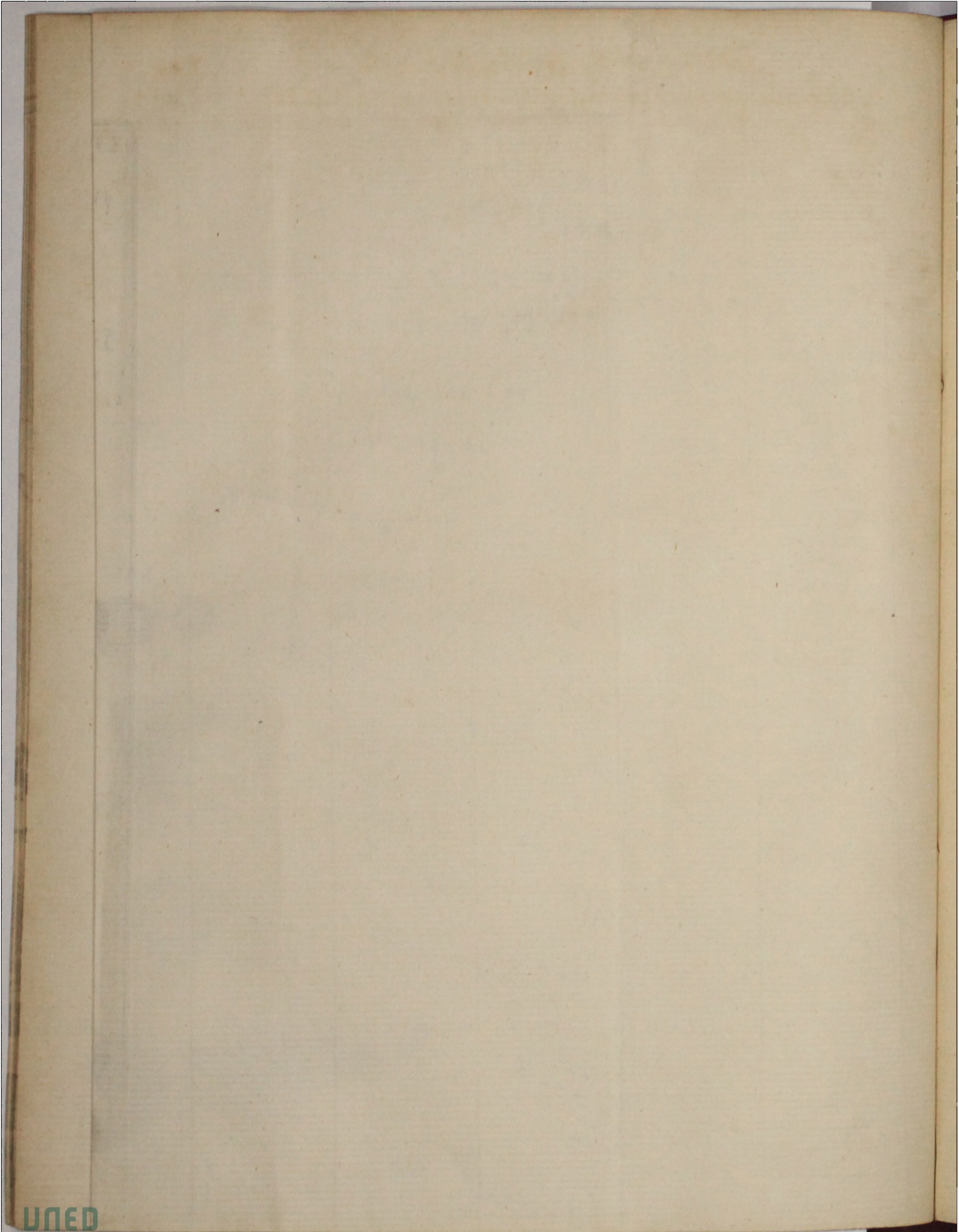
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Fig. 64



I spent three or four Days in the Coal-Pits of the Forest of *Dean*, where I found most of the Capillaries, besides some other new Plants, together with two Species of *Astropodium* gathered on the *Severn* Shoar; the only Rarities of the kind, I suppose, that have been discovered. I doubt not but the Coal Plants have been observed by the Workmen long since, though they escaped the Notice of Naturalists, who till this last Century contented themselves with bare reading and scribbling Paper. I find it well known to all our Country Colliers by the Name of *Carreg Redynog*, i. e. the Ferny Stone; and one Mr. *Williams*, Archdeacon of *Cardigan*, told me he had observed much finer Patterns 25 Years since in the Coal-Pits of *Glamorganshire*, than some that I shewed him. The whole *Braken* that *Kirkman* mentioned, was a noble Curiosity: We saw none such in the Forest; tho' we found them much larger than those you sent. The Stalks of Fern and Harts-tongue I think we often met with, but cannot say we saw any Roots. Indeed I know not well whether the Impressions of the Stalks might be easily distinguish'd from those of the Roots. We also often met with the membranaceous Substance of Leaves; and perhaps one or two of these Figures I send are the Representations of some Flowers.

Coal Plants.

Fig. 62. *Astropodium furcatum: sive stellæ marinæ Magellanicæ Radix lapidei.* Fig. 62.

Fig. 63. *Astropodium ramulosum: sive stellæ arborescentis Virgultum lapideum.* Fig. 63.

Fig. 64. *Hexapetalon carbonarium.*

Fig. 64.

Fig. 65. *Radiatula, &c. An Flos cujusdam Chrysanthemii?*

Fig. 65.

Fig. 66. *Phillitis trifolia.*

Fig. 66.

Fig. 67. *Abietis, an potius Lycopodij cujusdam ramulus?*

Fig. 67.

I have been very inquisitive about Coins of the Princes of *Wales*, but could never see one of them; tho' the Bishop of *Bangor* told me a Relation of his kept one of *Lhywelyn 'ab Iorworth*, who was contemporary with *Richard I.* and *K. John*, in his Pocket several Years, and shewed it many of the Bishop's Acquaintance, still living, who confirm it. By the Princes of *Wales* I understand the *British* Princes from *K. Kadwaladr* about the Year 600, to the last Prince *Lhwelyn ap Gruffydd* about the Year 1280. I have found several of the more ancient *British* Coins; whereof you see divers Figures in *Cambden*. Mr. *Nicholson* quotes *Cæsar* for the Britons having no Coins; whereas, on the contrary, *Cæsar's* Words are, *Nummo utuntur parvo & æneo*: Nor can I see any Reason to doubt of *British* Coins of all Sorts of Metal, till he or some other inform whose Coins those are which Mr. *Cambden* and other Writers take to be *British*.

Welsh Coins.

The Druid Beads are generally Glass. Since the last Edition of *Beads*. *Cambden* I have met with two or three of them, that had a Snake manifestly painted round them: So that I take it for granted, the *Ova Anguina* of the *British* Druids were these Glass Beads; tho' those of the *Gaulish* were the Shells of the *Echini orbiculati laticlavii*.

Plants.

We searched this Summer the high Mountain by *Brecknock*, called *Y Van uwch deni*; we met with *Sorbus legitimæ*, and *Sorbus torminalis* (grown to as great a height as the *Ornus*) neither of which had ever occur'd before in *Wales*. But of all these Topical Plants I was surprized at none so much as the *Capillus Veneris verus*, growing very plentifully out of a marly Incrustation, both at *Barry Island* and *Porth Kirig* in *Glamorganshire*, and out of no other Matter; and also that *Gnaphalium majus Americanum* should grow on the Banks of *Rymny River* (which runs altogether over *Iron-Stone*) for the Space of at least 12 Miles, beginning near the Fountain-Head in a Mountain of this County; and yet not a Plant of it to be seen elsewhere throughout *Wales*. In a great Lake called *Lbyn Savadban* I found a pellucid Plant I had never met with before: The Leaves are extraordinary thin and transparent, in Form not unlike small Dock-Leaves; but the middle Rib is continued beyond the Extremity, so that each Leaf has a soft Prickle at the End: We found there also the *Hippuris saxea*, and two elegant Sorts of small Leeches, which I suppose not describ'd.

The Limestone of this County affords small *Glossopetræ* and *Siliquastræ*; but they are but very scarce in comparison of the Quantity found in *Oxfordshire*, *Northamptonshire*, *Berks*, &c. The most considerable Rarities it affords are *Fairy Causeways*, which I call so in imitation of their *Giants Causeway* in *Ireland*, *si liceat magnis componere parva*: For whereas theirs may be half a Mile long, ours seldom exceed three Foot. Our Lime Quarries yield two or three Bodies congenious with it, though of a very different Form; and perhaps all may be referable to the *Coralline* Class.

Fig. 68.

Fig. 68. A green Adder's Bead adorn'd with Snakes Skeletons of a Citrine Colour.

Fig. 69.

Fig. 69. A black Adder's Bead adorned with nine small Snakes, or *cornua Ammonis*, of a whitish Blue.

Fig. 70.

Fig. 70. An Adder's Bead resembling Cherry-tree Gum, adorn'd with a Snake chequer'd of blue and white.

—v. 337.

p. 275.

Fig. 71.

A Sea Plant,
&c.

Fig. 71.

6.] I here send the Draught of a remarkable *Sea Plant* (Fig. 71.) which we met with a dredging for Oysters, near *Lban Dangw* in *Merionydshire*. The whole Plant is of a Straw-colour, and much of the bigness the Figure represents it. The Stems are hollow, and fill'd with a kind of thick reddish Liquor, as much like Blood or Gore as the Juice of Plants; insomuch that it seems referable to the *Zoophytes*. If you press these Stems at the Bottom betwixt your Fingers, the red Liquor is forc'd up, and causes the drooping Flowers (or Seed-vessels) to mount erect.

We have lately discover'd a sort of *Marble* in that County, which when polish'd represents a Number of small Oranges cut a-cross; the Reason whereof, is an infinite Quantity of *Porus* (or *Alcyonium*) stuck through the Stone. This might serve well for inlaying Work, as Tables, Windows, &c.

Wales

Wales affords a great Quantity of *Allum* and *Copperas*; particularly *Pembrokeshire*, and *Caermarthenshire* for the former; and *Meiriondyshire* for *Copperas*, where I saw a great Vein of *Pyrites* strongly impregnated.

IV. In this Kingdom our Travels in the High-lands were through *Cantire*, *Argyle* and *Lorn*, beside the Isles of *Mac y Chormic*, *Mul* and *y Colum Kil*; and in the Low-Lands through *Glasgow*, *Sterling* and *Edenbrough*. In the High-Lands we found the People every where civil enough; and had doubtless sped better as to our Enquiries, had we had the Language more perfect.

*Observations
in Natural
History, &c.
in Scotland,
by the same.
n. 337. p. 97.*

We met with several Inscriptions, but none of them *Roman*, nor indeed ancient: However, we copied all we met of two hundred Years standing, &c. for the sake of the Orthography of the *Irish* Names, which are writ differently from what is now usual.

We also took Figures of some Variety of their *Broaches*, or Silver and Brass *Fibulae* used by the Women to clasp their *Koleriv*, a Garment answering our Nightrails.

But what we were most diverted with, was their Variety of Amulets; many of which, (if not all) were certainly used by the *Druids*, and so have been handed down from Parents to Children ever since. Some of these may be render'd in *English*. 1. *Snake-button*. 2. *Cock-knee-Stone*. 3. *Toad-stone*. 4. *Snail-stone*. 5. *Mole-stone*. 6. *Shower-stone*, and, 7. *Elf-arrow*.

