## STONEHENGE

## A <br> T E M P L E

R E S T O R'D

TO THE

## 



> By WILLIAMSTUKELET, M. D.
> Rector of All Saints in Stamford.
——Deus eft qui non mutatur in avo. Manilius.

$$
L O N D O N:
$$

Printed for W. Innys and R. Manby, at the Weft End of St. Paul's. M decxl.

$$
\begin{aligned}
& \text { rosy scasce }
\end{aligned}
$$




のゾッパ・ $\because \because \because$
afctip．


C luctori d.d. Oliservantice ergo S. Kigucht. Salputor.

To His GRACE

## P E R E G R I N E

Duke of Ancafter and Kefeven,

Hereditary Lord Great Chamberlain of England, Éc. Éc.

May it pleafe your $\mathrm{Grace}_{\mathrm{R}}$,
TO accept of this attempt to illuftrate 1 one of the nobleft antiquities now left upon earth. Ì am confident your Grace will not diflike it, either becaufe it is a religious antiquity, or becaufe it belongs to our own country.
A
Your

## DEDICATION.

Your Grace beft fhews your regard to religion, by a conftant attendance on its duties, in the fervice of the church; and by a regular practice of its precepts, in their whole extent. And as you are juftly fenfible, the foundation of religion refts on a careful obfervance of the fabbath: you not only ftudy to encourage it, by your own great example; but likewife difcountenance, that too fafhionable cuftom of travelling on fundays, and other profanations thereof: which are the fure root of national corruption, the fure prefage of national ruin.

Nor are your Grace's virtues more confpicuous, in your religious and moral character, than in the love of your country. This you inherit with the blood that runs in your veins; this you derive from an immemorial feries of noble anceftors, renowned in our annals, for their fteady allegiance to the fovereign power; for their vigor in fupport of the conftitution both in church and ftate; that have often

## DEDICATION.

hazarded and ruined their fortunes, and poured out their blood, in its defence. I might inftance particularly, the great part they bore in the Reformation, the Reftoration and the Revolution.

After the honour I have enjoyed of having been long known to your Grace: I could enlarge upon the amiable qualities of your private life, your domeftic and focial virtues, your humane and beneficent difpofition to all around you, friends or dependants, or thofe of your own family. With truth I might fay, that you never refufed to ferve any perfon that applied to you, where it was in your power : that you never knowingly did an unkind, an injurious thing to any perfon: that no one ever withdrew griev'd from your prefence. I can fafely affirm, and fear no contradiction, that juftice, honour and honefty are fome of the real jewels, that adorn your Grace's coronet. And they; at this time of day, receive a feafonable luftre, from your high ftation, and illuftrious birth.

But

## DEDICATION.

But the agreablenefs of the fubject infenfir bly drew me from my main purpofe, which was to make this publick acknowledgment, of the great favours your Grace has confer'd upon me: and to beg leave to profefs myfelf,

May it pleafe your $\mathbf{G r a c e}^{\mathrm{E}}$,

Tour Graces moft humble,

And moft devoted fervant,

Fan. 1. 1739-40.

William Stukeley.

## PREFACE.

Afew years ago I Spent fome time every fiummer in viewing, meafuring, and confidering the works of the ancient Druids in our IJland; I mean thofe remarkable circles of Stones which we find all over the kingdom, many of which I bave feen, but of many more I bave bad accounts. Their greatnefs and number afonifj'd me, nor need I be afraid to fay, their beauty and defign, as well as antiquity, drew my particular attention. I could not belp carrying my inquiries about them as far as I was able. My fudies this way bave produc'd a vaft quantity of drawings and writing, wiblich confider'd as an intire work, may tbus be intitled,

## Patriarchal Christianity:

O R,

## A Chronological HISTORY

## OFTHE

Origin and Progrefs of true Religion, and of Idolatry.
The parts of wolbich the whole is compos'd are thefe:
I. Canon Mofaicx Chronologix, or the year of Mofes fettled, by woblich be reckons time in the biftory of the old world; the time of the year fix'd when creation was begun. Tbis is done in a new manner, and becomes an intire fijtem of cbronology from the creation to the Exodus, and is exemplifed by many particular Kalendars of the moft remarkable tranfactions; woblich are proofs of the truth of tbe Canon. There are interfperfed a great many aftronomical and biftorical illufrations of the facred pages, particularly Sanchoniathon's genealogies, and Manethon's Egyptian Dynaffies, are applied in a neve Metbod to the bifory and cbronology of the Scriptures.
II. Melchifedec, or a delineation of the firft and patriarchal religion, from the beft light we can gather in the facred bitory; and from the moft ancient beathen cuftoms, which were remains of that religion. In this Treatife it is 乃ivern, tbat the firft religion was no otber than Cbriftianity, the Mofaic difpenfation, as a veil, intervening; that all mankind from the creation bad a knowledge of the plurality of perfons in the Deity.
III. Of the myteries of the ancients, one of the firt deviations from true religion, to idolatry; this is chiefly purfil'd in an explication of the famous table of Ifis, or Bembin-table, publijb'd by Pignorius, Kircher, \&c. weberein that knowledge which the ancients bad concerning the true nature of the Deity, is further explain'd.
(a)
1V. $A$ dif-

## PREFACE.

IV. A difcourfe on the bieroglypbic learning of the ancients, and of the origin of the alphabet of letters. Very many bieroglyphic monuments of the Egyptians are explain'd, more efpecially thofe that relate to their true notions of the perfons in the Deity. The time and rife of the alpbabet of letters is deduc'd from a new foundration. The prefent fquare Hebrew cbaracters are Jhewn to be the primitive idea of ietters, from whence all others are deriv'd. Whence the idea of every letter was taken? an explication of all the old Hebrew coins with Samaritan characters.
V. The patriarcbal bifory, particularly of Abraham, is largely purfu'd; and the deduction of the Phœenician colony into the IJland of Britain, about or foon after bis time; whence the origin of the Druids, of their Religion and writing; they brought the patriarchal Religion along with them, and jome knoweledge of fymbols or bieroglyphics, like thofe of the ancient Egyptians; they bad the notion and expectation of the Mefiah, and of the time of the year woben lie was to be born, of bis office and death.
VI. Of the Temples of the Druids in Britain, their religious rites, orders, facrifices, groves, tombs, their curfus's, places of forts and exercifes, \&c. particularly an ample and accurate defcription of that fupendous temple of tbeirs at Abury in North Wilthire, the moft auguft work at this day upon the globe of the earth; with many prints of ground-plots, views and admeafurements of all its parts; of their manner of Jepulture; an account of my digging into many of their barrows and tumuli, with drawings of them, \&c.
VII. Of the celebrated Stonehenge, another Temple of theirs, weith prints of that work; an account of the barrows 1 dug up, and what was dificover'd in them; of the knowledge the Druids bad of the marnetical compafs, and conjectures of the particular times when thefe works were made, long before Cæfar arriv'd in Britain.

I propofe to publib thefe two firf, and proceed to the Jpeculutive parts afterwards; referving them, God willing, to the maturer time of my life.

My intent is (befdes preferving the memory of thiefe extraordinary monuments, fo much to the bonour of our country, now in great danger of ruin) to promote, as much as I am able, the knoweledge and practice of ancient and true Religion; to revive in the minds of the learned the Jpirit of Cbrifianity, nearly as old as the Creation, which is now languiJing among us; to refore the firft and great Idea of the Deity, who has carry'd on the fame regular and golden chain of Religion from the beginning to this day; to warm our bearts into that true jenfe of Religion, wobich keeps the medium between ignorant. Juperfition and learned free-tbinking, between flovenly fanaticijm and popi/b pageantry, between entbuljalina and the rational wor/hip of God, which is no where upon earth done, in my judgment, better than in the Cburch of England. And Seeing a Jpirit of Scepticifin bas of late become fo faßbionable and audacious as to frike at the fundamentals of all revelation, I bave endeavoured to trace it back to the fountain of Divinity, whence it flows; and 乃erw that Religion is one fyltem as old as the world, and that is the Cbrifian Religion; that God did not leave the rational part of bis creation, like the colony of an ant-bill, with no otber guide than inflinct, but proportion'd bis dijcoveries to the age of the world, to the learning, wijdom, and experience of it; as a wije parent does now to bis cbildren. I hall Jiew likewife, that our predecefors, the Druids of Britain, tbo' left in the extremeft weft to the improvement of tbeir own thoughts, yet advanc'd their inquiries, under all difadvantages, to fuch beigts, as 乃ould make our moderns a/bam'd, to wink in the fun-/bine of learning and religion. And we may with reafon conclude, there was fomewhat very extraordinary in thofe principles, which prompted them to fuch a noble pirit as produced thefe works, fill vifible with us, which for grandeur, fimplicity and antiquity, exceed any of the European woonders.

That

## PREFACE.

That the doctrines and woorks of the Druids bave bitberto been fo little confder-: ed (fince autbors only tranfcribe from one to another, the ferw remaining fcraps to be found in clafic writers) was an incentive to me likewije in the following attempt, and at the fame time it pleads for me, and befpeaks tbe reader's favour. I want likewife the great advantages to be bad from a knowledge of the remaining Celtic languages, books, manufcripts, and bifory, the Cornih, Welih, Iriih, Highland, \&c. the cbief repofitory now of their doctrines and cuffoms; fo that in my own opinion I may very well jay witb the poet,

Interea Dryadum filvas \& faxa fequamur Intactas, tua Mecænas haud mollia juffa.

## Virgil.

And tho' there bas been of late a large volume publijb'd on the fubject of Stonehenge, yet we may well fay there bas nothing been wrote upon the jubject. Nor bave I any otber notion of this performance, than that it is as a firft attempt to fay fomething upon thofe famous philofophers and priefts the Druids, who are never Jpoken of in antiquity but withb a note of admiration; and are always rank'd withb the Magi of the Perfians, the gymnofopbits of the Indians, the propbets and bierophants of the Egyptians, and thofe fort of patriarchal priefts, wobofe orders commenc'd before idolatry began; from webom the Pythagoreans, Platonifts, and Greek pbilofoplers learn'd the beft things they knew. To clear aweay rubbijh, and lay a foundation only, in this difficult and obfcure work, is doing fonewobat. The method of writing wbich I bave chofe is a diffufve one, not pretending to a formal and fiff fcholaftic proof of every tbing I jay, which would be odious and irkjome to the reader, as well as mylelf. The knowledge I bave acquired in thefe matters, was from examining and fudying their works; the proofs are deriv'd from diftant and different topicks, and it would be very inconvenient to marbal them fyllogitically in a work of this nature; the proof refults from the intire work; in all matters of fo great antiquity it muft be found out by the reader; and to one that has proper fagacity and judgment, conviction will fteal upon bim infenfibly, if I am not miftaken; and be will own the evidence in general, is as ftrong as the nature of the fubject will bear, or requires.

It was very difagreeable to me that I was forc'd to combat againft a book publifl'd in the name of the celebrated Inigo Jones, for whofe memory I bave the greateft regard. I wonder the publiber of that work did not think of a very eafy metbod to convince bimfelf that be was in an error. If Stonehenge is a Roman work, it was certainly built by the Roman fale; bad be reduc'd bis own meafiures to that flandard, be would bave Jeen the abfurdity of bis opinion; for we cannot tbink tbat a temple, or elegant building, as be would bave it, Bould not Joew its founders by the fcale on wobich it is form'd; they are all fractions in the Roman fale, undoubted evidence that the Romans bad no band in it. For there is no meaning, no defign in the cboice of the meafiures, neither in general nor particular; a tbing unvorthy of a great arcbitect, or a great defign. But it appears very evident to me, tbat Inigo Jones had little or no part in tbat work, eppecially as it is moulded at prefent; and I tbink I bave reafon to be of opinion that be never drew the defigns therein publijhed, becaufe I fould be unwilling to fay be knowingly falffied them. I bave very much fhortened what I bad to fay againft that book, becaufe I bave no love for wrangling, and barely mention'd wobat was neceflary, that the reader may bave a true notion of this noble antiquity.
(\%)
someswoogle


## STONEHENGE

## A WORK of the

## 2beitily 退uíds

DESCRIB'D.