Amulets.

The *Snake-button* is the same described in the Notes on *Denbighshire*, in *Cambden*, by the Name of *Adder-Beads*: But there are of these great Variety, as to Colour and Ornament; infomuch, that betwixt *Wales* and the High-Lands, I have seen at least fifty Differences of them. In *Ireland*, though they are tenacious enough of all old Customs, I could hear nothing of them: So I conculde, that either the *Irish* had no *Druids*, or that their want of Snakes frustrated their advancing that Imposture amongst the People: But there were but a few Places where we enquired; and perhaps we may hereafter hear of them in other Parts of that Kingdom. Not only the Vulgar, but even Gentlemen of good Education throughout all *Scotland*, are fully persuaded the Snakes make them, though they are as plain Glass as any in a Bottle.

The *Cock-knee Stone* is an *Echinites pileatus minor* of Flint; which they firmly believe to be sometimes found in the Knees of old Cocks; and a Fellow in *Mul* protested to me, (though I was never the nearer believing him) that he had with his own Hands taken one of them out of a Cock's Knee; and named two or three others, who had done the like.

The *Toad-stone* is some Pebble, remarkable for its Shape, and sometimes Variety of Colours. This is presumed to prevent the burning of a House, and the sinking of a Boat: And if a Commander in the

Field has one of them about him, he will either be sure to win the Day, or all his Men shall fairly die on the Spot.

The *Snail-stone* is a small hollow Cylinder of blue Glass, composed of four or five Annulets; so that as to Form and Size it resembles a middling *Entrochus*. This, amongst others of its mysterious Virtues, cures sore Eyes.

The *Mole-stones* are Rings of blue Glass, annulated as the aforesaid Snail-stones.

They have the *Ombriæ pellucidæ*, (which are Crystall Balls or Hemispheres, or depressed Ovals) in great Esteem for curing of Cattle; and some on *May* day, put them into a Tub of Water, and besprinkle all their Cattle with that Water, to prevent their being Elf-struck, bewitch'd, &c. And,

As to this *Elf-striking*, their Opinion is, that the Fairies (having not much Power themselves to hurt Animal Bodies) do sometimes carry away Men in the Air, and furnishing them with Bows and Arrows, employ them to shoot Men, Cattle, &c. I doubt not but you have often seen of those Arrow-Heads they ascribe to Elfs or Fairies: They are just the same chip'd Flints the Natives of *New-England* head their Arrows with at this day; and there are also several Stone Hatchets found in this Kingdom, not unlike those of the *Americans*. I never heard of these Arrow-Heads nor Hatchets in *Wales*; and therefore would gladly be informed whether they have ever been found in *England*. These Elf-Arrow-Heads have not been used as Amulets above thirty or forty Years; but the Use of the rest is immemorial: Whence I gather they were not invented for Charms, but were once used for shooting here, as they are still in *America*. The most Curious, as well as the Vulgar throughout this Country, are satisfied they often drop out of the Air, being shot by Fairies, and relate many Instances of it; but for my part I must crave leave to suspend my Faith, until I see one of them descend.

Near *Glasgow* we found two Fossils *toto genere* new: One resembling the small Joints of a Lobster's Arm, but much longer; the other somewhat like a large *Glossopetræ*, or perhaps like the *Mucro* of a *Pinna Marina*. These figur'd Stones are found there in an Iron-Stone, tho' I never saw them in that kind of Matter in *Wales*. We found both Shells and *Entrochi* gone off to that Substance, having changed their Matter and much of their Shape.

Near the same Town, searching for these Fossils, I found in the midst of the Lime-stone some *Cochlitæ* composed of Flint; but *Conchitæ* of Spar gone off so far from the Shape of Shells, as hardly to be known, were it not from others in the same Place retaining their Shape more entirely.

The Principal of the College shew'd us Stones he had lately procured for the Library, having *Roman* Inscriptions. These we copied, and several others elsewhere of the same Date; whereof some are

printed

printed in *Cambden* (tho not very correctly) and others not yet published. They keep these Stones at *Glasgow* very carefully in the Library; and the Principal was daily expecting two or three more that had been promised him.

V. 1.] We continued not above three Days at *Dublin*, when we steer'd our Course towards the *Giants Causeway*. The most remarkable Curiosity we saw by the way, was a stately Mount at a Place called *New Grange* near *Drogheda*; having a number of huge Stones pitch'd on one end round about it, and a single one on the top. The Gentleman of the Village (one Mr. *Charles Campbel*) observing that under the green Turf, this Mount was wholly composed of Stones, and having occasion for some, employ'd his Servants to carry off a considerable Parcel of them; till they came at last to a very broad flat stone, rudely carved, and placed edgewise at the bottom of the Mount. This they discovered to be the Door of a Cave, which had a long Entry leading into it. At the first entring we were forced to creep; but still as we went on, the Pillars on each side of us were higher and higher; and coming into the Cave, we found it about 20 Foot high. In this Cave, on each hand of us, was a Cell or Apartment, and another went on straight forward opposite to the Entry. In those on each hand was a very broad shallow Bason of Stone, situated at the Edge. The Bason in the right-hand Apartment stood in another; that on the left-hand was single, and in the Apartment straight forward there was none at all. We observed that Water dropt into the right-hand Bason, tho' it had rained but little in many Days; and suspected that the lower Bason was intended to preserve the superfluous Liquor of the upper, (whether this Water were sacred, or whether it was for Blood in Sacrifice) that none might come to the ground. The great Pillars round this Cave, supporting the Mount, were not at all hewn or wrought; but were such rude Stones as those of *Abury* in *Wiltshire*, and rather more rude than those of *Stonehenge*: But those about the Basons, and some elsewhere, had such barbarous Sculpture (*viz.* spiral like a Snake, but without distinction of Head and Tail) as the forementioned Stone at the Entry of the Cave. There was no Flagging nor Floor to this Entry nor Cave; but any sort of loose Stones every where under Feet. They found several Bones in the Cave, and part of a Stag's (or else Elk's) Head, and some other things. which I omit, because the Labourers differ'd in their Account of them. A gold Coin of the Emperor *Valentinian*, being found near the Top of this Mount, might bespeak it *Roman*; but that the rude Carving at the Entry and in the Cave seems to denote it a barbarous Monument, So the Coin proving it ancients than any Invasion of the *Ostmans* or *Danes*, and the Carving and rude Sculpture, barbarous; it should follow, that it was some Place of Sacrifice or Burial of the ancient *Irish*.

*Observations
in Natural
History, and
Antiquities
in Ireland,
by the same.
n. 335. p. 503.*

The

Vid. supra,
V. ii. C. iii.
S. lxxvi.

The *Giants Causeway* is so well described in the *Phil. Trans.* [N^o 212, & 241.] that nothing can be added to that Account of it. We have the same Stone on the Top of *Cader Idris*, one of the highest Mountains of North-Wales; but ours is less elegant, and does not at all break off in Joints; nor could I satisfy myself that there are set Joints (as in the *Entrockus* and *Asteria*) in the *Basaltes* of *Ireland*; but that it is the Nature of the Stone to break off in such a convex Form. However, we could perceive no Seams in these Pillars, excepting on those Sides that were exposed to the Weather.

Another remarkable Curiosity we met with, was a Copper-Trumpet like a Sow-Gelder's Horn; having the Hole for sounding near the midst, and two Rings at the smaller End, above two Foot long. Three of these were found in an old *Carn* (*i. e.* a great Heap of Stones) at *Balle Niwr* near *Carreg Fergus*.

We could make nothing of the Petrifying Quality of *Loch Neach*; but that they sometimes find Stones there, having the Grain of Wood.

We met with some *Irish* Inscriptions there, and others here; which none of the Critics in that Language we conversed with could interpret.

Near *Larne* in *Antrim* we met with one *Eoin Agniw*, whose Ancestors had been Hereditary Poets for many Generations, to the Family of the *O-Neals*; but the Lands they held thereby being taken away from his Father, he had forsaken the Muses, and betaken himself to the Plough: So we made an easy Purchase of about a dozen ancient Manuscripts on Parchment.

The *Potato* is not indigenous of *Ireland*. The *Arbutus* is, for what I can yet understand, the same with the common: And for the *Sabina*, I doubt my Friend I sent to *Kerri* (whom I have not yet seen) will bring me no News of it.

I have the Account of the living Fossil Muscles attested and signed by the four Persons present at the finding them; so that nothing but its being a singular Instance makes me scruple the Relation: But the Labourers have such a Character for Veracity, that I rather incline to believe it, than to doubt.

n. 336.
P. 524.

2.] For Antiquities, *Ireland* affords us no great Variety. I have in divers Parts of the Kingdom pick'd up about 20 or 30 *Irish* Manuscripts on Parchment; many of which are insignificant Romances: But the Ignorance of their Critics is such, that tho' I consulted the chiefest of them, as *O-Flaberty* (Author of the *Ogygia*) and several others, they could scarce interpret one Page of all my Manuscripts; and this is occasion'd by the want of a Dictionary of that Language. What I most value amongst them are their old Laws, which might give some Light to the Curious as to many of their National Customs, and some of their old Poems: But all are of use to any that would

com-

compose a Dictionary of that Language; which was anciently (considering the Narrowness of their Knowledge as to Arts and Sciences) doubtless very copious.

I saw no Coins found there, but a Roman Gold Coin of *Valentinian Jun.* several of our old *English* since the Conquest; and one cast Brass Piece inscribed with *Runick* Letters, which I take to have been a *Danish* Amulet.

Several of our old *British* Monuments, called *Kaer, Karn, Cromlech,* &c. we met with; and found that they distinguished them by the same Names.

What were peculiar to themselves, were their high round Towers for Belfreys; their round Intrenchments, commonly called *Danes Rathes*: and the *Elf-Arrow Heads* of Flint.

About *Slego* and *Bali Shany* we had good Success as to figur'd Stones; where we met with Variety of *Astropodia* and *Astrorrhizæ*, or *Modioli*, not yet figured or described, together with other Curiosities in that kind; all which (together with the Manuscripts) I have long since sent to *Oxford*.

In the same Neighbourhood, on the Mountains of *Ben Bulben* and *Ben Buisghen*, we met with a Number of the rare Mountain-Plants of *England* and *Wales*, and three or four not yet discover'd in *Britain*.

In most of the Mountains of *Galloway* and *Mayo* grows an elegant Sort of Heath, bearing large Thyme-Leaves, a Spike of fair purple Flowers like some *Campanula*, and viscous Stalks. I know not whether it be any thing related to the *Cisti Ladaniferæ*.

In the same Places *Pinguicula flore carneo minore* is a common Plant, and a sort of *Ros Solis*, which I take to be undescribed.

On the Mountains of *Keri*, *Sanicula guttata* grows in abundance; together with some other rare Plants: But the Tories frustrated our Curiosity here, tho' no where else in the Kingdom.

We met with some Marine Animals of the Exanguious kind, that were Strangers to us.

VI. When the Small-pox is Epidemical in the main Land over a-
gainst *Skie-Isle* on the S. E. and East, and likewise in *Skie-Isle*, the Na-
tives bathe their Children in an Infusion of *Juniper* Wood, and they
generally escape; whereas those who neglect this Precaution, are ob-
serv'd often to die: Of this I have seen several Instances.

Medical Ob-
servations in
Scotland, by
Mr. M. Mar-
tin, n. 312.
p. 2470.

The Plant *Water-Lilly* being apply'd to the pain'd Part of the Body where a *Felon* is fix'd, it is observ'd that it forces its Passage quickly in that Place through the Skin.

The *Red-hot* Iron is commonly used in piercing an Inch deep in the Arms or Legs, and cures several Distempers.

A Wound or *Scarification* across the Crown of the *Head* cures Fluxes and *Dysenteries*. The Blood being stanch'd, the Wound is cur'd as other Wounds commonly are.

Silverweed is used as Hops in brewing Beer.

VII.

Remarkables
in a Journey
through Den-
mark and
Holland, by
Dr. W. Oliver.
n. 285.
p. 1400.

—Denmark:

VII. The Colleges and Schools in *Copenhagen*, both as to their Structure and Foundations, are very ordinary: The best I saw there, was the Gift of the Learned *Borrichius*, and consists of twelve Apartments for as many Students, which are conveniently provided with Stoves for their manner of living in that cold Country. There is in it a small School for publick Exercises, and a little Library belonging to their College; the rest of the Students, except one hundred maintained by the King in small Colleges, live at Lodgings in the City, as at *Leyden* and at other Universities abroad, who, when the *Swedes* threatn'd them with a Bombardment in the Year 1700, formed themselves into a Battalion, and did Duty there all the while the Enemy was on the Island of *Zealand*. There are in this University, erected about two hundred Years ago, about a Thousand Students, and sometimes they have had near fifteen hundred.

The University Library, over one of their Churches, in one large Room, consists of several Libraries, the Gift of particular Men, which are kept apart, with the Benefactors Names over them in Capital Letters. The Royal Library, belonging to the King, consists of a great Variety of Books, well condition'd and well chosen, of all Languages; the Books of each Country being placed by themselves: The Room is large and well built, and has a large Gallery supported by Pillars on each Side. If *Gudius's* Library at *Gluckstadt* be added to this, as I was told it wou'd, this Library may be reckon'd of the first Rank of the *European* Libraries.

The King's Chambers of Rarities are in all eight, large and well built, over the Royal Library: They are furnished with great Variety of Natural and Artificial Curiosities. The first contains Coins and Medals, Gold and Silver; Modern and Antique; *Grecian*, *Roman*, *Danish*, and *Oldenburgh*; besides other *European* Nations, distinctly kept, by themselves, which make all together a very valuable Collection. Amongst the *Natural* Curiosities which are in the other Chambers, the most remarkable are;

Natural Cu-
riosities.

1. The *Petrified Child*. This is the same Child that *Bartholine* makes mention of in his *Hist. Anat. Paræus*, *Licetus de Monstris*, &c. who give the History at large. This happen'd at *Sens* in *Champaign*, anno 1582, when it was cut out of its Mothers Belly, where it was supposed to have lain about twenty-eight Years.

That it is an Human *Fætus*, and not Artificial, is visible to our Eye. The upper part of it is of a gypseous Nature, not so hard as the lower, the Thighs and Buttocks being hard and perfect Stone as can be, of a red Colour, and of a Grain and Superficies exactly like those I have seen taken out of the Bladder. I touch'd and felt it all over. This was convey'd first to *Paris*, and there bought by a Goldsmith of *Venice*; from whom, at *Venice*, *Frederick III.* King of *Denmark*, purchas'd it, and added it to his Rarities.

2. Two

2. Two *Elephant's Teeth*, that weigh an hundred and fifty Pounds apiece.

3. Several Heads of *Hares*, with divers sorts of *Horns*, brought out of *Saxony*.

4. An *Egg*, said to be laid by a *Woman*, of the ordinary size of a *Pullet's Egg*. This, *Ol. Wormius* tells us, was sent him by very good Hands, and confirm'd by People of Credit. He tells us, the *Woman* brought forth two with the usual *Child-bed-labour Pains*: Her Neighbours being called in to her Assistance, the first they broke, and found a *Yolk* and a *White*, as in that of a *Hen*; the second was kept and sent to him. *Vid. Mus. Worm. p. M. 312. Jo. Rod. Cent. 3. obs. 57.*

5. The *Horn* of a *Sea Unicorn*, or *Monoceros*, so called by the Learned, because supposed to have but one: But sometimes more are found to grow out of the upper *Jaw*; and I was credibly informed at *Copenhagen*, that one *Koens*, a *Hamburgber*, brought home from *Greenland* the Head of one of these with two *Horns* on it. And when I saw this, and examin'd it well, I found this *Horn* (part of the *Head* and upper *Jaw* being brought home with it) not to grow out of the middle, but left side of the upper *Jaw*; so that 'tis probable there was a *Fellow*, and then they may be said more properly to be his *Teeth* or *Tusks* than his *Horns*. Whether this was only a *Lusus Naturæ* or no, or naturally these carry only one *Horn*, as they are represented in the *Cuts* and *Figures* our *Naturalists* give us of them, I shall not determine.

6. Several Pieces of *Gold Ore* very rich, and some almost fine, dug out of the *Mines* of *Norway* and *Hungary*.

7. Several large Pieces of *Silver Ore*, dug also out of the *Mines* of *Norway*, one of which weigh'd five hundred and sixty pounds, an. 1666, five Foot and six Inches long, and four Foot about, valued at five thousand *Crowns*: Another from *Norway*, also valued at three thousand two hundred seventy two *Crowns*. I observed a great many *silver Threads* or *Trees* sprouting out of these two Pieces, and fancy the whole *Mass* had not above a fourth part of any baser *Metal*, *Mineral*, or *Earth* mixt with it. There are several of these *silver Ramifications* or *Trees*, all from *Norway*, which I take to be *Virgin Silver* and pure *Metal*.

8. A great Variety of very large Pieces of *Amber*; some dug out of the *Island* of *Anaker* near *Copenhagen*, and some when they were opening the *Ditches* for the *Fortifications* of *Copenhagen*: Some of these weigh about forty or fifty *Ounces*, and were found every where sticking fast to Pieces of black *Timber* like *Ebony*. Whether *Amber* be of the *Vegetable*, or *Mineral Kingdom*, would be too long a *Dispute* at present to be determin'd: All I shall say at this time on this Matter, is, That the *Observations* I made, when in *Poland* and *Prussia*, where I have seen great *Quantities* fished out of the *Sea* every day, and dug out of the *Earth*, incline me to the former; nor can I conceive how those *Animals*, that are found intomb'd in *Amber*, and are most of them,

if not all, Inhabitants of the Surface of the Earth, should be caught in it, if it were only Liquid when in the Bowels of the Earth.

9. A numerous Collection of very large Branches of *Coral*, white and red, and one black.

10. A large pair of *Stags Horns* growing out of a Piece of wood, after a very strange manner.

11. Another Branch of a *Stag's Horn*, with a large piece of Wood naturally adhering to the Top of it; the Top of the Horn piercing the very Body of the Wood, and growing some Inches beyond it.

12. A *Sheep*, with a Horn growing out of its *Side* about a Foot long.

13. I measured the *Thigh-bone* of a *Human Body*, I suppose, that was three Foot and three Inches long; the Head was two Foot and five Inches round, and the middle of it was nineteen Inches and a half about.

14. Two very large *Scollop Shells*, that weigh two hundred twenty-four Pounds each.

15. A Piece of *Marble*, with a *natural* Representation of a *Crucifix* on its Outside, mightily valued by the *Lutherans*. And I remember *Dr. Hartman*, who wrote *de Succino Prussiaco*, shew'd me at *Koningsberg*, in *Prussia*, a Piece of whitish Amber, having a Woman with a Child in her Arms prettily represented by Variety of Colours on the Superficies. I suspected it to be Artificial; but he assured me the contrary, and kept it very religiously.

There were besides these a great many more natural Rarities, which my short Stay there would not permit me to examine.

Artificial Curiosities.

Amongst the Artificial Curiosities: 1. A *Skeleton* made of *Ivory* in imitation of a Human Skeleton, two Foot and six Inches long, so artificially and curiously put together, that any one well skill'd in *Osteology* may take it for a natural one.

2. Two *Crucifixes* of *Ivory*, with the whole History of our Saviour's Passion, extremely well carved and exprest, and are both a very pretty Curiosity. I saw there a great Variety of Nicknacks made of *Ivory*, curiously wrought on the Outside: A small *Man of War* of *Ivory*, with Silver Guns in it; several small *Sloops* and *Galleys* of the same, and one of the *Unicorn's-Horn*, with a Gold Anchor.

3. A *Watch* made of *Ivory*, with all its Wheels and Motions. Several other Utensils made of *Ivory* and *Unicorn's-Horn*, prettily carved and turn'd: Besides some others of *Ebony*, *Heart Oak*, *Box*, *Amber*, *Silver*, *Brass*, &c. which are kept together for the Curiosity of the Workmanship.

4. In another Chamber there is nothing but the Garments, Arms and Utensils of *Indians*, *Turks*, *Greenlanders*, and other barbarous Nations, which for their Number and Variety entertain the Eye with a very agreeable Pleasure.

5. A Perspective of the late King of *Denmark's* Family, the Queen's Face being in the Middle, and eight Princes and Princesses round her;

yet

yet all club to make the Face of the King, thro' a Hole of a Glass Tube.

6. Six *Golden Sepulchral Urns*, found in the Island of *Fuenen*, an. 1685, by a Boor there, as he was ploughing his Land; they were full of Ashes or greyish Earth when found. The biggest is two Ounces and a half, the other five about two Ounces and a Drachm. This confirms the Accounts given us by *Saxo Grammaticus*, *Olaus Wormius*, and others, that it was a very ancient Custom among the Northern Nations to burn their Dead, and then bury their collected Ashes in Golden Urns. They were very thin, and had three Rings of Gold round their Necks, and several Circles one within another, with one common Center carved on the Outside round the Body of the Urn. They held between four and five Ounces of Liquids.

7. Another Sepulchral *Urn of Crystal*, of a conical Figure, found near *Bergen* in *Norway* about thirty years since, with a Gold Wire about it, that weighs eight Ounces.

8. I saw in another Chamber several *Urnæ Lacrymales*, in which were collected the Tears of Friends, which afterwards the old *Romans* mix'd with the Ashes of the Dead: These were some of Glass, and some of Earth, and of several Sizes. Brass *Lamps* of several Magnitudes and Shapes; some of other Metals, others of Earth, in the shape of Animals or Idols, that were worshipped by the Ancients. The *Stilus Æneus* of the *Romans*, the one end sharp, the other blunt; the first to write with, the other to rub out what was written.

9. The large *Danish Horn*, of pure Gold, weighs an hundred two Ounces and an half, is two Foot and nine Inches long, and holds about two Quarts of our Measure. This Horn was found anno 1639, accidentally by a Country-Girl in the Diocese of *Rippon* in *Jutland*: 'Tis no doubt, some *Runic* Piece of great Antiquity, by the Figures carv'd on the outside, which seem to be Hieroglyphicks, monstrous Shapes of Devils, Hobgoblins, &c. perhaps some of these might represent their Gods, and probably this Horn was used in their Sacrifices, as of old among the *Assyrians*, and other ancient Nations, who were wont on solemn Occasions to entertain the Croud with mighty Noises of Horns and Trumpets, or rather to drink out of at their solemn Treats.