## C H A P. I.

Of the Situation of Stonehenge in general. That it was a temple of the Druids, of the patriarchal mode, who were a mof ancient oriental colony. In later cimes, the Belgx from the continent, conquer'd this country from them. Whence thefe fones were brought? Of their nature, magnitude, weight. Of the meafure of the Druids, the ancient Hebrew cubit, and its proportion to the Englifh foot.

THE Wilt/bire downs, or Salifbury plain, (as commonly call'd) for extent and beauty, is, without controverfy, one of the moft delightful parts of Britain. But of late years great encroachments have been made upon it by the plough, which threatens the ruin of this fine champain, and of all the monuments of antiquity thereabouts. Monuments, we can fcarce fay, whether more wonderful in themfelves, more obferv'd, or lefs underfood! among them, Stonehenge has been eminent from the remoteft ages, tho' 'tis not the greateft, moft confiderable, or moft ancient. But 'tis my intent to begin my difcourfe from it, becaufe the lateft, and from thence proceed upwards in our inquiries, about the times and authors of thefe ftupendous works, the temples of the Druids in our Ifland: for I cannot doubt that Stonebenge was fuch. The idea we conceive of the diftance of time, when thefe kind of works were made, cannot be ill-form'd, if we confider, that the utmoft accounts of 'em we have in writing, are from the Britons, the remains of the people who lived here, at the time of the Roman invafion. This is mention'd in fome manufcripts of Ninnius before the Saxons and Danes came over. And the oldeft Britons fpeak of this only by tradition, far above all memorial. They wonder'd at Stonebenge then, and were as far to feek about the founders and intent of it, as we now. They have recourfe to magic, as is ufual, when they would account for any thing feemingly fo much above human power, to accomplifh. They tell us, thefe fones of immenfe bulk were brought from a plain, in the middle of Ireland, and the like. Which reports give us only no obfcure hint of their true authors, the Druids, who were famd for magic,
and were driven laft into Ireland, in the time of the Romans. There they built. fuch like works again, or their brethren had built before; till Chriftianity, to which the greateft and pureft part of their own doctrine was akin, foon put
an end to their polity, which the Roman arms could not do. And they embrac'd that religion, to which their own opinions and rites had fo direct a tendency. This is the fentiment of Origen on Ezekiel iv. And 'tis fufficiently evident, if we confider, that the firft planters of Chriftianity in Ireland, immediately converted the whole illand, without fo much as the blood of one martyr. Nay, the Druids themfelves, at that time the only national priefts, embraced it readily, and fone of them were very zealous preachers of it, and effectual converters of others. For inftance, the great Columbanus himfelf was a Druid : the apoftle of. Ireland, Cornwall, $\S c$. We need not be furpriz'd at this, when we affert, that there is very much reafon to believe, thefe famous philofophic priefts came hither, as a Pbanician colony, in the very earlieft times, even as foon as Tyre was founded: during the life of the patriarch Abrabam, or very foon after. Therefore they brought along with them the patriarchal religion, which was fo extremely like Chriftianity, that in effect it differ'd from it only in this; they believed in a Meffiah who was to come into the world, as we believe in him that is come. Further, they came from that very country where Abrabam liv'd, his fons and grandfons; a family God almighty had feparated from the grofs of mankind, to ftifle the feeds of idolatry; a mighty prince, and preacher of righteoufnefs. And tho' the memoirs of our Druids are extremely fhort, yet we can very evidently difcover from them, that the Druids were of Abrabam's religion intirely, at leaft in the earlieft times, and worhipp'd the fupreme Being in the fame manner as he did; and probably according to his example, or the example of his and their common anceftors.

All this I hall prove, in the purfuit of this work. But before we come to fpeculation, intend to give an exact defcription of their feveral temples, and the like works; for fuch will be a good foundation for us to build upon. That we may proceed from things evident and more known, to thofe lefs known, and which we defign to make evident, as well as we are able, and the nature of it will permit. A matter fo immers'd in the dark mift of time, where very few fcatter'd traces remain, muft needs befpeak the reader's candor. The dignity of the fubject will excufe my boldnefs in attempting one fo difficult. And however I fucceed in accounting for thefe wonderful works; at leaft, I hall be inftrumental in preferving their memory, in giving juft drawings of them.

Stonebenge, by the extravagant grandeur of the work, has attracted the eyes and admiration of all ages. After the reformation, upon the revival of learning among us, the curious began to confider it more intimately, I cannot fay fuccefsfully. Mr. Camden rofe as the fun of antiquity, that put out former lights, and, like Cofar, affrights all that value a reputation, from attempting any thing in his way. His great fkill in Roman learning, and our Engli//s hiftory, only enabled him to be, as it were, filent on Stonebenge. He faw with excellent judgment, that neither Roman nor Englijb had place there, or could ferve to illuftrate it. He writes modefly, as his manner was; "Of thefe things I am " not able fo much to give an accurate account, as mightily to grieve, that " the founders of this noble monument cannot be trac'd out." He could not perfuade himfelf that either Romans, Saxons or Danes had any hand in it. And as for his reprefentation of it in picture, I verily believe, it was drawn only from fancy or memory, or by fome engraver from his oral defription. A.D. 1620, king $\mathcal{F}$ ames I. being at the earl of Pembroke's feat at $W$ ilton, and agreeably furpriz'd with the fight of Stonebenge, confulted the famous architect Inigo Fones, upon it ; thinking it a matter in his way. This great man, who defervedly may be ftiled the Englifh Vitruvius, gave his opinion of it, as a Roman work; and left, I fuppofe, fome few indigefted notes in writing there-



## DESCRIBED.

upon. From which his fon-in-law Jobn Webb compos'd an intire treatife, endeavouring to prove it. But they that are acquainted with Roman architecture, or have confider'd Stonehenge, muft needs be of a different opinion. And as my Lord Bimhop of London well obferves, in his notes on Camden, " it cannot be "fafe to clofe with Mr. Fones, tho' his book otherwife be a learned and ingenis " ous piece." Inigo Fones lived 30 years after this, and yet Mr. Webb makes an apology for his work, "that if he had furviv'd to have done it, with his own "hand, it would have been better." But'tis very reafonably believ'd, that tho" Inigo Fones was an extraordinary genius in architecture, yet he wanted many qualifications for an author, efpecially in fuch a work as Stonebenge. 'Tis my opinion, that had his architectonic fkill been united to Mr. Camden's learning, he could never have demonitrated Stonebenge to be a Roman work. Afterwards, Dr. Charlton publifh'd a piece againft Webb's performance, and certainly has !aid enough to overthrow it, tho' he could not with equal fuccefs eftablifh his own opinion, that it was the work of the Danes. Whereas Olaus Wormius finds no fuch monuments among the Gotbic nations: which, as Mr. Toland obferves, is anfwer fufficient to his allegation. Webb anfwer'd the Doctor's book, and by turns effectually demolifh'd his opinion, but could not ftill vindicate his own. Yet from all their difputations, no fpark was ftruck, towards a difcovery of the real truth. What is the worft part in both performances of Mr. Webb, his reprefentation of the real monument in his drawings, is fictitious. And, as Mr. Aubry rightly obferves, "in endeavouring to retrieve a piece of " architecture in Vitruvius, he abufes the reader with a falfe reprefentation of the " whole." It requires no great pains to prove this, nor need we take much time to be fatisfy'd in it: the work is ftill extant. As foon as a judicious eye comes upon the fpot, we difcern that Webb's equilateral triangles forming the cell are fancies : his three entrances acrofs the ditch are fo too; and that he has turn'd the cell a fixth part from its true fituation, to favour his imaginary hypothefis. But 'tis againft my inclination to find fault with the labours of others, nor do I thereby feek to bribe the reader in my own favour. I had a great pleafure for feveral years together, in viewing and examining thefe noble remains of our anceftors. What I wrote about them, was for my private amufement, and that of friends. And I publifh them only for the honour of my country, and in hopes that fuch a publication will not be unferviceable to religion; which is my ultimate view.

Tho' Stonebenge be the proudeft fingularity of this fort, in the world, as far as we know : yet there are fo many others, manifertly form'd upon the fame, or kindred defign, by the fame meafure, and for the fame purpofe, all over the Britanic inles; that we can have no room to doubt of their being made by the fame people, and that by direction of the Briti/h Druids. There are innumerable, from the land's end in Cornwall, to the utmof northern promontory in Scotland, where the Roman power never reach'd. They are to be found in all the iflands between Scotland and Ireland, inle of Man, all the Orkney iflands, $\mathcal{E}^{\circ} c$. and numerous in Ireland itfelf. And there is no pretence, as far as I can fee, for any other perfons or nations being the founders of them. They are circles of ftones, generally rude, of different diameters, upon elevated ground, barren, open heaths and downs; chiefly made of ftones taken from the furface of the ground. There are no remembrances of the founders, any other than an uninterrupted tradition of their being facred; that there is medicinal virtue in them; that they were made by the Irif; that they were brought from Afric; that they were high-places of wormip; fanctuaries; bowing, adoring places; and what names they commonly have, intimate the fame thing. And in many places the exprefs remembrance and name of Druids remain, and the people bury their dead in or near them to this day, thinking them holy ground. Mr. Toland in his hiftory of the Druids, p. 23. tells us, "In "Gealcofi's mount in Inifoen in the county of Dunegal, a Druidefs of that

## STONEHENGE

"t name lived; it fignifies white-legg'd, according to the ancient manner in "Homer's time. On that hill is her grave and her temple, being a fort of di" minutive Stonebenge, which the old Irijh, at this day, dare not any way " profane." Many inftances of this fort, of all thefe particulars, we have in our inland: particularly the temple on Temple-downs by Abury. Whatever is dug up in or near thefe works are manifently remains of the Druid times; urns, bones, ornaments of amber, glafs beads, fnake-ftones, amulets, celts, flinthatchets, arrow-heads, and fuch things as befpeak the rudeft ages, the utmoft antiquity, moft early plantations of people that came into our ifland, foon after Noalb's flood. I have all the reafon in the world to believe them an oriental colony of Pbocnicians; at leaft that fuch a one came upon the firft Celtic plantation of people here: which reafons will appear in the progrefs of this difcourfe. I fuppofe in matters of fuch extraordinary antiquity, it would be abfurd to fet about a formal demonftration; and thofe readers would be altogether unreafonable, that expect we prove every fact here, as they would do by living witneffes, before a court of judicature. When all is confider'd, that I have put together on this affair, a judicious perfon, I prefume, will agree, I have made the matter fufficiently evident, and as much as the nature of things requires.