10. The *Oldenburgh Horn*, of pure Silver, gilt with Gold, and variously enamell'd with green and purple Colours, and weighs about four Pounds. The *Danish* Antiquaries tell us strange fabulous Stories of this Horn, which I shall omit at present; only observing, that whereas they say this Horn was given to Earl *Otho* of *Oldenburgh*, anno 989, by the Workmanship of it 'tis plain it cannot be of that Date: for the Figures and Characters engrav'd and emboss'd on its Outside are modern; which, with the Enamelling and other Ornaments, all curiously done, please the Sight mightily, and make a very fine, as well as valuable Curiosity. I found in the same Chamber a great many

Horns of this kind, some in Metal, some of Bullocks Horns tipt with Gold about the Edges, others of Ivory, Unicorns Horns, &c. all prettily wrought on the Outside with great Variety of Emblematical Fancies, according to the Humours of those Countries and Times they were made in; which were so many Cups to drink out of at their solemn Entertainments; and this of *Oldenburg* was finer than the rest, because designed for the Royal Table. 'Tis said to be made by Command of *Christian I.* who lived in the fifteenth Century, and did it in honour of the three Kings of *Cullein*.

Tycho Brahe's Castle.

I went one day ashore on the Island of *Weenen*, which our Sailors call *Scarlet Island*, from a Tradition, that *Q. Elizabeth* offered as much Scarlet Cloth for it as would cover it. This Island is now an Appendix to *Schonen* in *Sweden*, not above half a League from the main Land. Here I observ'd the Ruins of *Tycho Brahe's* Castle, which he built on this Island, given him by King *Ferdinand*, who supply'd him with Money for the carrying it on in the Year 1567. This Castle was built in the middle of the Island, but is now demolish'd, and quite razed to the Ground, and all the Vaults and under-ground Works fill'd up, except the large Observatory, which, *Gassendus* tells us, was distinguish'd from all the rest of his Apartments under-ground, that were very many, by a solid round Stone Wall, part of which remains still. This was his great Observatory, and was called by him *Stellæburgum*, or the City of Stars; as the Castle was *Uraniburgum*, or the City of the Heavens. The Situation was pleasant no doubt, it being on a very little rising Ground, in the middle of a plain Island, not above three Miles round. The same Author tells us, the King of *Denmark's* Liberality was so great towards this learned Man, that the best Workmen were employ'd about it, and every thing well contrived both for Pleasure and Conveniencies of Room, for Instruments and Astronomical Observations above and under-ground, besides noble Gardens, Fish-Ponds, and a Park; But by the Fate of War between *Sweden* and *Denmark*, no one Stone is left of this magnificent Superstructure. His Instruments that were very fine, are now scattered up and down in *Germany*, and some few remain in *Copenhagen*; his own Cœlestial Globe I saw there in the *Round Tower*, which was six Foot and three Quarters in Diameter.

This Tower was built 1601, for the making Astronomical Observations, near the Royal College in *Copenhagen*, and is above a hundred and fifty Foot high, whose *Area* at the top is sixty Foot Diameter: The Passage up to it is large enough for two Coaches, and the Ascent so easy and hardly perceivable, that it serv'd for a Place of Parade for their Gentry, when they had a mind to take the Air in their Coaches, riding up to the top, and so round the Ring, as well as for an Observatory.

But Monsieur *Romer* has converted the upper part of this Tower now to other Uses, where in a dark Room he has his Instruments for Ob-

Observation. Here I saw his Machine for observing the Stars by Day : There is a Pole eight or ten Foot long, erected perpendicular in the Center of an Equinoctial Plane ; on the Top of this Pole is fasten'd a Telescope, not much above three Foot long, which runs through the Roof of the Chamber, whose Elevation is directed by an Astronomical Dial upon the Equinoctial Plane, with an Index fitted to it for that purpose, which determines it to the Star he has a mind to observe at any time.

He is said to be the Inventer of two other Machines of great Artifice and Use : By the one he will shew at any time the Station of any Planet, according to the *Copernican* Hypothesis ; by the other he will demonstrate all the Eclipses of Sun or Moon past or to come.

There is, besides all these, in the King's House in the Garden at *Copenhagen*, a Royal Throne all of Unicorns Horn, on which all the Kings of *Denmark* are seated at their Coronation ; but this, when I was there, with the rest of the *Regalia*, was secured and carried away, because they wou'd have been too much exposed, had the King of *Sweden* bombarded this Town, as it was fear'd, when he landed on the Island, being but a little within the Wall towards the Land-side.

The Royal Throne.

In the Year 1685, I was at *Koningsberg* in *Prussia*, where I saw the Knife which was swallow'd by a *Prussian* Boor ; who, being crop-sick one Morning, thrust the Haft of his Knife down his Throat, in order to make himself discharge what offended his Stomach ; but forcing the Knife too far, it slipt down his Gullet into his Stomach ; from whence it was taken out by an Incision of the left Side, a little below the short Ribs, with that Success, that he lived several Years after it in very good Health. This happen'd in the Year 1635. The Operation was perform'd by Dr. *Daniel Swab*, a Physician and Surgeon, and the Knife is kept in a Velvet Bag in the King of *Prussia's* Library, where I saw it. I measured it, and found it to be of our Measure, but six Inches and about a half long, as it is express'd in the Cuts given us of it. What their Authors mean, by saying the Knife was *decem transversos digitos longum*, I don't know.

The Prussian Knife, &c.

I made Enquiry concerning it, and was very well assured by several People of the Town the Matter of Fact was true ; and 'tis hard to think, the King of *Poland*, who was then at *Koningsberg*, the Government of the City, and the College of Physicians, who were consulted upon the Operation, and, together with his *Polish* Majesty, were Eye-witnesses of it, shou'd, by the Certificates they have publish'd of it in Print, contrive to impose a Cheat upon the World. And I remember, talking one day with one Mr. *Taylor*, a *Scotch* Merchant in *Koningsberg*, he told me, that *Andrew Grunbeide* was his particular Friend and Acquaintance ; that he saw his Wound several times when his Surgeons dress'd him, and was Godfather to one or two of his Children after his Recovery.

When

— Holland.
An American
Vulture.

When I was at *Amsterdam*, I had the Curiosity to go to a Tavern, where the Master was very curious in Birds, and had a great Variety of some very uncommon ones; amongst which, in a Chamber by itself, he shew'd me a Cage with a Bird in it little bigger than a Capon, which he valued as a great Rarity, and told me it cost him near a hundred Pounds Sterling: He takes a Groat from every body that is admitted to see it. I must needs say I never saw a more beautiful Creature in all my Life; in Body somewhat like a Hawk, but its Head and Neck bald like a Vulture, only a few short Feathers over his Eyes like Eye-brows; his Eyes were pretty large, and the *Iris* of a very fine bright Pearl-Colour, which gave a great Beauty to this Bird. The Colour of his Feathers is so curiously mixt with that Variety, that no Painter can imitate them, and entertains the Eye with a great deal of Pleasure: His Bill and Head in Shape are more like the Eagle than the Vulture, tho' I take it to be of the kind of the latter, but of the lesser sort.

The Bird came from *Cartbagena* in *America*, and may be described thus: *Vultur Americanus minor Cartbagenæ Corpore eleganti & plumis admodum concinne variegatis*. I presume this Bird can hardly be of the same kind with those Vultures *Monardes* tells us of in the Islands near *Lima* in *Peru*, that prey'd on their living Cattle in the Fields, if not carefully watch'd by their Keepers.

I did not see the Cherry-stone in the King of *Denmark's* Cabinet, which I was told had some hundreds of Heads engraved on the Outside of it; but I remember an *English* Gentleman shewed me once in *Holland*, in the Year 87, a Cherry-stone of this kind with a hundred and twenty-four Heads on the Out-side of it, so that you might distinguish with the naked Eye Popes, Emperors, Kings and Cardinals, by their Crowns and Mitres. 'Twas bought in *Prussia*, where it was made, for three hundred Pounds *English*, and is now in *London*, there having been a Law-suit not long since commenc'd about it in *Chancery*. Whether this, or any artificial Curiosities before-mention'd of Ivory, &c. may compare with *Homer* in a Nut-shell; or the Ivory Ants and other small Creatures said to be made by *Callicrates*, whose Parts were so very small, that no-body could see them, so as to distinguish one from another, but he that made them; or the Ivory Chariot made by *Mermecides*, which a Fly cover'd with his Wing, and a Ship of the same hid under the Wing of a Bee? And if those things be true, as *Pliny* and *Solinus* tell us, whether the Ancients have not out-done us in such a kind of Impertinencies, I leave others to judge.

Remarkables
in several
Parts of Eu-
rope, by Mr.
C. Ellis. n. 286.
p. 1416.

VIII. At *Haerlem*, *Van Dalen*, the Author *de Oraculis* shew'd me a Curiosity of a young Lady born deaf and dumb, yet taught by Dr. *Amman* to speak very intelligibly. I heard her read *Dutch* and *Latin*; she is about 17 Years old.

I was

I was surpriz'd at *Amsterdam* to see a most curious *Physick Garden*, admirably constructed, and in excellent Order, which, because it has more Space and foreign Plants, far exceeds *Leyden*. Here are also *Series Lætionum*. Our Travellers have not made much mention of these Things, nor any at all of *Boln*, where is a Chamber well furnish'd with Rarities, considering there is no University, Schools nor Gardens, nor any Professors. There occur'd here a Rarity not then publickly expos'd, two Female Children join'd together from the Neck to the Navel; their Posture was with Arms embracing, and Legs twisted, all Parts and Joints entire to both, the *Viscera* too all double and perfect; the Head only single, but appertaining to both, and looking over the right Shoulder of one, and the left of the other. They had been opened before I saw them. I could not learn by the Mother or Father, whether the *Aspera Arteria* and *Gulæ* did not divide as they enter'd into the Stomach and Lungs, or whether they were continued separate, nor any Account of the Brain: They were born alive before seven Months: The Father, *John Ameston*, a *French* Soldier, but deserted to this Place. He preserves them with the Skin and Muscles, by sponging them with Spirit of Wine. He asks 300 Guilders for them.

At *Maestricht* I went into the Quarry, of which there is an Account in the *Transactions* †; but it is more wonderful than there describ'd, and more large, being three Hours in Length, and one in Breadth, and capable to shelter 100000 Men. It cost me a Fit of an Ague, through its excessive Chilness. The Stone dug from hence is much like our *Kettering*; the Jesuits have here a very fine Chapel built of it.

† *Vid. supra*,
V. ii. C. iii.
S. lv.

Franciscus Linus's Dials at *Liege*, the Original of those formerly in our *Privy-Garden*, are shamfully gone to decay, none remaining of Use, but that which distinguishes the Hours by feeling, and the Globe, which shews it in all other Parts of the World. Here is but one in the Society that understands any thing of this Matter, and he is endeavouring to make a Water-Dial, that shall have a Flux and Reflux like the Sea; but it is yet brought to no Perfection.

At *Namur* are no Curiosities but Military, except only the *Cachot* cut in the Rock of the Castle, with Apartments for 600 Men, and all Rooms of Use, as Kitchens, &c. This was done by the Order of *Mareschal Boufflers*, to defend the Garison from the Bombs, and was the Labour of four Years.

At *Liege* is Sir *John Mandevil's* Tomb, whose Epitaph is also at *St. Albans* with us, which may be hard to be reconciled.

Since my coming to *Bruxelles*, I have seen a young *Friesland* Boy of about five Years old, round the Pupil of whose Eye they pretend is naturally engraven *Deus Meus*, and the same in *Hebrew*. This is look'd upon as a prodigious Miracle in these Parts; but upon nice surveying it, I could perceive it was only the *Iris* of the Eye not circularly join'd, but lash'd out into *Fimbriæ*, which here and there might be thought

thought to form some imaginary Letters; as beginning at the *Lacrymal* Corner of the left Eye, there is something like D & I & V; but not a Footstep for the strongest Fancy to work out any more, nor any Letters of *Hebrew* in the right Eye, as they pretended. I don't doubt, but as the Boy grows up, the others may conjoin again.

In another Letter from the *Hague*, dated *June 16. 1699*, the same Person writes, that at this Place there are very few natural Curiosities; but a Piece of Art, that of its sort I believe never was parallel'd, which is perform'd by one *Elizabeth Pyberg*, who cuts in Paper not only Towns, as *Loo*, and *Hounslerdyke*, but Faces to an extreme Likeness. She has done King *William* and Queen *Mary* better than any Limner I ever saw, and refuses 1000 Guilders for the Pieces; it is so curious, that I could not believe the Queen's Drapery not to be Point, till I had most exquisitely enquired into it.

*Observations
in a Journey
through Italy,
by Dr. J. P.
Breynius.
n. 334.
p. 447.*

— IX. 1.] The Town of *Leghorn*, situated in a Plain upon the Sea-shore, with high Hills on each Side, tho' it is not very large, is well built and fortified. The Air is not very wholesome, and I was told the double Tertian is very frequent there, and hard to be cured. From *Leghorn* I went to *Pisa*, which is at some Miles Distance from it. The Road was very pleasant, through a plain and fertile Country, with frequent Groves of Oak, Holm, Cork-Tree and Myrtle.

Pisa.

Pisa, formerly a Republick, and an elegant City, now subject to the Great Duke of *Tuscany*, has lost much of its ancient Splendor and Number of Inhabitants. There are a great many Things at *Pisa* worthy to be examined; which as they are taken notice of by other Journalists and Describers of Places, I shall here pass over in Silence. The University here was once more celebrated than it is at present. It has four Colleges, which are not to be compared to those of *Oxford*. The first is called the College of *Wisdom*; the second is the College of *Ferdinand*, built by *Ferdinand* the First, Great Duke of *Tuscany* in the Year 1595. in that place where the House of the famous Civilian *Bartholi* stood, as we find by the Inscription; the third is the *Putean*, taking its Name from *Puteus* a Bishop, erected in the Year 1605. The Physick-Garden at *Pisa*, well known amongst the Botanists, was begun under *Cosmus* the First, Great Duke of *Tuscany*, in the Year 1547. seven years after that at *Padua*, which was the first, and put under the Direction of *Lucas Gbinus*, (as *Castellus in Opt. Med.* says) who was succeeded by *Andreas Cæsalpinus*, the best Botanist of his Age. The above-mentioned *Lucas Gbinus* is called by *Jo. Antonio Bumaldo* (under which feigned Name *Ovidius Montalbanus* lies anagrammatically concealed) in his *Bibliotheca Botanica*, the first Founder of publick Physick-Gardens. But the Buildings adjacent to the Garden, in which a great many natural and artificial Curiosities are kept, were founded by *Ferdinand* the First, in the Year 1595, as appears by the Inscription over the great Gate. In the Court-yard, before you enter the Garden,
you

you see a great many Bones of Whales piled up; and in the upper Part a Collection of Curiosities placed in very good Order: When you go to the other Part of the House, you come to an Area of the Entry into the Garden, in the Portico of which are several Portraits fixed to the Walls, as that of *Cæsalpinus*, *Clusius*, *Casaubon*, *Matthiolus*, *Pona*, &c. In the upper Chambers is a large Air Pump, with some other Physical Instruments, and Furnaces, with the Chemical Apparatus's belonging to them. The Garden is sufficiently large, but not kept in exquisite Order; and an old Gardener assured me there were fifteen thousand different Species of Plants in it, but not disposed in any regular Order. I saw however some very rare ones amongst them, which I have not observed elsewhere.

The Aqueduct of *Pisa*, which conveys a very clear Water for five *Italian* Miles into the City, deserves to be seen, being very old, bearing the Injuries of Time very well.

Concerning the famous bending Tower, I shall only observe this, that its Foundation on that side towards which it is inclined, must have sunk at the Time it was a building, or soon after, and so the Tower got that Bend which has been so much cried up, without the Intention of the Architect, as appears very plainly upon examining it.

Leaving *Pisa*, I set out next for *Lucca*, and passed first through a fertile enough Plain, very pleasant, with Fields surrounded with Mulberry Trees, Laurel, Poplar, Fig Trees, &c. mixed with Vines, twisted very beautifully round them. Afterwards I travelled over *St. Julian's Mountain*, famous for Savory, high and rocky, and having but few Plants upon it. In passing over it, besides the Savory, I observed different Species of Cistus, both of the Hill-rose and the Male Cistus, and of the Myrtle, the Mastic Tree, and also different Kinds of Heath and House-leek. At the Bottom of this Mountain begins the Jurisdiction of *Lucca*, in which we presently saw Olive Trees with ripe Olives, of the best Kind, as also Chestnut Trees, Strawberry Trees, and Turpentine Trees laden with ripe Fruits. At last we got into another Plain, very fertile and abounding with Vines as far as *Lucca*, the Head of a well known Republick. Here I saw very little remarkable relating either to Physick or Natural History; I only observed in this District, as also in *Tuscany* a great many Fields sown with the common white Lupins, which the People in that Country eat boiled. Besides, there too they cultivate Vetches, Millet, Sorgh-seed, and Panick, both for their own Use, and for Pigeons and other Birds.

From hence I travelled by way of *Pistoria* to *Florence*, the Metropolis of *Tuscany*. This large and beautiful Town has a great many Things in it worthy to be taken Notice of, which have been mention'd by others, especially in a little Book, intituled, *Ristretto delle Cose più Notabili della Città di Firenze*, the Principal of which are the Treasury of the Great Duke, which is called the *Gallery*, full of the most valu-

able Productions of Art, and the splendid Temple of *St. Laurence*, not yet finished, design'd for the Burial-place of the Great Dukes, to which you may add the Great Duke's Gardens extremely well cultivated.

The greatest Ornaments of *Florence* at that Time were *Laurentio Bellini* and *Antonio Magliabechi*, famous all over *Europe*. The first, who is chief Physician to the Great Duke, is very well skill'd in Physick, especially the Theory of it, as appears from a great many Works which he has publish'd, and is truly a great Man; but in Practice (which is frequently observ'd in others) he is not very successful. He is a Man of difficult Access, but received me with more Frankness than usual. He is of a low Stature, sixty Years of Age, broken with various Diseases, and has had a Cataract of the left Eye these five Years by-past. I had a great deal of Discourse with him about Physick. He affirmed, that there was nothing in Physick which might not be found out by Judgment and Application, (seeing every Thing was done by Mechanical Laws,) except the Figures of the least Particles and Elements, and that this was the Reason why Physick could never arrive at Perfection. He told me that the Waters of *Tetuzzi*, so much cried up for curing of Distempers, had their Source near *Pistoria*, and that they contained a Sea Salt, or common Salt, and had a purgative Quality; and hence he had sometimes order'd Sea Salt dissolved in Spring-Water to poor People in that Complaint with Success, though it did not answer so well as the other. He assured me he had wrote a great deal, which probably would never see the Light; and said he had applied himself for some Years by past to Musick and Poetry, which he was distractedly fond of, being wore out with continual Study.

The other, *Antonio Magliabechi*, is Library Keeper to the *Great Duke* and his Brother the *Cardinal*. Amongst the Physical Books, and those of Natural History, of which there is a great Number, there is remarkable a thick Volume very finely bound, containing very lively Figures of Plants coloured, with their Names in Writing, and entitled, *Vixidarium Botanicum, in quo Arborum, Fruticum, Suffruticum, Stirpium, & plurimarum Plantarum tam indiginarum, quàm exoticarum Species lætè virentes perennantur, quas è diversis locis collegit & delineavit, coloribus naturam imitantibus pinxit, & celebrium Botanicorum Nominibus distinxit Josephus Baldius, Medicus, Physicus, Civis Florentinus, Academicus Apatista 1650.*

Amongst the Libraries, that of *St. Laurence*, so call'd from an adjacent Church of the same Name, is not the last. This is no less remarkable an Account of its elegant Architecture, which it owes to *Michael Angelo Bonoratio*, as of its curious Manuscripts in every Science, of which it is almost wholly compos'd, fasten'd with Iron Chains, as in the *Bodleian Library* at *Oxford*. Amongst the Medical ones, the most remarkable to me seem'd an old Folio in Vellum, with Figures expressed in very lively Colours, especially relating to Luxations, with the

the following Title ; *Chirurgia Hippocratis, Galeni, Oribasii, Heliodori, Asclepiadis Bitynii, Archigenis, Dioclis, Amyntæ, Apollonii Ther. Nymphodori, Ruffi Ephesii, Apollonii Citiensis, Sorani, Pauli Æginetæ, Palladii.* This Manuscript, as *Magliabechi* inform'd me, was transcribed by *Jacobus Tollius*, since whose Death *Hainius*, Professor of *Dusburg* has had it, and will publish it very soon. Here is a manuscript Copy of *Diascorides*, wrote on Paper, which does not seem to be very old. Signior *Bruno Tozzi* carried me to the Hospital of *St. Mary*, said to be the largest in *Italy*, if not in all *Europe*, in which there is a prodigious Number of sick People, extremely well taken Care of. He shew'd me too the Chemical Elabatory of the Great Duke, which is called by the *Italians*, *Fondia del Grand Duca*, in which are kept a great many chemical Preparations, together with Furnaces and Utensils. Here I observed the Method of preparing various odoriferous Essences, famous all over *Europe*, commonly called the Essence of *Bergamotte, Cedar, &c.* They are distilled by the Retort (not like the *Roman Essences*, which were prepared by Expression) from Barks, with nothing but common Water, and after the Distillation, the Oil which swims at Top, called the Essence, is separated. But the odoriferous here are usually distill'd from the Flowers without the Addition of any Water, and are excellent of their kind. Besides this Elabatory at *Florence*, there is likewise the Great Duke's Dispensatory ; in which, besides other Rarities, there are some monstrous *Fætus's* preserved in Spirits of Wine, as a Hare with eight Feet, a Puppy with two Feet, another with one Eye upon its Forehead, and others which were shewed me.

Before I leave *Florence*, I cannot pass over in Silence the Disgrace of this elegant Town, *viz.* the Paper Windows of a great many of the Houses, and even of some of the Palaces ; tho' I observed them still more frequent at *Pisa* and *Lucca*. I am surprized that the Inhabitants, who in other Respects are really sumptuous about their Houses, should be so negligent in this, especially as I am persuaded they might have Glass there as cheap as it is in other Places.

The thirtieth of *October* I set out for *Rome*, I passed by *Sena* famous for the Purity of the *Tuscan* Language, and afterwards over the high Mountain *Radicosani*, at the Bottom of which the Pope's Jurisdiction begins.

Bolsena is a Town situated by a Lake of the same Name, upon the Left of which is the high Road hard by a Forest of Oaks. The Oaks here are low, loaden with large Acorns, as also with those Excrements which are the *Pilulæ capillatæ* in *Caspar Bobinus's Pinax*, or rather of *Lobelius*, engraved by *Bedeguari*, a spongy muscous Excrement. I observed likewise a great many of the Oak in *Caspar Bobenus's Pinax*, with the large Acorn and prickly Husk. The Mountains were very rocky, composed in a great many Places of Marble, with a Number of Pits, and Caverns, dug out formerly I imagine by Art.