In the times juft preceding the coming of the Romans into Britain, the Belge, a moft powerful colony from the Gallic continent, had firmly feated themfelves all over the country, where Stonebenge is fituate, quite to the fouthern fea; taking in the fouth part of Wilffloire, and all Dorjet/Jire. Wilt/bire has its name from the river Willy, which in Welf/ is weyli, in Latin, vagire, from its noife. A river of like name in Nortbampton/bire. Upon the former river at Wilton, probably liv'd the Carvilius, one of the four kings he The The thards the end. The Belyc came into Britain upon the fouth, as other Celtic nations before had fix'd themfelves from the eaft, Kent, the Thames, $\mathcal{E}^{\circ}$. fuch as the Cantii, Segontiaci, Atrebates, $\mathcal{B}^{c}$. fo that in Cafar's time, all the fouth and eaft parts of Britain were difpoffefs'd of their original inhabitants, and peopled from the continent: and this very work of Stonebenge was in the hands of the Belga, who built it not. In my itinerarium curiofilm, p. 181. I obferv'd no lefs than four fucceffive boundary ditches here, from the fouthern fhore; which with good reafon, I fuppos'd, were made by the Belga, as they conquer'd the country by degrees, from the aboriginal inhabitants. This fhews, 'they muft have been a long while about it, that the Britons difputed every inch of ground with them, and that for two reafons; as well becaufe of the extraordinary beauty and goodnefs of the country, as fighting pro aris $\mathcal{E}$ focis for their great temple of Stonehenge: not to fpeak of that other greater temple, a little more northward, at Abury. The Segontiaci had got Hampfire, to the eaft of them, before, as far as the Colinburn river, and the Atrebates, Berkjbire. The firft ditch runs between the river of Blandford, formerly Alauna, and the river of Bere, the piddle in Dorfet/bire, two or three miles fouth of it. The fecond runs to the north of Cranborn chafe, upon the edge of Wiltfire, by Pentridg: it divides the counties of Dorfet and Wilts. The third is confpicuous upon Salifbury plain, as we pafs from Wilton to Stonebenge, about the two-mile fone, north of Wilton: it is drawn between the river Avon and the Willy, from Dornford to Newton. The fourth is the more famous Wanfdike, of great extent. Gwaban in old Briti/b fignifies feparatio, diffinctio guahana feperare, and tbat undoubtedly gave name to the ditch. The method of all thefe ditches, is, to take the northern edge of a ridge of hills, which is always fteep; the bank is on the fouth fide. And in my itinerary, p. 134. I fhow'd a moft evident demonftration, that it was made before the time of the
Tab. II. Romans, in the paffage of the Roman road down Runway hill. Tab. II. Wanfdike is the laft advanc'd poft of the Belge northwards, and that it was
made
yanflury


促

车为
祭
昷

为


OProfpect of $\mathrm{S}_{\text {Ty N Vegnagions cumpe }}$ ．from the Raft．
，$\Rightarrow$
＊ized by HOOH

```
Shiceley delin.
```

made after Stonebenge was built, is plain, becaufe the ftones that compofe the work, were brought from Marlborough downs in north $W$ ilt/bire, beyond the dike; and as then in an enemy's country. And moft probably it was built before the Belga fet footing in Britain, becaufe of the great number of barrows or fepulchral tumuli about it, which, no doubt, were made for the burial of kings and great men.

The ftones of which Stonebenge is compos'd, beyond any controverfy, came from thofe called the gray weathers, upon Marlborough downs near Abury; where is that other moft wonderful work of this fort, which I fhall defcribe in my next volume. This is 15 or 16 miles off. All the greater fones are of that fort, except the altar, which is of a ftill harder, as defign'd to refift fire. The pyramidals likewife are of a different fort, and much harder than the reft, like thofe of that other Druid temple call'd the Weddings, at Stanton-drew in SomerfetJhire. Dr. Halley was at Stonebenge in the year 1720, and brought a piece of it to the Royal Society. I examin'd it with a microfcope. 'Tis a compofition of cryftals of red, green and white colours, cemented together by nature's art, with opake granules of flinty or fony matter. The Doctor obferv'd from the general wear of the weather upon the ftones, that the work muit be of an extraordinary antiquity, and for ought he knew, 2 or 3000 years old. But had the Doctor been at Abury, which is made of the fame ftones, he might well from the like argumentation conclude, that work as old again as Stonelenge, at leaft much older, and I verily believe it. Neverthelefs the current of fo many ages has been more merciful to Stonebenge, than the infolence of rapacious hands, (befides the general faccage brought upon the work of old) by the unaccountable folly of mankind, in breaking pieces off with great hammers. This deteftable practice arofe from the filly notion of the fones being factitious. But, alas! it would be a greater wonder to make them by art, than to carry: them 16 miles by art and ftrength; and thofe people muft be inexcufable, that deface the monument for fo trifling a fancy. Another argument of vulgar incogitancy, is, that all the wonder of the work confifts, in the difficulty of counting the ftones; and with that, the infinite numbers of daily vifitants bufy themfelves. This feems to be the remains of fuperfition, and the notion of magic, not yet got out of peoples heads, fince Druid-times. But indeed a ferious view of this magnificent wonder, is apt to put a thinking and judicious perfon into a kind of ecftacy, when he views the ftruggle between art and nature, the grandeur of that art that hides itfelf, and feems unartful. For tho' the contrivance that put this mafly frame together, muft have been exquifite, yet the founders endeavour'd to hide it, by the feeming rudenefs of the work. The bulk of the conftituent parts is fo very great, that the mortaifes and tenons muft have been prepar'd to an extreme nicety, and, like the fabric of Solomon's temple, every ftone tally'd ; and neither axes nor hammers were heard upon the whole ftructure. Neverthelefs there is not a fone at Stonebenige, that felt not, more or lefs, both ax and hammer of the founders. Yet 'tis highly entertaining to confider the judicious carelefners therein, really the grand gufto, like a great mafter in drawing, fecure of the effect: a true mafter-piece. Every thing proper, bold, aftonihing. The lights and Mades adapted with inconceivable juftnefs. Notwithftanding the monftrous fize of the work, and every part of it ; 'tis far from appearing heavy: 'tis compos'd of feveral fpecies of work, and the proportions of the diffimilar parts recommend the whole, and it pleafes like a magical fpell. No one thinks any part of it too great or too little, too high or too low. And we that can only view it in its ruins, the lef's regret thofe ruins, that, if poffible, add to its folemn majefty.

The ftones of the gray weathers are of a baftard fort of white marble, and lie upon the furface of the ground, in infinite numbers, and of all dimenfions. They are loofe, detach'd from any rock, and doubtlefs lay there ever fince the creation. Being folid parts thrown out to the furface of the fluid globe, when

## STONEHENGE

its rotation was firft imprefs'd. All our Druid temples are built, where thefe fort of ftones from the furface can be had at reafonable diftances; for they are never taken from quarries. Here is a very good quarry at Cbilmark in this country. Salifbury cathedral, and all the great buildings are thence; but 'tis a ftone quite different to our work. It was a matter of much labour to draw them hither, 16 miles. My friend the reverend Dr. Steplien Hales, the excellent author of vegetable ftatics, and other works, computed them as follows. The fone at the upper end of the cell, which is fallen down and broke in half, is in length (fays he) 25 feet, in breadth 7 feet, and in thicknefs at a medium $3^{1}$, amounts to 612 cubic feet. Now a cubic foot of Hedington ftone weighs near $154 \div$ pounds troy. If Stonehenge fone be of the fame fipecific gravity, it will amount to $94,34^{8}$ pounds, which is $31 \frac{1}{2}$ tuns. But if this be of the fame fpecific gravity as Burford fone, which weighs to $155 \frac{1}{7}$ the cubic foot, then it will weigh 95319 pounds troy, or 32 tuns. If it be equal to Blaiton ftone, which is 187 pounds troy per cubic foot, then it weighs 114444 pounds troy, or 38 tuns. But I am fure that the fone is of confiderably larger dimenfions, than what Dr. Hales has ftated it at, and that the fort of ftone is much heavier than that of the largeft fecific gravity he fpeaks of, and that it amounts to more than 40 tuns, and requires more than 140 oxen to draw it; yet this is not the heavieft fone at the place.

The notion we ought to entertain of Stonebenge is not a little enhanc'd, by the difcovery I made from frequent menfurations there. It gave me the opportunity of finding out the flandard and original meafure, which the people us'd, who made this and all other works of this kind. And this preciudes any tedious difputation againft the opinion of authors; for whoever makes any eminent building, moft certainly forms it upon the common meafure in ufe, among the people of that place. Therefore if the proportions of Stonchenge fall into fractions and uncouth numbers, when meafurd by the Enslij, French, Roman, or Grecian foot, we may affuredly conclude, the architects were neither Englijh, French, Roman or Greeks. Thus, for inftance, when the accurate Greaves tells us, the door of the Pantbeon (which is of one ftone) is of Englifb foot-meafure 19 foot $\frac{102}{102}$ within: Ghould we not be apt to affert at firt fight, that the architect in fo coftly a work, did not chufe his meafures at random, but intended that this dimenfion mould be 20 feet? When we confider this building is at Rome, and that it amounts to 20 Roman feet, muft we not conclude, it was erected by the Roman ftandard? adding too, that all the reft of the dimenfions of this ftately fructure fall aptly and judicioully into the fame fale. So as long as any vefigia of St. Paul's cathedral remain, the Englifb foot, by which it was built, will eafily be known. I muft prepare the reader for a right underftanding of our Druid edifices, by informing him, that Stonebenge, and all other works of this nature in our ifland, are erected by that moft ancient meafure call'd a cubit, which we read of in the holy fcripiures, and in ancient profane authors. I mean the fame individual meafure, call'd the Hebrew, Egyptian, Pbernician cubit; moft probably deriv'd from Ncab and Adam. 'Tis the fame that the pyramids of Egypt and other thcir works are projected upon; the fame as that of Mofes's tabernacle, Solamon's temple, © ${ }^{\circ} \mathrm{C}$. and we may reafonably pride ourfelves in poffeffing thefe vifible monuments of the old meafure of the world. My predeceffor Bifhop Cumberland fhows, enough to fatisfy us, that the Egyptian and Hebrew meafure was the fame, tho' he has not hit upon that meafure, to a nicety. My friend and collegue Dr. Arbuthnot has been more fucceffful, in applying it to fuch parts of the greater pyramid, as evidently eftablifh its proportion, to our Englifb foot, from the meafures Greaves has left us: and fhows it to be 20 inches and $\frac{1}{}$ of Engliks meafure. Thus the Doctor obferves the fide of the greater pyramid at bafe, is 693 Engili/j feet; which amounts exactly to 400 Egyptian cubits, a full and fuitable rumber for fuch a fquare work, and without queition the originally defign'd mea-

Wer Pabmin

隹

Digitized by Google
fure, the ftadium of old. I have taken notice that Inigo Fones obferv'd the like dimenfions, in laying out the plot of Lincoln's-Inn-fields. The Doctor adds many more inftances, deduc'd in the fame way, to confirm it. I add, that Greaves fays, the lowermoit fteps of the pyramid are near 4 feet in height, which amounts to 2 cubits and 2 palms. They are 3 foot in breadth, i.e. I cubit 4 palms. The length of the declining firft entrance is 92 feet and an half, i.e. 55 cubits. The length of the next gallery is 110 feet, which amounts to 60 cubits. There is another gallery in the pyramid, of the fame length. Mr. Wibb fays the diameter of Stonehenge is 110 feet. This would tempt one to fufpect the fame meafure us'd in both. Thus the diameter of the like work at Rowldrich in Oxford/bire, defcrib'd by Dr. Plot, is 35 yards, i. e. 110 feet, grofsly meafur'd. Father Brothais in his obfervations on upper $E$ gypt, in our Pbil. Tran/: found a door-cafe made of one ftone, in a magnificent building, it was $26 \div$ feet in height, this is 15 cubits. Dr. Huntington, in the fame Tranf. fays, he found the fphynx fanding by the northern pyramids to be 1 Io feet in circuit, i. e. 60 cubits. Ptolomy in his IVth book, and Pliny XXXVI.-_feak of the obelifk rais'd by king Ramefes at Heliopolis, which Mr. Webb, p. 34. gives the length of in Englifh, feet, 136. This is $80 \mathrm{cu}-$ bits. That which Augufus fet up in the circus maximus at Rome upon reduction of Egypt, Webb fays, is 120 feet 9 inches, which amounts to 70 cubits. Another, Auguftus fet up in the campus martius, which he fays is 9 foot higher, i.e. 5 cubits. He fpeaks again of that erected by Fontana before St. Peter's, 8 I feet, which was 50 cubits. I fuppofe the bafe being injur'd, it was cut a little fhorter. This at the bafe, he fays, is 9 foot fquare, i.e. 5 cubits. The Vatican obelifk is 170 foot high, which is 100 cubits. 12 foot broad at bottom, which is 7 cubits; at top a third part lefs.