At *Monte-Viasconi*, a little Town so called from the *Muscadine* Wine there, the most remarkable thing is the famous Inscription of *Est, Est, Est*, concerning which *Misson* in his *Voyage d'Italie* has wrote the best; in which however, although he carps with others upon the same Account, he has not set down the Inscription right, which I found to be as follows:

EST. EST. EST. PPR. NIUM.

EST. HIC. IO. DEUC. D.

MEUS. MORTUS. EST.

Viterbo is the most remarkable Town after *Sena* upon this Road, pretty large, and subject to the Pope: On the right of which, at an *Italian* Mile's Distance, I heard there were the natural Baths, called *Bulicanti*, that is, boiling, which I was curious to see. I found them on a Declivity, in a dry, whitish, and as it were limey Soil, discovering themselves as you approaced them by a sulphureous Steam and Smoke. The Taste likewise was sulphureous and brackish. The best of them is situated a little higher than the others, composed of a great many Springs bubbling out of the Earth, surrounded with a low Stone Wall with an heptagonal Figure, and is almost equal in Bigness to the King's Bath at *Bath*. Upon one Side of the Wall is the following Inscription cut in the Stone.

D. O. M.

Ars Ortulanorum.

fecit A. D. MDC.

The Water is very hot, so as to burn the Hand if it is kept for some Time in it, and hardens an Egg very soon. From this run out four little quick Stripes into the second Bath, which is a great deal cooler than the first. The Channel of these Stripes is stony, and white from the limy Sediment of the Water, of which it is full, which appears from the Stalks of Hemp, which I gathered there, cover'd over with a stony limey Crust of the same kind. In many Places this crusty Sediment is of a greenish Colour, and gives the Water the same Taint. These Baths appeared to me to be almost quite neglected, which I was much surprized at, though I should not advise the Use of them internally, upon account of the great Quantity of limey Particles mixed with them. However, in the second Bath the Peasants there usually steep their Hemp.

Remarks on a
MS. &c. Vid.
supra, p. 138.

2.] Some Remarks upon the Vellum Manuscript above-mentioned, taken out of the *Additamenta G. Ch. Schelhammeri ad Herm. Conringii Introductionem in Artem Medicam*, Cap. xii. pag. 401.

Besides

Besides these, (viz. Hippocrates, Galen, and C. Celsus) we have none among the Ancients, who have treated on Surgery. H. Conringius.

There remain a great many Anecdotes, if we may believe *Jobannes Sponius*, famous for his Skill both in Surgery and Antiquity, in that magnificent Library of the Great Duke of *Tuscany*; amongst the Manuscripts which are kept in the Church of *St. Laurence*, concerning which I shall transcribe his own Words from his Journal, where he put down what he saw remarkable in *Italy, Sclavonia, Greece* and *Asia*. But when he comes to describe what he saw extraordinary in *Florence*, he speaks in his Native Language, which I have translated thus: I shall mention another Manuscript belonging to the Art which I profess, and is the only one of the kind, as far as I know, in any Library in Europe. It is a very large Greek Volume, containing the Surgery of the Ancients, Hippocrates, Galen, Asclepiades, Bithynus, Apollonius, Archigenes, Nymphodorus, Heliodorus, Diocles, Ruffus Ephesius, and Apollodorus Cytienis, in which there are Figures represented on Parchment, shewing the Manner of reducing Luxations. Of the last, as also of Asclepiades, Apollonius, and Diocles, there is a frequent mention made in Pliny. Archigenes too is mentioned several times by Galen: But their whole Works are no where to be found. And as to Bithynus, Nymphodorus, and Heliodorus, their Names are scarce known to us. If all this was true, as *Sponius* represents it, it would be a great Injury done to Surgery to keep such a Work concealed, in which there must be a great many very useful Observations. For it is plain to all the World, and agreeable to Reason, that there must have been a greater Number of good Observations amongst the Ancients, when the Art of Surgery was studied by Physicians, than there possibly can be now amongst ignorant Operators, who know nothing of Anatomy.

But however, the slight View that *Sponius* has taken of the Manuscript has deceived him. For as I intended to insert these Observations, I was luckily assisted by *Meibomius's* Knowledge, my intimate Friend and Collegue, a most sagacious Enquirer into Medical Antiquities, and who I know enjoyed the Benefit of perusing the Grand Duke's Library so as to be envied while he staid at *Florence*, which was a long Time. Asking his Advice about this Manuscript, he sent me the following Answer.

That Book, which a certain Physician *Nicetas*, I know not of what Age, gathered from the ancient Surgeons, I am very well acquainted with. It stood upon the Shelf LXXIV in the Great Duke's *Laurence's* Library, and I was allowed to peruse it all the while I was at *Florence*, and to transcribe several Things out of it. However, it is not at *Florence* alone, as *Sponius* believes, but the same Collection is likewise extant in the King of *France's* Library. Neither are all the Treatises in that Volume unpublish'd, nor of that Moment he represents them, far less are the Authors of them unknown. I have found in it some Books quite entire, and only very small Fragments of others. I don't

don't mention any thing of the Writings of *Hippocrates*, *Galen*, *Oribasius*, *Paulus Ægineta*, *Ruffus Epheſius*, and *Palladius*, which are known to be publiſh'd elſewhere. I ſhall only ſay ſomething of *Bitbynus*, *Nymphodorus*, and *Heliodorus*, becauſe *Sponius* mentions their Names as quite unknown. Of *Bitbynus* indeed he might not have ſaid amiſs, that he, of all the reſt, was leaſt known by Name, becauſe it lately ſprang out of *Sponius's* Brain,. For the Fragments that are there, are of *Aſclapiades* of *Bethynia*, or *Pruſia*, ſo frequently mention'd by *Pliny* and *Galen*; and of him he makes two; one *Aſclepiades*, and the other *Bitbynus*. After the ſame manner he might have divided *Ruffus Epheſius*, making one *Ruffus* and the other *Epheſius*. *Heliodorus* is mentioned both by *Ægineta* and *Oribasius*, who commend his Surgery; and *Nymphodorus* would probably be known both to *Ceſus* and *Galen*, and likewiſe *Oribasius*, on account of his Commentary. And the ſame *Heliodorus*, of whoſe Writings there are eleven Chapters upon Fractures in that Collection, has been peruſed and publiſhed by *Vidius*. G. C. Schelhammerus.

Observations
made about
Rome and
Naples, 1683,
1684. by Dr.
T. Robinſon,
n. 349. P.
473.

X. In my Journey from *Rome* to *Naples*, I obſerved on the Rubbiſh of the *Tre Taberne* an unuſal Vegetable for that Place, remote from Town or Houſe, which was the *Ficus Indica Spinofa*, commonly called the *Opuntia* or *Tuna*, and by our Writers of *America*, the *Prickly Pear*, whoſe Juice gives the Urine a red Colour. When I came to *Naples*, I found it there near the Rocks, and in ſome wild ſolitary Places like a Native. If the *Spaniards* planted it, they choſe deſert Situations. On this Plant the *Cochineel Vermiculus* is ſaid to feed in great Numbers, before it changes into the *Chryſalis* or *Aurelia* of a *Lady-Cow*: But the Colour lies in the *Nymph-Worm* before it turns a *Beetle*. This gives me Occaſion to reflect upon the many Species of our *Europæan Vermiculi*, ſome of which might be found to yield rich Colours (if try'd): We are certain the Maggot of our *Ilex* gives the *Kermes*, and a noble Scarlet Dye before it turns into a Fly. Many Shell-Fiſh (which are a ſort of Inſect) contain Purple Juices.

This brings on another Remark I made in paſſing the *Appennines* and *Alps*, where I noted in ſome Beds or *Strata*, and even in the miſt of the hardeſt Rocks, great Varieties of perfect Shells, that never occurr'd to me on the *Italian* Shores, nor in any of the numerous *Muſeums* of that Country: So I gueſs they might be *Exotic*.

Going further on the *Via Appia*, I obſerved abundance of the *Siliqua Arbor*, or *Carob-Tree*, commonly call'd *Panis St. Joannis Baptiſta*, on the Pulp whereof many poor People were feeding. The Huſks taſted like *Manna* to me. Near them grew plenty of the *Arbor Judæ*.

The *Arbutus*, or *Strawberry-Tree*, was common in the woody Places. If this grows wild in the South-Weſt-Parts of *Ireland*, as ſome affirm, I ſhall think them much warmer than any Counties of *England*.

Before I enter'd the beautiful *Campania* of *Naples*, large Woods of *Cork-Trees* grew on each side the Road, where the Inhabitants were decorticating them. I asked if the Trees did not perish; they answered, some did; but the Acorns returned annual Supplies. The Women and Children wore Shoes made of the Bark.

Coming near *Capua*, I observ'd a Species of Ash, or *Ornus*, on the Trunk whereof many saccharine Concretions were visible. This proved the true *Manna*, that issues out through the Incisions made in this Tree by the Inhabitants of *Calabria*. Swarms of *Cicada's* were sucking the Body and Boughs, and perhaps by wounding them made way for fresh *Manna*. Here I may note, that many Insects have not only a *Probofcis* to bore and draw out the Juices of Plants for Aliment, but other proper Instrumentss to convey their Eggs into Vegetables and Animals, where they may find Covert and Food when they come to hatch, in the Gall-Tumours, and other Excrescences occasioned by the Wounds of the Parent Insects, that make such Variety of *Cuniculi* in all Parts of Plants, and even in the cutaneous Parts of living Creatures, and in dead Flesh.

This confirms me, that many Gums and Exudations find their Way out of Vegetables through the Wounds of Insects and other Apertures. Most *Voyagers* through the *East-Indies* affirm, that *Gum-Lack* is worked and made by large *Ants* that cover the Trees. I rather think the Insects suck and terebrate the Tree, and so give Vent to that peculiar Sap that hardens in the Sun. This may extend to most balsamiferous, gummiferous and saccharine Plants, especially in hot Climates, where Insects abound, and are more active. In cold Climates the Saps of many Vegetables will boil into Sugars, as that of Maple, Birch, Reeds, &c. Not but that the Fluids of Plants (like those of Animals) will spontaneously break through their Vessels in a Plethory, and make on the superficial Parts various Eruptions and Congestions.

Discoursing of *Manna*, I may here take Notice there are many Adulterations of this Drug. All passes for the *Calabrian*, whereas that of *Brianson* is from the *Larix*, that of *Persia* from the *Myrica*, and these frequently mixt with the Juices of Spurges, and other purgative Ingredients. I must not here deny, that Dew will sometimes in cool Mornings shoot, and congeal into a solid, sweet, white Substance, which I once observed in very hot Weather before Sun-rise.

Upon viewing the *Vulcano's* about *Naples*, *Vesuvius* on the East-side, — of *Vulcano's* the *Solfatara* and *Monte di Cinere* on the West near *Puzzuolo* and *Bajæ*, no's. I observed the same Face of Nature, which I believe runs through all the other *Vulcano's* of our Globe; viz. Heaps of Pumice-Stones and Cinders of *Marchasites* on the Sides, with Beds of Flower of Brimstone on the Tops. The Holes and Cavities in those calcined Minerals seem to be the *Nidus* of the *Sulphur*, which hath been sublimed by the Heat and Fire of that vast Mass of *Pyrites*, that compose the Bowels of those *Vulcano's*,

Vulcano's, and lie scattered through many Parts of the Earth, even under the Sea, where they sometimes germinate, ferment, and take Fire, throwing up little *Islands*. Earthquakes and other Shocks of the Globe may spring from the Mines of these combustible and explosive Minerals, loaden with Brimstone and elastic Salts. Hence some Account may be given of *Thermæ* or hot Baths, whose Waters gliding through these hot Beds, take their *Gas*. Of such medicinal boiling Waters and Stoves, there are more about *Naples* than in any Place I ever saw or heard of, the whole Country being continually pervaded by hot Streams.

Palm-Trees.

Walking round this City, I found *Palm-Trees*, some with unripe *Dates* hanging down, others without any Fruit: And there was another Species of *Palm* that sweats out the *Gum-Dragon*. I suppose the Monks had transplanted them out of *Africa*. I saw growing here many *Sugar-Canes*, *Rice*, *Maiz*, abundance of the purging *Senna*, and *Cumming-Seed*. Through the whole *Campania* of *Naples* I observed the same Vegetables to be larger and more proud than in other Parts of *Italy*, as the *Platanus*, the *Lentiscus*, the *Terebinthus*, the *Pistaches*, the *Oleanders*, *Agnus Castus*, *Barba Jovis*, the *Tragacanth*, the *Syrax*, the *Capers*, &c. The *Melons*, *Fujubes*, the *Azaroles* and other Fruits were of a better Taste. The *Gossypium*, with the Cotton breaking out of the Husks, adorn'd some of the Fields; the Hedges full of *Pomegranats*, *Almonds*, *Tamarisk*, *Sumach*, *Cedrus Lycia*, (a sort of Juniper or Savin) abundance of *Phillyrea*, *Alaternus*, *Cisti*, *Cytisi*, *Myrtles*, *Spanish Broom*, *Bays*, *Laurustines*, &c. all wild, indigenous of that warm Soil and kind Climate. The Water-Melons, the Olives, the Oranges, Lemons and Citrons were better than about *Genoa*, or in *Provence*.

The *Lotus Arbor* or *Nettle-Tree*, the *Paliurus* or *Christ-Thorn*, the *Ricinus* or *Palma Christi*. common in the Hedges, with several *Thymelæa's*.

I saw them fishing for *Coral*, and *Hippocampi*; the first did not come soft out of the Sea; the hard Incrustation covers the vegetable Part that bears Seed, as the *Alga's* and *Fuci* do. They take the *Sword-Fish* by darting a Spear into him, as they do the *Whales* in the *Greenland-Fishery*.

Flies, &c.

When dark Night came on, I could see Multitudes of luminous Flies thro' the *Campania* of *Naples*: Perhaps our Male *Glow-Worm*, or flying *Cicindela*, may abound there; not but that many other Insects may carry such Lanthorns about them. The *Scorpions* creep out about that time; and I have found them often in Bed, with the *Punaises*.

The Hedges are full of *Lizards* of various Colours; and the *Cicada's* chirp and sing towards Evening. I observed several Species of stinging Spiders in the Corn-Fields, some of which, in hot Harvests, may prove *Tarantula's*; the Poison of Animals and Plants increasing with the Approach of the Sun, and the Heats of Climates. Abundance of Silk-Worms were spinning on the Trees and Shrubs; the Birds prey'd upon them, before they could change into *Papilio's*, as they do upon Swarms of *Locusts*.

I eat

I eat often their young Frogs, Tortoises and Snails, served up with Oil and Pepper, which agreed well with me; so did their *Sea-Urchins*, and the *Urtica Marina*, (called *Sea-Jelly* or *Blubber*, though it be an Animal, having a true Heart, and Vessels for the Circulation of Fluids). Some of their Thistles are no ungrateful Sallet.

I saw some Vitriol Works about *Siena*, *Rome* and *Puzzuolo*; those of *Alum* only about *Civita Vecchia*. Amongst the Sands of the *Adriatic* Sea I observed many white, clear, shining Flints; which they told me were carried to *Venice*, to make the fine Crystal Glass at *Muran*.

Upon reading Dr. *Musgrave*, *de Geta Britan. & Synop. Chronolog. Dom. Sever.* I consulted my Diary taken at *Rome*. The magnificent *Septizonium* figured by him stood near the Foot of the *Palatine* Hill, on the E. S. E. side, overlooking the *Via Appia* and the *Circus Maximus*, the *Amphitheatre* of *Titus*, being near on the other side. By the Number of *Portico's*, (which were seven) it might contain Multitudes of People, as Spectators of the Triumphal Entries, and the publick Games. But I would not be thought to differ from him, who with good Authority thinks it the *Sepulchretum* of that Imperial Family; tho' most of the ancient *Mausolæums*, (at least those I saw) were *Rotonda's*, or *Colombaria's*, for the more convenient placing the *Urns* of the Kindred; as that of *Augustus* near the *Campus Martius*; that of *Adrian* on the other Bank of the *Tiber*; those said to be of *Scipio*, of *Cicero*, and *Munatius Plancus*, near *Gaieta*, and the *Via Appia*; that of *Virgil* on the side of Mount *Pausilippus*; that of *C. Metella*, and some others on the *Via Flaminia*. Some were Pyramidal, as that of *Cestius* in the Wall of *Rome*, and a few others on the publick Roads. This *Septizonium Severi* seems to differ from the rest of those Ancient *Sepulchretums*, which might be varied according to the Fancy and Humour of great Families.

This Urn Burial was only in Fashion amongst the *Gentes Majores*: As for the dead Bodies of the *Plebeians* and Slaves, they were generally laid in Places where they had dug Stone; and those Quarries became *Catacombs*. The Laws prohibited them to bury within a City, unless the Bodies were first reduced to Ashes.

I observ'd in many of the Ruins about *Rome* and *Naples*, great Stones laid close, and wedged very fast with little or no Cement; the Bricks towards the middle of a Building were generally of a *Rhomboidal* Figure, very smooth, shining and hard, laid in Plaister as firm as Marble. Their Mortar was much more durable than ours, as appears at this Day by their *Aqueducts* and *Piscina's*, the *Cento Camare*, and *Caligula's* Bridge under Water at *Bajæ*. *Pliny* says they made Use of the *Terra Puteolona*; but the present Inhabitants have lost the Way of tempering it.

During my Abode at *Genoa*, *Leghorn*, *Ostia*, and *Civita Vecchia*, I observ'd many *Torpedo's*, or *Cramp Fishes*, most accurately anatomized *Fishes*. by *S. Lorenzini*; Plenty of *Sphyræna's*, (a Species of Sea Pike, a-kin to

the Needle-Fishes.) The *Uranoscopus*, call'd *Bocca in Capo* and *Prete*. The *Mola* or Sun-Fish. The *Dentex* or *Pentalis*. *Altavela's*, a sort of *Pastinaca*. The *Pesce Balestra* or *Capriscus*. The *Pesce Pettine* or *Novacula*. The *Zygæna* or Balance-Fish, as large as the Saw-Fish or most Sharks. The *Scolopax* or *Trombetta*, call'd by our Seamen the Bellows or Trumpet-Fish. The *Draco Marinus*. The Tunny-Fish. The *Centrina* or *Pesce Porco*. The *Aquila*. The *Scorpius Major*, with Varieties of *Turdi* in the Markets. But what pleas'd me most, were some odd Sea Animals, as the *Lepus Marinus*, (a Species of naked Snail) the *Hystrix Marinus*, or *Eruca*, call'd by the Seamen *Pincio*, with a Brush hanging out of the Tail, like the *Byffus* or Silk of the *Pinna*. Many *Tamburo's* or Drum-Fishes; Plenty of *Muræna's*. I observ'd a strange Sea Animal, call'd the *Microcosmo marino*, with many Shells, *Tubuli* and Vegetables growing or sticking to the Back of it. This appear'd to me a-kin to the *Echini Marini*, or rather to the *Stellæ Marinæ*, being Triangular, and sometimes *pentadactylous*.

I embark'd once with the Fishermen, who shew'd me several *Loligo's*, *Polypi*, and *Sepia's*, or Cuttle-Fishes, (all *Crustaceous*) some of them were casting out their Ink in the Water: I suppos'd some Sharks, Dog-Fishes, or other Enemies, were near them: This black Liquor may be the Gall of those Animals. In the Nets I often found Sea Insects, and Vegetables; and indeed a new World, undescrib'd by natural Writers, at least unknown to me.

Birds.

I observ'd the *Italians* near the *Alps* and *Appennines* call'd several Birds *Francolino's*, as our Red, Grey and Black Game; and even their red and white Partridges. The different Colours of the Hens from the the Cocks, the many Variations in Feathers, the different Ages and Places, have all given Occasion to multiply Names and Species. The same may happen in Fishes, Quadrupeds, Insects, and all the Divisions of *Zoology*; and even in *Botany* and *Mineralogy*.

The *Italians* call many of their little fat Birds *Beccafigo's*, that feed upon Figs, Grapes and other sweet Fruits. So the *French* multiply their *Ortelans*, taken in the Vineyards and Gardens. Some of the Ancient Writers take notice that the *Romans* used to feed their Geese and other Birds with Figs, when they intended to swell their Livers to a monstrous Bigness.

The *Merop* or *Apiaster* is common on their Brooks; it flies like our King's-Fisher, and preys not only upon Insects, but Fish. There is a very beautiful Bird in *Italy*, that suspends its Nest down from the Boughs of Trees: When I saw it fly by me, I took it for an *Indian*, from the Brightness of its Colours; it is as large as our Missel-Bird and Thrush. *An Icterus Plinii?*

The great *Cock of the Wood* (said to be found in *Ireland*) is common on the Sides of the *Italian Hills*, and brought frequently to the Markets. I saw twice or thrice the *Himantopus*, and the *Phœnicopterus* or *Flamingo*, (whose Tongue was a Dainty amongst the *Romans*,

when

when they grew luxurious.) I have observ'd some *Spoon-bills*: These three last Birds were wading in the Rivers and Marshes near the Sea. Once I spy'd some *Pelicans* on the *Adriatic*, near the Mouth of the *Po*. The *Avis Diomedæa* was hung up dry'd in one of the *Museums* at *Florence*; but they told me it had been taken on some of the Isles of the *Archipelago*.

On the *Laguna* of *Venice* I saw several Species of *Mergi*, *Lari*, *Colymbi*, and other Water-Fowls, most of which div'd. I was surpriz'd with the Variety of them, having not seen so many on other Coasts: Perhaps the hard Winter had forc'd some unusual Birds thither. The Monks and Friars told me, they eat some of those Sea-Birds in *Lent*, and on Fast-Days, because they liv'd upon Fish, and had a piscose Taste, as the *French* pretend their *Macreuse* to have, which is a sort of Sea-Duck, common on the Coast of *Normandy*, and brought to the Markets, even at *Paris*, on *Maigre* Days; of which I gave a long History in the *Philos. Transactions* †.

Buffalo's are common in the Kingdom of *Naples*, and in some Parts of *Lombardy*, where they plough and draw with them. A peculiar Cheese is made of their Milk, (called *Casio di Cavallo*) rowl'd up like stiff Pieces of Ribband. Out of their black shining Horns they make Snuff-Boxes and Combs. The Creature is unruly, and therefore they lead them with Iron or Brass Rings drawn thro' their Noses. They make a Buff Leather of their Skins. I once saw some hairy Sheep feeding on a Common; perhaps they had been brought from *Africa*.

† Vid. supra,
V. ii. Ch. vi.
S. lxxxv.
Quadrupeds.

In passing the high *Alps*, I had a View of the *Ibex* or *Steinbock*, whose large Horns are recurvated almost as far back as the Tail; they are very ponderous for the Bulk of the Animal, having many knotty Rings, that may help them in climbing. They are rarely taken.