Hence we gather, the meafure of the fhew-bread table of the Yews, a cubit and half in height, Exod. xxv. 23. It had a golden crown about it, meaning a moulding, or verge or cornifh, as upon our tea-tables. it peripheria, coro$n a$, becaufe 12 loaves were to be pil'd upon it. It was 31 inches in height, that of our ordinary eating-tables. And we fhall find by this fame cubit divided into its 6 tophach's or palms, all our Druid works are perform'd. 'Tis not to be wonder'd at, that it fhould come into Britain, with an eaftern colony under the conduct of the Egyptian, Tyrian, Pbonician Hercules, (who was the fame perfon) about Abrabam's time, or foon after, as I have good reafons to believe, which will be fhown in its proper place.

## C H A P. II.

Of the name of Stonehenge. Thefe works prior to the Roman times. Who were the builders? Of the general fituation of it, again. Of the beauty of its general proportion. A peep into it. A walk round the area. Remarks on two fones fanding on the vallum, and two correfponding cavities for water vafes: explained from ancient coins. That the Welh are the remains of the Belgx from the continent, wholived bere at the Roman invafion, and by whofe reports, Stonehenge was built by the moft ancient oriental colony, that brought the Druids bither.

CO M E we to the name of Stonebenge, fo call'd by our Saxon anceftors; an argument fufficient, they were not the builders of it; they would have called it by a more honourable name. Rose henfenne is in Saxon a hang-ing-

## STONEHENGE

ing-rod or pole, i.e. a gallows; and Stonebenge is a fone gallows, called fo from the hanging parts, architraves, or rather imports, the more remarkable part; and which only can perfuade people from thinking, the fones grew in the very place, (as they exprefs it.) And fo Mr. Camden, Dr. Holland, Mr. Webb and others think, of the wonderful work at Abury; becaufe there are none of thefe overthwart ftones, as here. Many are fo aftonifhed at the bulk of thefe ftones, that meafuring all art and power by their own, they had rather think, they fprouted up in their places, like mufhrooms, at regular diftances, in mathematical circles; than that they were plac'd there by human induftry, for excellent purpofe. But pendulous rocks are now called benges in Torkfire, and I have been informed of another place there called Stonebenge, being natural rocks. So that I doubt not, Stonebenge in Saxon fignifies the hanging ftones. In Cormwall is a Heath call'd now Hengfon down, probably from fuch a work as ours, now demolifhed. It is in the hundred of Eafte. And near it, is that other memorable Antiquity, compofed of many upright fones, call'd the Hurlers, a Druid temple. The old Britons or Welf call Stonebenge cboir gaur, which fome interpret chorea gigantum, the giants dance: I judge, more rightly chorus magnus, the great choir, round church, or temple. As Banchor (where probably was of old, another Druid temple ) means the high temple. But they miftake it for chorea, cbwarae $\chi^{u a r e, ~ a ~ b a l l, ~ d a n c e ; ~ a s ~ N e c h a m ~ f i n g s ; ~}$

## Nobilis eft lapidum fructura, chorea gigantum: <br> Ars experta fuum poffe, peregit opuis.

Mr. Camden defines the work corone in modum. The Latin corona a crown, corolla a gbirland, and the Britifb crown comes from its circular form, as côr chorus. The armoric Britons call cryn rotundus, kruin the Irifh. Coryn is the round tip of any thing, many fuch like words in all the Celtic dialects. The chorus of a building among Ronian chriftians, became appropriate to the more facred part, or eaft end of churches, always turn'd of a circular form; from the time of Confantine the Great. Thus all the churches in the holy land, thus the chapel in Colcheffer caftle, and in the Tower of London, (both, in my opinion, built about his time ) are round at the eaft end. The old Britons or $W e l / h$, we find, had a notion of its being a facred place, tho' they were not the builders of it; for $I$ take them to be the remains of the Celtic people that came from the continent, who chiefly inhabited England, at leaft the fouth part, when the Romans invaded the ifland, they are more particularly the remains of the Belga. I fuppofe their name Welf, a corruption of Belgre, 'Ové $\lambda$ gat in greek, 2Belgitchen and Uatlfchen in german. Strabo IV. f feaks of their way of making flannel, called $\lambda$ awroy, for which our Welh are fo famous. Strabo gives the celtic word without the guttural afpirate, chlena in latin. The moft ancient inhabitants, the remains of the old Pbsenician colony and primitive Celts who built Stonebenge, were the Picts, Scots, Higblind and Iri $\beta$, all the fame people, tho' perhaps differing fomewhat in dialect, as in fituation: no otherwife than a Cumberland-man and one of Somerfitfiaire now. The Cornifb, I fuppofe, fome remains too, of the old oriental race. But at this very day in $W$ ales, they call every antiquated appearance beyond memory, Irijb. Upon view of land, that from before any ones remembrance appears to have been plow'd, or very ancient ruins of buildings, and the like, they immediately pronounce, That it was in the times of the Irijh. The very fame is obfervable in the north, of the Picts or Pigbts, as they pronounce it, gutturally, in the oriental farhion, which we cannot imitate. They call old foundations, Pigbts houfes, छ̌c. Every thing is Pictilb, whofe origin they do not know. Thefe people are confcious, that they are not the Aborigines, who by time and fucceffive inundations, were forc'd northward and weftward, into Scotland and Ireland. And alfo in the days of the Romans, fuch of the then inhabitants,


## Described.

habitants as would not fubmit to their gentile yoke, took the fame road. The Irifh therefore, or ancient Scotti/h, is the remnant of the Pbenician language, mixt with old Bijcayan and Gallic, dialects of Celts; and fome oriental, Arabic in particular: as Mr. Toland obferves. And they are the defcendants of the people who built Stonebenge, and the like Works. Whence fpring the ftrange reports of thefe ftones, coming from Exypt, from Africa, from Spain, from Ireland. As retaining fome memory of the fteps, by which the people who preceded their anceftors, travelled; nor they themfelves, nor even the Belgre pretending to be the builders of this wonderful work. For the Belge could not be ignorant of their own coming from the Gallic continent.

I have taken notice of another remarkable particular, as to the name of Stonebenge; which I apprehend to be of higheft antiquity: that it was called the Ambres, or Ambrofe, as the famous main Ambre by Penjans in Cornwall, another work of the Druids akin to this. And from hence the adjacent town of Ambrefoury had its name. But of this matter, I muft beg the readers patience, till I come to the laft chapter, and difcourfe of the antiquity of there works in general.

So much at prefent as to the name of our fabrick; it is time to draw toward the facred pile, and fancy ourfelves walking upon this delightful plain:

> | Non raftris bominum, arva videre |
| :--- |
| nolli obnoxia cura. Virg. |

nought can be fweeter than the air that moves o're this hard and dry, chalky foil. Every ftep you take upon the fmooth carpet, (literally) your nofe is faluted with the moft fragrant fimell of ferpillum, and apium, which with the fhort grafs continually cropt by the flocks of heep, compofes the fofteft and moft verdant turf, extremely eafy to walk on, and which riles as with a fpring, under ones feet. The following drawing Ta $\mathbf{~}$. III. is a profpect taken from

Tab. III.

the king's barrow, weft from $V_{e / p a f i a n ' s ~ c a m p, ~ i n ~ t h e ~ w a y ~ f r o m ~ A m b r e f o u r y ~ t o ~}^{\text {o }}$ Stonebenge, by the Brifol road. Tho' the graver has not done it juftice: yet it will give one a general notion of the fituation of the place. It is admirably chofen, being in the midft of thofe wide downs, eall'd Salifbury plain; between the river Avon to the eaft, and a brook that runs into the Willy, on the weft. Thefe two ftreams half round encompafs it, at 2 miles diftance, forming as it were a circular area, of 4 or 5 miles diameter, compos'd of gentle acclivities and declivities, open and airy. Yet agreeably diverfify'd with the appearance of barrows, every where upon the edges of the higheft grounds. Which very barrows are curious and entertaining, when view'd at hand, as well for the nicety and handfome turn of their forms, as for their great variety, and all within fight of the temple. Thefe downs feed many flocks of fheep, and no doubt furnifh'd the idea of Theflalian and Arcadian plains, to the noble Sydney refiding at the neighbouring Wilton. The rivers are planted very thick with towns. Six miles fouth of Stonchenge is Salifbury, a mile nearer is Sorbiodunum, or old Sarum, by the fide of which paffes the Roman road via Iceniana reaching from Norfolk, into Dorfet Fire. As this road goes fouthward, a mile beyond Woodyates, where it enters Dor/et/Jire and Cranburn chafe, it paffes over a heath where are many old barrows, like thefe on Salifoury plain. It happens there, to infringe upon one of the barrows, which luckily affords us a demonftration, of the road being made fince thofe barrows; of which I took notice in my itinerarium p. 180. and further to gratify the curious have here inferted a print of it $\mathrm{T}_{\mathrm{A}} \mathrm{B}$. IV. Tab. IV. and may take the opportunity once for all to advertize them, of the difadvantage under which all drawings from thefe plains muft appear. They are made for ufe and inftruction, like mathematical figures, and cannot be expected much to pleafe the eye; being form'd chiefly from bare lines, admitting no picturelike decoration.

## STONEHENGE

I have oblerv'd another fimilar proof of thefe works being older than the Roman times here, in that Roman road that goes from Marlborough to Bath. It is near Abury, and I have a print of it engrav'd, which will be exhibited, when I next publifh an account of that great work. But in the former plate
Tab.IV. IV. I call thofe Druid barrows, which are often found on thefe plains: a circular trench, fometime of 100 foot diameter, with only a fmall tump of earth in the middle, under which there is commonly an urn. Sometime two or three of thefe little tumps or diminutive tumuli within one circle, which it is natural to fuppofe, were friends or relations. Thefe circles are always excellently well mark'd out.

The particular fpot of ground where Stonekenge ftands, is in the lordhip of weft or little Ambrefoury: the poffeffion of the reverend Mr. Hayward, who at prefent may be call'd the Archdruid of the inland. 'Tis a delicate part of this large plain, with a gentle declivity from the fouth-weft to the fouth and north-eaft. So that the foil, which is chalk, is perfectly dry and hard. Hence the infinite numbers of coaches and horfes, that thro' fo many centuries have been vifiting the place every day, have not obliterated the track of the banks and ditches. The water cannot poffibly reft any where hereabouts. The founders confulted well for the ftability of their work, and falubrity of the place. Cofar informs us in his commentaries, B. G. vi. 13. that among the Druids, "one has the fupreme authority. When he is dead, whoever excels " in dignity fucceeds. But if there be more candidates, the Archdruid is chofe " by the votes of the Druids: and fometimes they fight for it. At a certain " fix'd time of the year the Gaulifb Druids meet, in the territories of the Car" nutes, which country is in the middle of Gaul, in a confecrated place. Hi" ther all perfons from all quarters come, who have any controverfy, and ftand " to their determination. The difcipline of the Druids arofe in Britain, and " is faid from thence to have been brought into Gaul. And now, they who "defign to be more throughly initiated therein, go over to learn." Here in few lines the great author acquaints us with a vaft fund of ancient hiftory, and upon which whole volumes have been wrote. I obferve no more from it at prefent, than that we may very reafonably conclude, the elegant and the magnificent ftructure of Stonebenge was as the metropolitical church of the chief Druid of Britain. This was the locus confecratus where they met at fome great feftivals in the year, as well to perform the extraordinary facrifices and religious rites, as to determine caufes and civil matters. Cefar calls thefe appointments of the Druids in Gaul confecrated places, where probably was nothing but a circle of rude ftones. Had he feen thofe of our ifland, an Abury or even a Stonebenge, he would fcarce have given them the title of temples: he was not ufed to the old patriarchal way. But 1 reckon the true reading in that paffage quoted from him, to be loco confecrato, not luco, which was put in by fome bold tranfcriber, who had heard of the fondnefs of the Druids for groves. But how unfit is a grove for a great and public meeting upon civil affairs? And this for the excellency of its fituation upon a vaft plain, was well calculated for a publick meeting of thofe of the order, at an election of a new Archdruid. As Cafar's words give light to the work before us, fo it confirms what the warlike author fays, of the difcipline being originally in Britain; which the critics upon the continent cannot bear, and vainly endeavour to fipirit away Cefar's meaning. The very building of Stonebenge, to fay nothing of other like works here, fhows it was not in vain, that the youth of Gaul came to learn of men, who could contrive and execute fo mighty a work.

Stonebenge ftands not upon the very fummit of a hill, but pretty near it, and for more than three quarters of the circuit you afcend to it very gently from lower ground. At half a mile diftance, the appearance of it is ftately and awful, really augut. As you advance nearer, efpecially up the avenue, which is to the north-eaft of it, (which fide is now moft perfect) the greatnefs of its con-


## DESGRIBED.

tour fills the eye in an aftonifhing manner. Tав.V. is the front profpect from Tав. V. the entrance of the avenue. The ftone that leans o'er the high altar appears thro' the grand or principal entrance: becaufe we ftand upon lower ground. If the reader pleafes to caft his eye upon Plate XII. there 'tis reprefented in ortho- Ta $\mathbf{~ в . ~ X I I . ~}$ graphy, (to fpeak technically) as here in profpect. Hence by this method of comparing the defigns together, we may, without confufion, gather a true notion of the work. Stonebenge is a good deal more in diameter, than the outfide of St. Paul's cupola. And from a comparifon of thefe two buildings, I was able to judge of the vanity of the architect of St. Peter's at Rome, who in order to degrade the Pantbeon, (whilft he was imitating it) boafted, he would fet the Pantbeon 200 foot high in the air, meaning the cupola there. But the architect of the Pantbeon, Valerius Oftienfis (had he been alive) would have told him, that the vaftnefs of the diameter in thefe cupola's is loft by the very height. Whatever we would have admired, ought to be preferved as the largeft dimenfion. Therefore Valerius, with admirable judgment, has made the outward breadth of the PantJjoon one fifth part compleatly longer than its height, taken in front; but if we meafure it fidewife, taking in the portico, the breadth to the height, is more than 6 to 4. By this means the wonder of the Pantbern, the curve or arch 150 Roman feet in diameter, remains. So the curve of Stonebenge, which is above ino Englijh feet, appears extraordinary large and well proportion'd, upon a height of 18 foot, which reaches to the top of the outer cornih; that of the inner cornifhes is but 24 foot high, at a medium. For the cornifhes of the inner part of Stonebenge, or that which $W e b b$ calls the cell, are not all of equal height, of which in proper place. Thus both parts of the wonder is preferv'd, the greatnefs of the circuit of the whole work, the greatnefs and height of the parts that compofe it ; the height being one fourth of the diameter. The greatnefs too of the lights and fhades in Stonebenge, as well as their variety arifing from a circular form, gives it all poffible advantage, and makes it deferve the appellation of,

> Deorum gloriofa domus,
as Theorritus and Herodotus generally call temples. And its fituation is correfpondent to the antient notion. Paufanias praifes the Tanagrei in Beotia, for having their temples in clean and diftinct area's, diftant from profane buildings and traffic.
Stonebenge is inclofed within a circular ditch. After one has pafs'd this ditch, fays the right reverend annotator to Camden, he afcends 35 yards before he comes at the work itfelf. This meafure is the fame, as that which $W e b b$ calls 110 foot, the diameter of the work. For the area inclos'd by a ditch, wherein Stonebenge is fituate, is in diameter three times the diameter of Stonebenge. See the Plate of the area. XXIII. Therefore the diftance between the verge of the ditch within fide, quite round, to the work of the Temple, is equal to the diameter of the Temple. The reader remembers what I promis'd, about the fcale or meafure whereby this work and all others of the Druids, is form'd; that 'tis the old Hebrew, Pbenician or Egyptian Cubit, which compar'd with the Englifb foot, amounts to 20 inches and $\frac{4}{3}$. Therefore I have drawn the enfuing comparifon and proportion, between our Englifh and Hebrew Scale; which is to accompany us in the future defcription. Tab.VI. the fcale of Tab. VI. cubits and feet compar'd. That I might not be fufpected to favour an hypothefis, I produce other peoples meafures, where I can find them in print, provided they be done with tolerable judgment and accuracy; for both are neceffary in our cafe, with proper allowance. 'Tis not to be fuppos'd, that in this work, the minutenefs and extreme curiofity of Deffodetz, with which he meafur'd the remains of old Rome, is expected, or even poffible. For tho' the ftones are not chizel'd and fquar'd, to fuch precifenefs, as Roman works are; yet they are chizel'd, and are far from rude. Neverthelefs every body has not

Tab.
XXIII.

Akill, properly to meafure them. For they are much impair'd by weather: much is knock'd off by wretched hands. Thofe ftones that ftand, are luxated various ways, by time and their own weight; by filly people digging about them, and by the unfortunate colony of rabbets lately tranflated thither. So that we may well fay with Claudian,

> Seram ponderibus pronis tractura ruinam,
> Pars cadit afzduo fatu, pars inbbre perefa. Rumpitur, abripuit partem vitiofa vetufas.

I was forc'd to make many admeafurements and repeated, before I could obtain an exact ground-plot; and it requir'd much confideration to do it, and to find out the true fcale by which it was compos'd, the Druid cnbit, which they
Tab. VI. brought with them from the eaft. Therefore by the annexed fcales, Tab. VI. which I have contriv'd to anfwer all lengths, the reader will moft perfectly underftand the fubfequent defcription, and fee the truth of my affertion: and may from thence be enabled to meafure any other like works, in our iflands, which I have not had the opportunity of viewing. It was the eaftern way, in laying out a building, to ufe a ftaff of 6 cubits long. This was of a convenient, manageable length; and its divifions being half a dozen, fuited well a reckoning by duodenaries. Thus in Ezek. xl. 3, 5. Apoc. xxi. 16. the angel that laid out the temple of Solomon, is defcribed, as having a reed of 6 cubits (a meafuring reed or cane) in his hand. This being the univerfal and firft meafure of antiquity, was in time fpread all over the world. In particular, it became the decempedum of the Greeks and Romans; the common meafuring ftandard. But 'tis remarkable, they alter'd the divifions, thinking it more artful and convenient to have them in lefs parts: and inftead of 6 cubits, they made it confift of 10 feet. . And by time and change, the whole meafure became fomewhat alter'd from the primitive. For the Greek decempedum was fwell'd fomewhat too long, as the Romans diminifh'd theirs a little. Ezekiel's reed is our 10 foot and 4 inches $\frac{2}{3} ; 400$ cubits is the fadium of the ancients, or furlong, 700 feet.

When you enter the building, whether on foot or horfeback and caft your eyes around, upon the yawning ruins, you are ftruck into an exftatic reverie, which none can defribe, and they only can be fenfible of, that feel it. Other buildings fall by piece meal, but here a fingle ftone is a ruin, and lies like the haughty carcafe of Goliatb. Yet there is as much of it undemolifhed, as enables us fufficiently to recover its form, when it was in its moft perfect frate. There is enough of every part to preferve the idea of the whole. The next
Tab. VII. Plate, Tab. VII. the peep (as I call it) into the fanctum. fanctorum, is drawn, at the very entrance, and as a view into the infide. When we advance further, the dark part of the ponderous impofts over our heads, the chafm of 1 ky between the jambs of the cell, the odd conftruction of the whole, and the greatnefs of every part, furprizes. We may well cry out in the poet's words

## Tantum Relligio potuit!

if you look upon the perfect part, you fancy intire quarries mounted up into the air: if upon the rude havock below, you fee as it were the bowels of a mountain turn'd infide outwards. It is pleafant likewife to confider the fpot upon which 'tis fituate, and to take a circular view of the country around it. For which purpofe I have fketch'd the following profpects, taking in the country almoft round the circumference of the horizon. This Ufe there will be in them further; if ever it happen, that this noble work fhould be deftroy'd: the fpot of it may be found, by thefe views.
тab. VIII. Tab. VIII. north profpect from Stonebenge.
Tab. IX. Tab. IX. fouth-weft profpect from Stonehenge.
тав. $\mathbf{X}$. Tab. X. fouth-eaft profpect from Stonebenge.


Apeep into the fancaum Canctorum 6 Iune. 1724.

## Describe D.

The vallum of the ditch which inclofes the area, or court, is inwards, and makes a circular terras; walking upon which, we take the foregoing profpects. The loweft part of the area is towards the entrance. The tops of all the cir- cumjacent hills, or rather eafy elevations, are cover'd o're, as it were, with barrows, which caufe an agreeable appearance; adorning the bare downs with their figures. And this ring of barrows reaches no further, than till you loie fight of the temple, or thereabouts. Stand at the grand entrance by the flone that lies upon the ground, and the view of the temple prefents itfelf as in the Vth Plate, the front profpect of Stonehenge. Directly down the avenue, тab. V. to the north-eaft, the apex of an hill terminates the horizon, between which and the bottom of a valley you fee the Curfuss, a work which has never yet been taken notice of. Being a fpace of ground included between two long banks going parallel eaft and weft, at 350 foot diftance, the length 10000 fect. This was defign'd for the horfe races and games, like the Olympic, the Iftimnian, \&c. of the Greeks. But we Thall fpeak more particularly of this afterwards. In the valley on this fide of it, the ftrait part of the avenue terminates in two branches; that on the left hand, leads to the Curfius; that on the right goes directly up the hill, between two famous groups of barrows, each confifting of feven in number. The fartheft, or thofe northward, I call the oldeft king's barrows; the hithermoft are vulgarly called the feven king's graves.

If we walk a little to the left hand, TAb. VIII. is prefented. See the Tar. ViII. northern long barrow: on this fide of which, the eye takes in the whole length of the Curfus. Many barrows at the end and on both fides of it. That mark'd P. was open'd by my Lord Pembroke, thofe mark'd S. were open'd by myfelf. What was difcover'd therein will be treated of hereafter. Further to the weft, the higheft ground of that fpot whereon Stonebenge ftands, eclipfes a diftant view, and there are the neareft barrows planted with rabbets, which do much damage too at Stonebense, and threaten no lefs than the ruin of the whole. Upon the vallum of Stonebenge is one of the ftones there, which feems to be a fmall altar, for fome kind of libations, and at the letter A. the mark of a cavity; of which more particularly, in the next page. The next or fouth-weft profpect, Tab. IX. from Stonebenge, takes in the country from Tab. IX. Berwickbarn, and my Lord Pembroke's wood of Groveley, to Salifoury fteeple: a chain of barrows reaching a 6th part of the whole horizon. Many from the great quantity of thefe fepulchral tumuli here, injudicioully conclude, that there have been great battels upon the plain, and that the flain were bury'd there. But they are really no other than family burying-places, fet near this temple, for the fame reafon as we bury in church-yards and confecrated ground. Salifbury fteeple feen from hence, brings to my forrowful remembrance, the great Thomas Earl of Pembroke, whofe nobie afhes are there depofited. He was patron of my ftudies, particularly thofe relating to Stonebenge. Virtue, piety, magnanimity, learning, generofity, all fublime qualities recommended and added to his illuftrious defcent. Glorious it will be for me, if thefe pages live to teftify to another age, the intimacy he was pleafed to honour me with.
Temperet a lachrymis quis talia fando

In this Plate, the reader may remark another of the cavities within the vallum, to which that correfponds on the oppofite diameter before hinted at.