The *Rupicapra* or *Chamois* is very common on the Sides of the Cliffs, whose Skins afford the soft Leather. The *Mus Alpinus*, or *Marmota*, is as large as a Rabbet, will soon grow tame in Houses, tho' brought down from the Summits of the highest Mountains, where it will grow fat.

I have seen in several Towns of *Italy* fresh strong *Porcupines*, which the Inhabitants told me were taken in the Hedges and Ditches thereabouts, tho' much more rare than our Land *Urchins*. In the *Grisons* Country, and in some Cantons of *Switzerland*, I have often observ'd the *Ranunculus Viridis* or small Tree-Frog, perching on the Boughs and Leaves.

In the Northern Parts of *Germany* I saw several *Elk* Skins, and those of the *Rhin-Deer* stuffed, and set up in *Museum's*, but never alive; tho' the Animals are said to be common in *Muscovy* and *Lapland*, and sometimes seen in the Forests of *Prussia*.

The Skins of *Hippopotami* (said to be the *Bebemoth*) are in some Collections of Curiosities in *Italy* and *Holland*; so are those of the *Musk-Deer*, one of which is in the *Museum* of our *Royal Society*.

*A Journey to
the Top of
the Pike of
Tenerife, &c.
by Mr. J.
Edens, n.
345. P. 317.*

XI. On *Tuesday August* the 13th, N. S. at half an hour past ten in the Evening, I, in company of four more *English* and one *Dutch* Man, with Horses and Servants to carry our Provision, together with a Guide (wich is the same that has conducted all those that have been this Journey for many Years) set forward from the Port of *Oratava*, the Night being somewhat cloudy, and the Moon in the full at 12 the Night following.

At half an hour past Eleven we came to the Town of *Oratava*, which is about two Miles from the Port, where we stopt for about half an hour, to get walking Staves to assist us in our ascending the Steep of the Pike.

At one a-Clock on *Wednesday* Morning we came to the Foot of a very steep Rising, about a Mile and a half above the Town of *Oratava*, where it began to clear up; and we saw the Pike with a white Cloud covering the Top of it like a Cap.

At two a-Clock we came to a plain Place in the Road, which the *Spaniards* call *Dornajito en el Monte verde* (the little Trough in the green Mountain) so call'd I suppose because a little below this Plain: On the right Hand as we went, there is a deep Hollow, at the upper End of which Hollow there is a Spout of Wood placed in a Rock, through which there runs very clear and cool Water, which comes from the Mountains; and at a Descent a little lower than the Spout there is a Trough into which the Water comes.

At three, after travelling a Road, which was sometimes pretty smooth, and other times very rough, we came to a little wooden Cross by the Road Side on the left Hand, which the *Spaniards* call *la Cruz de la Solera*, (the Cross of the Solera). A *Solera* is a long Pole with a Hole at each End, which the *Spaniards* use to draw Wood with, by fastning one End to the Wood, and the other to the Oxen. This Cross was made with a Piece of a *Solera*, and for that Reason is so called; but why it was set up in this Place, I can't tell, unless it was because somebody was kill'd thereabouts. At this Place we also saw the Pike before us; and altho' we had come up Hill quite from the Port, yet to our Thoughts it seem'd almost as high here as when we were there, the white Cloud still hiding the greatest part of the Sugar-loaf.

After riding about half a Mile further, we came to the Side of a Hill, which was very rough and steep, (the Place call'd *Caravala*) where are a great many Pine-Trees that grow on both sides the Road for a great way both on the right Hand and the left, one of which, that was close to the Road on the right Hand as we went, our Guide desir'd us to observe, it having a great Branch growing out, which with the Boughs that were upon it look'd like the Forepart of a Ship. And from the Likeness this Tree has to a Ship, I suppose the Place took its Name; for *Caravela* signifies an old fashion'd Vessel, formerly

merly much used in *Spain*, sharp before, ill shap'd every way, and all the Masts stooping forwards; their Sails are all Mizzen Sails, that is, triangular; they will lie nearer the Wind than other Sails, but are not so commodious to handle. Amongst these Trees, not a great Height in the Air, we saw the Sulphur discharge itself like a Squib or Serpent made of Gunpowder, the Fire running downwards in a Stream, and the Smoak ascending upwards from the Place where it first took fire; and like this we saw another, whilst we lay under the Rocks the next Night at *la Stancha*, part of the Way up the Pike: But I could not observe whether either of them gave any Report as they discharged.

At three Quarters after Four we came to the Top of this high rough and steep Mountain, where grows a Tree which the *Spaniards* call *el Pino de la Merenda*, the Pine-Tree of the Afternoon's Meal. This is a large Tree, and is burnt at the Bottom, as having had Fires made against it; and in the burnt Place there issues out Turpentine. At a few Yards distance from this Tree we had a Fire made, where we staid and baited our Horses, and breakfasted ourselves. These Hills are very sandy, and there are a great many Rabbits which breed there; there is also much Sand found a great way up the Pike itself, and not a great way below the Foot of the Sugar-loaf, some of which I brought down with me.

At three Quarters after Five we set forwards again, and at half an Hour past Six came to the *Portillo*, which in *Spanish* signifies a Breach or Gap. We saw the Pike about two Leagues and a half before us, cover'd still with a Cloud at Top; and the *Spaniards* told us we were come about two Leagues and a half from the Port.

At half an hour past Seven we came to *las Faldas*, that is, the Skirts of the Pike; from whence all the Way to *la Stancha*, which is about a Quarter of a Mile up from the Foot of the Pike, we rode upon little light Stones, for the most part not much bigger than one's Fist, and a great many not much broader than a Shilling: And if we kept the beaten Track which was used before, it was not so deep; but if we turn'd out of it, the Horses went almost over their Feet. I lighted and made a Hole there, thinking to find how deep these little Stones lie, but could not find the Bottom; which makes me conclude they may cover the Ground for a great Thickness.

There are a great many vast Rocks, some of them two Miles or thereabouts from the Foot of the Pike, which the *Pike-Man* told us were cast out from the Top of the Pike at the Time it was a *Vulcano*. Many of them lie in Heaps of above threescore Yards long; and I observed that the further these Rocks lie from the Foot of the Pike, the more like they are to the Stone of other common Rocks; but the nearer we went to the Pike, we found them more black and solid; and some of them, tho' not many, were glossy like Flint, and all extream heavy. Those that shone so, I suppose, retain'd their natural Colour, but

but there are some that look like Dross that comes out of a Smith's Forge, which without doubt was occasion'd by the extream Heat of the Place they came from.

Some of these great Rocks were thrown out of the *Caldera* or Kettle in the Top of the Pike ; and others from a Cave or Cistern which is a pretty way up the side of the Pike, and has by some been thought to have no Bottom.

At Nine on *Wednesday* Morning we arrived at *la Stancha*, about a quarter of a Mile above the Foot of the Pike on the East-side, where are three or four large hard and solid black Rocks lodg'd : Under some of these we put our Horses, and under others we lay down ourselves to sleep, after having refresh'd ourselves with a little Wine : And we had a Fire made in order to get our Dinner ready, where a Cook we took along with us both roasted and boiled our Meat and Fowls. We slept here for about two Hours, then rose again, and about Two in the Afternoon went to Dinner.

There are several Mountains that lie Eastward from the Pike at four or five Miles distance, call'd the *Malpeses*, and one more lying a little more to the Southward call'd *la Montana de rejada* ; all which were formerly *Vulcano's*, tho' not so great as that of the Pike, as appears by the Rocks and small burnt Stones that lie near them, just in the same manner as about the Pike.

Still being at *la Stancha*, after we had dined, we laid down again to take a Nap under the Rocks as before Dinner ; but not sleeping very well, we all got up again, the rest of them spending the Afternoon at Cards, &c. But I made it my Business to admire the Strangeness and Vastness of that great Body, which indeed is very wonderful, in-somuch that it's impossible to express to one, that has never seen it, in what a manner that confused Heap of Rubbish lies ; for it may very well be styled one of the greatest Wonders in the World. About six at Night we saw *Grand Canaria* from *la Stancha* bearing from us *E. by N.*

At nine at Night, after having had our Suppers, we retired to our former Lodgings, where laying Stones for our Pillows, and our Cloaks for Bed-cloaths, we endeavoured to get to sleep ; but all in vain for a great while. Some lying pretty nigh a Fire complain'd of being burnt on the one side, and frozen on the other, (for the Air was very cutting and sharp) others happening to lie in a Place where there were a great many Fleas ; though it be something strange that Fleas should be found there, the Place being so cold in the Night. Perhaps the Goats sometimes get under these Rocks, and so leave them ; and I am inclin'd to believe it, because the Guide and I found a dead Goat in a Cave at the very Top of the Pike. I suppose this Goat straggling up here by Chance was benighted, and so finding the Cold, got into this Place for Heat, where meeting with too much of it, and a very strong sulphureous Vapour, it overcame him ; for he was almost

almost dry'd to Powder. Betwixt Eleven and Twelve we got to sleep, and slept till One, when awaking, our Guide told us 'twas Time to prepare for our Journey. We immediately arose, and by half an hour past One we were all upon the March, and leaving our Horses and some of our Men behind, we went away. Betwixt *la Stanca* and the Top of the Pike there are two very high Mountains and the Sugar-loaf, each of which Mountains is almost half a Mile's walking: On the first of them the Rubbish is more small, and we were apt to slip back as we stept upwards. But the uppermost is all composed of hard loose rocky great Stones, cast one among another in a very confused Order. After resting several times, we came to the Top of the first Mountain, where we drank every one of us a little Wine, and eat each of us a bit of Ginger-Bread we had amongst us. Then being pretty well refresh'd, we set forwards again to ascend the second Mountain, which is higher than the first, but is better to walk on, because of the Firmness of the Rocks. After we had travelled for about half an hour up the second Mountain, we came within Sight of the Sugar-loaf, which before we could not see, by reason of the Interposition of these great Hills. After we were arriv'd to the Top of this second Mountain, we came to a Way that was almost level, but bearing some small matter up-hill; and about a Furlong further is the Foot of the Sugar-loaf, which we soon after came to. Then looking upon our Watches found it to be just three a-Clock. The Night was clear where we were, and the Moon shone very bright; but below over the Sea we could see the Clouds, which look'd like a Valley a prodigious Depth below us. We had a brisk Air, the Wind being *S. E.* by *S.* as it was for the most part whilst we were upon our Journey.

Whilst we sat at the Foot of the Sugar-loaf, resting and refreshing ourselves as before in other Places, we saw the Smoak break out in several Places, which at first look'd like little Clouds; but they soon vanish'd, others not long after coming in their room from the same or other Places.

We set forwards to ascend the last and steepest Part of our Journey, *viz.* the Sugar-loaf, exactly at half an hour past Three; and after we had rested twice or thrice, I left the Guide and the rest of my Company, and ran forwards; and when I was got very nigh the Top (which was at three quarters after Three) two more of the Company deserted, and came up about five Minutes after me; the rest of the Company and the Guide coming up to the Top just at Four.

The Shape of the Top of the Pike is partly oval, the longest Diameter lying *N. N. W.* and *S. S. E.* and is, as nigh as I could guess, about 140 Yards long; the Breadth the other way being about 110. Within the Top of the Pike is a very deep Hole call'd the *Caldera* (or *Kettle*) the deepest Part of which lies at the *South* End: It is, I believe, 40 Yards deep, reckoning from the highest side of the Pike: But it is abundant shallower reckoning from the side opposite to *Garachica*.