The fouth-eaft profpect finithes the circle, Tab. X. looking towards the Tab. X. valley fouthward, where the rain-water paffes, from the whole work of Stonebenge, the whole tract of the Curfus and the country beyond it, as far as north long barrow; and fo is convey'd into the river Avon at Lake. That road between king barrow and the feven barrows is the way to Vefpafian's camp and fo

E

## STONEHENGE

to Ambrefbary. The barrow under thofe feven kings of later form, is that neareft to Stonebenge.
Doubtlefs in the facrifices and ceremonies which were here practis'd, water was us'd, and I obferve moft of our Druid temples are fet near rivers. The reafon why Stonebenge was not fet near a river, has hitherto effectually preferv'd it, this part being uninhabitable upon that account, and rather too far off a town for tillage. But when I curioully contemplated the beauty and convenience of this court, I obferv'd two remarkable places, which plainly have a conformity with the two fones fet upon the vallum; which ftones puzzle all enquirers. Thefe particulars feem to explain one another, and more efpecially by the help of a coin in Vaillant, tom. II. p. 240. for which reafon I caus'd it to be engraven on that plate, TAb. XXIII. the area of Stonebenge. 'Tis a coin of Pbilip the Roman emperor, ftruck by the city of Heliopolis in Ceeleffiria under mount Libanus, now call'd Baldec, where is an admirable ancient temple remaining, defrrib'd and pictur'd in Maundrel's travels of the holy land. In the walls of it are two or three fones of an immenfe length, which feem to be the fragments of an obelifk, dedicated to the fun, whence the name of Heliopolis. The coin prefents a temple built upon a rock: to which they afcend by fteps. The temple is inclos'd in an area with a wall. On the left hand by the circuit of the area is a ftone altar. A little further, is a great vafe for water to be us'd in the facrifices. The legend is colonia ivlia avgufta felix heliopolitana. Now the two cavities in the circuit of our area, very probably were the places where two great ftone vafes were fet, and the two fones were two altars for fome particular rites, which we don't take upon ourfelves to explain. See another coin II. in Defcamp's felectiora numifinata, p. 23. which is to the fame purpofe. Thofe fones are fet in their proper places in my fcheme of the area of Stonebenge: and I leave them to the better conjectures of the learned in thefe matters. Mr . Webb fancies them the jambs of two portals of two entrances, befides the great entrance; and makes them favour his imaginary triangles, from which he forms the work of Stonebenge, upon a Vitruvian plan. And in order to bring this about, he draws one fone, that toward the eaft, or on the left hand, from the true and only entrance, no lefs than 120 foot out of its real place. No doubt, the reader will be furpriz'd at this, and the eafier credit me, when I fay his ground-plot in other parts, is very far from being exact. The reader will obferve from my fcheme, that the two femicircular hollows mark'd A A, wherein I fuppofe the water-vafes were fet, are plac'd alternatively, with the two ftones: I don't pretend to fhow why the Druids did fo. But that ftone ftanding, together with the upper A, and the center of the grand entrance by the ftone that lies flat there, make an exact equilateral triangle; yet really have not the leaft relation to the fcheme of the work of Stonehenge in general, or to the cell in particular. Nor do the ftones, or thofe hollows, point out any other entrance crofs the ditch into the area. So in the tabernacle of Mofes and temple of Solomon, great vafes in brafs were fet for water, in the court before the temple.


## Described.

## C H A P. III.



The admeafurement of the ground-plot; and outer circle of the temple, and impofs over it. Of the principal line of the work, running down the avenue, and fingle entrance, into the area, or court. The impofs are jointed exquifitely by mortaije and tenon. The temple at Perfepolis a building of this fort.

LET us now fet about an examination of the meafures of the temple itfelf. Take a ftaff 10 foot 4 inches and $\frac{1}{4}$ long. Divide it into fix equal parts. Thefe are the cubits of the ancients. Each cubit is divided into fix parts. Thefe are palms. Thus have we the original meafure of the founders of Stonebenge. We will take Mr. Webb's meafures, and compare'em herewith. Tab. Tab. xi. XI. the ground-plot.

Mr. $W_{e} b b$ fays, p .55 . that the whole work of Stonelenge being of a circular form, is 110 foot in diameter. But to be precife, 'tis 108 and fomewhat more, and his own fcale in his ground-plot fhows the fame. This is the diameter from outfide to outfide, which in our ground-plot is the principal diameter. The thicknefs of the flones of the outward circle, he fays, p. 59. are 3 foot and an half. Hence the inner diameter becomes almoft 102 feet $E n g l i / J$. If the reader pleafes to meafure 102 feet upon the comparative fcales, which I Tab. Vi. gave of the Englifb foot and Hebrew cubit, being the meafure us'd by the Druids, or in the fcales at the bottom of the ground-plot, he will find that it amounts exactly to 60 cubits. 30 cubits being the radius wherewith they ftruck the circle upon the turf, which is the inner circumference of that work. That fufficiently defin'd their ground-plot. For tho' they intended in general, that the thicknefs of the ftones of this outer circle fhould be 3 foot and a half; but to fpeak more properly, 2 cubits (which is the fame meafure) yet they were more careful of one fide only, of that dimenfion. And the chief bufinefs being withinfide this temple, they fet the beft face of the fones inwards, upon that ground-line; the other face was fuited as well as the fcantlings they could get, beft anfwer'd. Webb's 3 foot and a half is precifely 3 foot 5 inches, and fomewhat more, making compleatly 2 Druid cubits, as you find by the fcales. They that carefully view Stonebenge, will eafily fee, that the ftones of the infide both of the outward circle and of the cell, are the fmootheft, beft wrought, and have the handfomeft appearance. For fo the polite architects of the caftern part of the world, beftow'd more elegance within their temples than without. Not as our modern London builders, who carve every moulding, and crowd every ornament, which they borrow out of books, on the outfide of our publick ftructures, that they may more commodioully gather the duft and fmoke. The truth is, good fenfe and obfervation of nature, produces the fame ideas in all ages and all nations. Our Druids obferv'd, that God almighty in forming the body of a man, made all the external parts great, bold, round, with ornament fufficient; but where the beauty chiefly confifted in the fitnefs of the proportions, in fymmetry and plainnefs. In the infide, he has difplay'd all the minutice of divine fkill . They have done the like, according to their way, in Stonebenge. So even as to the outward appearance, I find they took care to fet thofe ftones that had the beft outward face, toward the front or entrance. And to embarrafs the general fcheme of the work, they made ufe of two centers inftead of one, but 2 cubits diftance from one another; perhaps to make the thing intricate and as magical: befides the advantage it gives to the oval form of the included cell.

Obferve,

## STONEHENGE

Obferve, in laying down the ground-plot and projecting this outer circle, we faid it was 1 io feet, (grofs meafure) in diameter. We remember what is before-mention'd, that the learned Greaves meafur'd two galleries in the greater pyramid, in like manner, each 110 feet. So the bifhop of London fays, from the grand entrance of Stonebenge, to the work is 35 yards: fo he fays the diameter of the circle at Rowldrich in Oxford/bire, is 35 yards: all this while 60 Druid or Egyptian cubits are meant. So the length of Solomon's temple was 60 cubits, whereof the Ædes 40 cubits, the fanctum fanctorum 20.

The intention of the founders of Stonebenge was this. The whole circle was to confift of 30 ftones, each fone was to be 4 cubits broad, each interval 2 cubits. 30 times 4 cubits is twice $60: 30$ times 2 cubits is 60 . So that thrice 60 cubits compleats a circle whofe diameter is 60 . A ftone being 4 cubits broad, and 2 cubits thick is double the interval, which is a fquare of 2 cubits. Change the places between the ftones and their intervals, and it will make a good ground-plot for a circular portico of Greek or Roman work. For fuppofing thefe intervals to be fquare plinths of 2 cubits each fide, and columns properly fet upon them: it will admit of 3 diameters for the intercolumniation, which is the diaftyle manner in architecture. . But to talk of pycnoflyle with $\mathrm{Mr} . W e b b$, and call thefe ftones of ours pillars or pillafters, where they are twice as broad as the fpace between them, and to call this an order, is monftrous.

Thus a fone and an interval in this outward circle of Stonebenge, makes 3 fquares; 2 allotted to the ftone, 1 to the interval; which for ftability and beauty withal, in fuch a work as ours, is a good proportion. The curiofity of the work, and the general orthography of the outward circle, I have defign'd in
TAB. XII. Plate XII. and it may be feen in the feven fones now remaining at the grand
Tab. V. entrance. Which fhow what frictly was the intent of the founders, and where they took the liberty to relax of that ftrictnefs, and that with judgment; fo as to produce a good effect. I thall explain it from Mr. Webb's own meafures, that I may give the truth its full advantage. P. 59. he fays, the ftones which made the outward circle are 7 foot in breadth. Obferve that 7 foot makes 4 cubits of the Druids. He fays, they are 15 foot and a half high. You find that exactly 9 cubits. P. 6r. he fays, the architraves lying round about upon them, are 2 foot and a half high, i. e. our cubit and half. He mentions their breadth to be 3 foot and half, equal to the thicknefs of the upright, i.e. our two cubits. They are jointed in the middle of each perpendicular ftone. Hence tho' he has not mention'd the length of thefe architraves, we gather them to be 6 cubits long. This is fpoke of their inward length, for outwardly they muft needs be fomewhat longer, as being an ark of a larger circle. I muft obferve about thefe architraves, as Mr. $W e b b$ calls them, that they are more properly call'd impofts or cornifhes; for they are not made to fupport any thing above them, as is the nature of an architrave, but for the ftability and ornament of what fupports them, which is the nature of impoofts and cornifhes. Tho' thefe bodies of ftone here, never had or were intended to have, any mouldings upon them, like Greek and Roman works; they are wrought perfectly plain, and fuitable to the ftones that fupport them. I obferve further, the chizeling of our upright ftones, is only above ground. For the 4 or 5 foot in length below ground, is left in the original natural form. And that the upright fones are made very judicioully to diminifh a little, every way; fo that at top they are but 3 cubits and a half broad, and fo much narrower as to fuffer their impofts, to hang over a little, or project (in properer terms) over the heads of the uprights, both within fide and without. By this means thefe uprights are in much lefs danger of falling or fwerving any way: and the impofts, which are not broader than the thicknefs of the fones at bottom, which fupport them, have a graceful effect, by projecting a little, without danger of furcharging them. We fee here plain, natural, eafy geometry, what we may call the


## DESCRIBED.

firft rudiment of art, deduc'd from common reafon: but they that can find any Roman delicacy herein, muft, I freely own, have a much nicer eye and tafte, than I can pretend to. The Druids had, from patriarchal times, made their altars or temples of rude unpolifh'd ftones. But now hearing, probably from Pbonician traders, of the glories of Solomon's temple, at leaft of other temples made artfully in imitation of it; fuch as thofe of Sefoffris in Egypt, and others about Pbecnicia: they thus made a fmall approach to fquare fcantlings and fones wrought. And this feems to have been the firft and the laft work of theirs of this kind, that I can hear of, either in the Britanic ifles, or on the continent. And no doubt but it muft give them fo high a reputation, that even the people of Gaul themfelves could not help owning to Caf/ir, that the difcipline of thefe men was firft begun here, and carry'd on with fuch fuccefs, that they fent their youth from the continent hither, as to an academy, to be initiated in their learning. We are not to fuppofe thefe words are to be ftrictly taken, as if the Druids here began their inftitution: but that being an oriental manner of religion, and much different from that on the Gallic continent, what they had of it there, was deriv'd from Britain. It appear'd as much new to them, who were chiefly idolaters, as in many ages preceding, Abrabam's religion appear'd new to the inhabitants of Pbocnicia and Erypt: who were then not much tinctur'd with idolatry. Nor, probably, had the Druids much opportunity of building another fuch work, as Stonebenge, between its foundation and the Row:an times. Becaufe, I apprehend, the encroachments of the Gallic nations from the continent, feating themfelves in Britain, about 200 years before Cafar's invafion, had molefted the Druids much, in thefe fouthern counties: and drove them with the old Britons, farther northward and weltward. But of this we will treat more particularly afterwards, when we offer our opinion, of the time when it was made.
In the orthographic plate, $\mathrm{T}_{\text {а }}$. XII. we may fee the frict geometry of the Tab. XII. work of this outward circle, and the artful variation therefrom, in order to make the aperture of the grand entrance fomewhat wider than the reft. Mr. Webb does not take notice of this particular; and he might have triumph'd in it. For'tis no lefs than a Vitruvian rule, to relax the intercolumniation juft in the middle of the portico, in the front of a temple, and over-againft the door. He fpeaks of it in Lib. III. 2. when talking of the Euftyle ratio, the beft for ufe, appearance and ftrength: he directs the intercolumniation to be of two diameters and $\ddagger$; but the middle intercolumniation of three diameters. By which means the approach to the door will be much more commodious, and nothing diminif'd of beauty in afpect. And this is the reality of the cafe before us.

But alas, our Britijb priefts knew nothing of Vitruvius; they deduc'd this knack from an authority much ancienter than him, viz. from pure natural reafon, and good fenfe. Nor does this hurt the whole of the work. The aperture ought frictly to have been two cubits equal to the reft, but they advanc'd it to two cubits and a half. This only crowds the next intervals on each fide a fmall matter nearer, the reft preferving their true diftance quite round. And in the work itfelf, 'tis obvious enough to the naked eye. Again, there is another remarkable particular obferv'd by our priefts. Becaufe the aperture of the principal entrance we are fpeaking of, is wider than the reft: they have made the impoft over it thicker than the reft, and 'tis equally obvious to the naked eye. 'This was the more effectually to fecure it from breaking. But this additional thicknefs they have put below. They were fenfible it would have produc'd an ill effect at top, by breaking the line of that noble cincture. It muft be own'd this was extremely well adjufted. And the breadth of the fone that hangs over head in this place is aftonifhing. See Plate VII. call'd a Ta b. VII. peep into the fanctum fanctorum. I had the greateft pleafure imaginable, in the year 1723, $\mathfrak{F}^{\prime}$ uly, in being here for feveral days together, with the learned Heneage Lord Winchelfea. I have juft reafon to boatt of that intimacy he in-
dulg'd me in ; and his memory muft for ever be dear to me, for his noble qua-
$T_{\text {A }}$. VII. lities. My Lord and I were very careful in taking the meafures of Stonebenge; and with great grief we obferv'd, the ftones here reprefented in that Plate,
Tab. ${ }^{\text {. }}$ and Tab. V. the front view, to be much deviated forwards from their true perpendicular, and in the utmoft danger of falling. 'Tis to be fear'd fome indifcreet people have been digging about the great entrance, with ridiculous hopes of finding treafure, and loofen'd thereby the chalky foundation. We found by meafure, that the upper edge of the impoof overhangs no lefs than 2 foot 7 inches, which is very confiderable in a height of 18 . The whole breadth at the foundation is but 3 foot and a half. And this noble front is now chiefly kept ap by the mafonry of the mortaife and tenon of the impofts.

Thro' the middle of the principal entrance, runs the principal line of the whole work; the diameter from north-eaft to fouth-weft. This line cuts the midde of the altar, length of the cell, the entrance, the entrance into the court, and fo runs down the middle of the avenue, to the bottom of the valley for almoft 2000 feet together. This is very apparent to any one at firft fight, and determines this for the only principal entrance of the temple. All the other intervals of the ftones of the outer circle, have no preheminence in any refpect. There is no fuch thing as three entrances, which Mr. Webb's fcheme fuggefts. He might as well have pretended there are 6 , for fo many points of his triangles meet in intervals, at the verge of the outer circle. Upon this line are all the principal centers that compofe the work, it varies a fmall matter from true north-eaft.

The contrivance of our artificers in making mortaifes and tenons, between the upright ftones and the impofts is admirable, but fo contrary to any practice of the Romans, that it alone is enough to difqualify their claim to the work. Much judgment and good fenfe is fhewn in the management of them. The centers of the tenons are 2 cubits diftant from each other, upon each upright. By this means there is 4 cubits diftance from the center of the tenon of one ftone, to the center of the tenon of its next neighbour, acrofs the intervals, or in one impoft. Divide the upper face of an upright into its 2 fquares, the center of a tenon is in the center of that fquare. Divide the under face of an impoft, into its 3 fquares, the correfpondent mortaifes are in the centers of the two outermoft fquares, and this was the ftrict geometrical method us'd by the founders: fo that the ftones fitted, as foon as plac'd in their true fituations. Thefe tenons and mortaifes of this outer circle are round, and fit one another very aptly. The tenons and mortaifes, are 10 inches and a half in diameter, which is 3 palms, or half a cubit. They rather refemble half an egg, than an hemifphere. Thefe moft effectually keep both uprights and impofts from luxation, and they muft have ufed great labour that threw them down. Sir Robert Sibbald fpeaks of a rocking ftone in Ireland, contriv'd with mortaife and tenon like ours: of which Mr. Toland gives us an account, with other like, the works of the Druids.
Tab. XII. $\because$ The whole height of upright and impoft is io cubits and a half. The uprights 9 cubits, the impoof 1 cubit and a half, fo that the impoft is a 6th part of the height of the upright. If we meafure on the outfide, the collective breadth of two upright fones, and the interval between them, 'tis 10 cubits and a half equal to the whole height; and the interval is half the breadth of a ftone, the thicknefs of a fone is half its breadth. That impoft which lies over the grand entrance, we faid, was deeper and longer than the reft. Abrabam Sturges an architect, and myfelf meafured it, in prefence of Lord Winchelfea. Its middle length is II feet 10 inches, which is 6 cubits 4 palms; 2 foot 11 inches high, which is I cubit 4 palms. They have likewife added a little to its breadth, more than the reft, being 3 foot 9 inches, which is 2 cubits and a palm. N. B. The fcale of my drawing is adapted for the infide of the circle, upon which the proportions in geometry are built: fo that the outward breadths
umop Rysymis

$\xrightarrow[-2]{+}$
1
--
年等

 5 * -



| $\because$ | 0 |
| :---: | :---: |
|  | 0 |

Digitized by Google
breadths of the uprights and lengths of the imports are fomewhat more, than by the fcale appears there. The intelligent reader knows this muft be the confequence, in arks of a larger circle.

Nothing in nature could be of a more fimple idea than this vaft circle of ftones, and its crown-work or corona at top; and yet its effect is truly majeftic and venerable, which is the main requifite in facred ftructures. A fingle ftone is a thing worthy of admiration, but the boldnefs and great relievo of the whole compages, can only be rightly apprehended, from view of the original. On the outfide, the impofts are rounded a little to humour the curvity of the circle, and within they are ftrait, tho' they ought to be a little curv'd. This makes them fomewhat broader in the middle, than at the end, and broader than the 2 cubits, which is the thicknefs of the upright ftones, upon an ichnography. So that within, the crown-work makes a polygon of 30 fides. But this little artifice without debafing the beauty of the work in the leaft, adds much ftrength to the whole, and to the impofts in particular. We may guefs their proportions are well chofe, when fo many of them are thrown down by violence, and not broke in the fall. And their greater breadth in the middle, or that part that covers the intervals, adds to the folemnity of the place, by the fhadow they prefent at the bottom. The whole affair of jointing in this building is very curious, and feems to be the oldeft and only fpecimen of this kind of work in the world. There is nothing, that I know of, comes in competition with it, but the celebrated ruins at Perfepolis. TA b. XXXV. It is compos'd of great ftones laid acrofs one another, as Stonebenge: but not with mortaife and tenon. The vulgar and learned too, generally take it for the remains of the palace of the Perfian monarchs, burnt by Alexander the great; but it is really an open temple like ours, and made much in the fame manner. But the ftones are well fquar'd, ornamented with mouldings and carvings, and the whole of them are fquares, not round works as here. Perfepolis is a mixture, between the ancient patriarchal round form of open temples, and the fquare form introduc'd under the $\mathcal{F e w i f h}$ difpenfation, in oppofition to the former, which were generally degenerated into idolatrous purpoles. But of this I Thall fpeak more perhaps hereafter, when I treat of the moft ancient temples.

Of the outer circle at Stonehenge which in its perfection confifted of 60 ftones, 30 uprights and 30 impofts, there are more than half the uprights, viz. I 7 left ftanding. II of thefe uprights remain, continuous, by the grand entrance, five impofts upon them. One upright at the back of the temple or on the fouth-weft, leans upon a ftone of the inner circle. There are fix more lying upon the ground, whole or in pieces. So that 24 out of 30 are ftill vifible at the place. There is but one import more in its proper place. And but two lying upon the ground, fo that 22 are carried off. Hence I infer, this temple was not defac'd when chriftianity prevailed. But fome rude and facrilegious hands carried the ftones away for other ufes. However it cannot but be the higheft pleafure imaginable to a regular mind, to walk round and contemplate the ftatcly ruins which I have endeavour'd to preferve in the outfide views, fuch as TAB. XIII. from the fouth-weft, and fo of the reft. Tab. XIII. But we may fay with Lucan,

> Jam magis atque magis praceps agit omnia fatum.

## CHAP.

## C H A P. IV.

## Of the leffer circle of fones, without impofts. A difputation againft Mr. Webb.

MA NY drawings have been made and publin'd, of Stonebenge. But they are not done in a fcientific way, fo as may prove any point, or improve our underftanding in the work. I have therefore drawn four archiTAв. XII. tectonic orthographies: one, Tab. XII. is of the front and outfide: three are different fections upon the two principal diameters of the work. Thefe will for ever preferve the memory of the thing, when the ruins even of thefe ruins are perifh'd; becaufe from them and the ground-plot, at any time, an exact moTab. XIV, del may be made. Tab. XIV, XV, XVI. thefe orthographies fhow the priXV, XVI. mary intent of the founders; they are the defigns, which the Druids made, before they put the work in execution. And by comparing them with the drawings correfpondent, of the ruins, we gain a juft idea of the place, when it was in its perfection. But now as we are going to enter into the building, it will
Гав. XI. be proper again to furvey the ground-plot, Tав. XI. which is fo different from that publifh'd by Mr. Webb. Inftead of an imaginary hexagon, we fee a moft noble and beautiful ellipfis, which compofes the cell, as he names it, I think adytum a proper word. There is nothing like it, to my knowledge, in all antiquity ; and 'tis an original invention of our Druids, an ingenious contrivance to relax the inner and more facred part, where they perform'd their religious offices. The two outward circles do not hinder the fight, but add much to the folemnity of the place and the duties, by the crebrity and variety of their intervals. They that were within, when it was in perfection, would fee a moft notable effect produc'd by this elliptical figure, included in a circular corona, having a large hemifphere of the heavens for its covering.

Somewhat more than 8 feet inward, from the infide of this exterior circle, is another circle of much leffer ftones. In the meafure of the Druids 'tis five cubits. This circle was made by a radius of 24 cubits, drawn from the common centers of the work. This ftruck in the chalk the line of the circumference wherein they fet thefe ftones. The ftones that compofe it are 40 in number, forming with the outward circle (as it were) a circular portico: a moft beautiful walk, and of a pretty effect. Somewhat of the beauty of it may be
Tab. XVII. feen in Plate XVII. where, at prefent. 'tis moft perfect. We are impos'd on, in Mr. Webb's fcheme, where he places only 30 ftones equal to the number of the outer circle, the better to humour his fancy of the dipteric afpect, p. 76. He is for perfuading us, this is a Roman work compos'd from a mixture of the plainnefs and folidnefs of the Tufcan order, with the delicacy of the Corinthian. That in afpect 'tis dipteros bypathros, that in manner 'tis pycnoffylos; which when apply'd to our antiquity, is no better than playing with words. For fuppofe this inner circle confifted of only 30 ftones, and they fet as in his fcheme, upon the fame radius, as thofe of the outer: what conformity has this to a portico properly, to an order, tufcan, corintbian or any other, what fimilitude is there between thefe fones and a column? where one fort is fquare oblong, the other oppofite (by his own account) pyramidal. Of what order is a column, or rather a pilafter, where its height is little more than twice its diameter? Where is the bafe, the fhaft, the capital, or any thing that belongs to a pillar, pillafter or portico? the truth and fact is this. The inner circle has 40 ftones in it. Whence few or none but thofe two intervals upon the principal diameter, happen precifely to correfpond with thofe of the outer circle. Whereby a much better effect is produc'd, than if the cafe had been as $W e b b$ would have it. For a regularity there, would have been trifling
ijr
ii
its

$$
\begin{aligned}
& \because \\
& \vdots
\end{aligned}
$$

[^0](a)

Digitized by COO Ole

- /fnel M.N10H


trifling and impertinent. Again, Mr. Webb makes thefe ftones pyramidal in fhape, without reafon. They are truly flat parallelograms, as thofe of the outer circle. He fays, P. 59. they are one foot and a half in breadth, but they are twice as much. Their general and defigned proportion is 2 cubits, or two cubits and a half, as they happen'd to find fuitable ftones. A radius of 23 cubits frikes the inner circumference: of 24 the outer. They are, as we faid before, a cubit thick, and 4 cubits and a half in height, which is above 7 foot. This was their ftated proportion, being every way the half of the outer uprights. Such feems to have been the original purpofe of the founders, tho' 'tis not very precife, neither in defign, nor execution. In fome places, the fones are broader than the intervals, in fome otherwife: fo that in the groundplot I chofe to mark them as equal, each 2 cubits and a half. There are fcarce any of thefe intire, as to all theie dimenfions; but from all, and from the fymmetry of thefe Celtic kind of works, which I have been converfant in, I found this to be the intention of the authors. 'Tis eafy for any one to fatisfy themfelves, they never were pyramidal; for behind the upper end of the adytum, there are three or four left, much broader than thick, above twice; and not the leaft femblance of a pyramid. I doubt not but he means an obelifk, to which they might fome of them poffibly be likened, but not at all to a pyramid. Nor indeed do I imagine any thing of an obelifk was in the founders view ; but the ftones diminifh a little upward, as common reafon dictates they ought to do. Nor need we beftow the pompous words of either pyramid, or obelifk upon them. For they cannot be faid to imitate, either one or other, in thape, ufe, much lefs magnitude: the chief thing to be regarded, in a comparifon of this fort. The central diftance between thefe ftones of the inner circle, meafured upon their outward circumference, is 4 cubits. I obferve further, that the two ftones of the principal entrance of this circle, correfpondent to that of the outer circle, are broader and taller, and fet at a greater diftance from each other, being rather more than that of the principal entrance in the outer circle. It is evident too, that they are fet fomewhat more inward than the reft ; fo as that their outward face flands on the line that marks the inner circumference of the inner circle. I know no reafon for all this, unlefs it be, that the outfide of thefe two ftones, is the outfide of the hither end of the ellipfis of the adytum: for fo it correfponds by meafure upon the ground-plot. This is apparent, that they eminently point out the principal entrance of that circle, which is alfo the entrance into the adytum. For five fones on this hand, and five on that, are as it were the cancelli between the fanctum and fanclum fanctorum, if we may ufe fuch expreffions. 'Tis fcarce worth mentioning to the reader, that there never were any impofts over the heads of thefe ftones of the inner circle. They are fufficiently faften'd into the ground. Such would have been no fecurity to them, no ornament. They are of a harder kind of ftone than the reft, as they are leffer; the better to refift violence.

There are but nineteen of the whole number left; but eleven of them are ftanding in fitu. There are five in one place ftanding contiguous, three in another, two in another. The walk between thefe two circles, which is 300 foot in circumference, is very noble and very delightful. Probably it gave Inigo Fones the idea of defigning that fine circular portico, which is one great beauty, among many, in his drawings for Wbite-ball, publif'd lately from the originals by my Lord Burlington; who has a true notion of the extraordinary merit of that great man: and very commendably has reviv'd his memory. Such a circular portico put in execution, would have a marvellous effect, much exceed a common gallery in ufe, becaure 'tis a perpetual walk, without turning back, and well becomes a royal refidence. The beft view of this fort, to be had from our work, is from the north, as in Tab. XVII. the reader cannot Tab. XVII. but obferve, how little pretence here is for an imitation of Greek or Roman portico's, notwithftanding the grand and agreeable curve of the outward circle.

But when we fee the difproportion of the inner circle in regard to any purpofe of this fort, we muft own the invention of Hermogenes in contriving the pfeu-do-dipteros, is here apply'd with an ill grace. The founders of Stonebenge cou'd have no need of make-ihifts for want of room on Salifbury plain. Or how could a concentric row of little ftones, or pillars if he will fo have it, bear any " refemblance to the contrivance of Hermogenes, which confifted in having none; in taking away the whole inner row of pillars, fo as to add to the convenience of room, and preferve the afpect, at the fame time? Moft undoubtedly the Druids had no further meaning in it, than to make ufe of the even numbers of 30 greater ftones, and 40 leffer ftones; and this was to produce a more perplexed variety, by the interftices having no regard to one another. So far were they from having a notion of Grecian beauty, in the pillars of circular portico's being fet on the fame radius; pillar anfwering to pillar, intercolumniation to intercolumniation. And this will be fhown repeatedly in the progrefs of this work, to be the common practice of the Druids in other like inftances.

But when we confider the cell, as Mr. Webb names it, we find him guilty of great difingenuity, in ill conceiving the form of it, and in diftorting his ground-plots, to colour it over the better. The minute you enter this adytum, one, and there can be no greater abfurdity than to imagine it one. It is in truth compos'd of certain compages of ftones, which I hall call trilitbons, becaufe made, each of two upright ftones, with an impoft at top: and there are manifeftly 5 of thefe trilithons remaining. But the naked eye eafily difcovers, they are very far from making 5 fides of a hexagon. They cannot be brought to any approach, of a truly circular polygon. 3 trilithons of the 5 are remaining entire, 2 are ruin'd indeed, in fome meafure, but the ftones remain in fitu. And nothing is eafier, than to take the ground-plot, from fymmetry and correfpondency. We fee the two trilithons on the wings or fides of the adytum, are fet almoft in a ftrait line, one of another; when in a hexagon form, they ought to make a confiderable angle. If you examine them trigonometrically, the true angle of an hexagon is 120 degrees, but here is an angle of near $150^{\circ}$. And by making it an hexagon, he fuppofes one trilitbon entirely gone, that neareft the grand entrance, when there is not the leaft appearance that ever there were fuch ftones there. No cavity in the earth, no ftump or fragment vifible, not is it eafy to imagine, how 3 ftones of fo vaft a bulk could have been clean carried away, either whole or in pieces. There is no room for them to have been carried away whole, no traces of their having been thrown down, broke in pieces and fo carried away. This outer fide of the work being the moft perfect of the whole. Of the ruins of the other trilithons, there is not the leaft part wanting. What has been thrown down and broke, remains upon the fpot. But this trilitbon in difpute, muft needs have been fpirited away, by nothing lefs than Merlin's magic, which erected it, as the monks fable. Befides, if it were ftill ftanding, it would be very far from making this adytum a regular hexagon, to which he has accommodated his peripteros fcheme: p. 87. Further, granting it was a regular hexagon, it would be very far from correfponding with that fcheme, or have the leaft appearance, of its being taken from fuch a one. For our editor there, has converted the cell quite from the nature of that at Stonehenge. He has made the upper end of his cell at the letter $H$ oppofite to the grand entrance $G$, not a trilithon as it is notorioully at Stonebenge, but an angular interval between 2 trilithons. It is not the fide of the figure, but the angle. Whereas it is moft notorious at Stonebenge, that the upper end of the adytum oppofite to the grand entrance, and to the whole length of the avenue and entrance between it and the area, is a trilitbon; not an angle or interval. And that trilithon is exceeding ftately, tho' in ruins, one of the upright fones being fallen, the other
leaning.


leaning. So that here, we have the cell converted full a 6 th part of the whole compafs, from its true and original fituation, and fo in all the fchemes of Mr . Webb's book, not one excepted. In that, for inflance, Scbeme I, P. 56, the high altar is plac'd at D not againft a trilitbon, as it ought to be, oppofite to the grand entrance in the front of the temple, and to the (only) entrance below, into the area, but againft an angle between two. If then you fuppofe that hexagon remov'd back a 6th part, fo as that a trilithon be fet behind the high altar, as it is really in the thing its felf, and upon the principal diameter of the whole work: then this abfurd confequence follows, that the oppofite trilitbon of the cell ftands in the very midft of the entrance into the cell, upon the fame principal ground-line or diameter of the work, and quite obftructs the view and entrance into it. It is altogether as ridiculous, as if a dead wall was built under St. Paul's organ-loft, which is and ought to be the chief entrance into the choir. Befides, by $W$ ebb's ground plots and uprights, it feems as if, when you entred this adytum, there were 3 trilitbons on the right, and 3 on the left, whereas it is moft obvions, there are but two on the right, and two on the left; when you advance into it, the orderly way, from the northeaft grand entrance of the avenue; which he himfelf p. 55 . owns to be the principal. But I am tired of fo ungrateful a tafk, which neceffity alone could have extorted from me.

## C H A P. V.

## Of the cell or adytum of Stonehenge. Of the Surgeons ampbitheater, London.

DIfpatations become cloifters and porticoe's. Let us now with minds free from paffion, enter the adytum with an intent to find out its true figure, to examine what it really was, and what it is. And that may eafily be done, becaufe (as I faid before) as to the trilithons of which it is chiefly compos'd, they are all remaining. Not a bit is loft, but what mifchievous and filly people knock off with hammers, to fee whether, as the wretched vulgar notion would have it, the ftones be factitious. Tab. XVIII. is a defign of it, which I made fitting in the center of the grand entrance in the inner circle. This point is properly the door-way or entrance into the adytum, as a wicket or little door, whilf the jambs of the hithermoft trilithons prefent themfelves, as the greater door, of above 40 feet wide, 25 cubits. I obferve in the old Greek ftory, many footfeps of the primitive patriarchal way left in their facred ftructures, which are parallels to this work before us, and others of our Druids. For inftance, Paufanias in atticis fpeaks of a temple dedicate to Venus, in the front of which, is a wall (as he calls it) built of rude fones. Neverthelefs he concludes it to be a very famous work. One may very well imagine, this wall of rude ftones is the remnant of fome fuch old work as ours, left for the facred regard the people had to it, even after art was rifen to great height, together with fuperfition and idolatry. For that the moft ancient Greeks had very little of idolatry, any more than our Druids, I fhall fhow when I difcourfe on that head. Again : the more facred part of the temple at Hierapolis anfwering to our Adytum, had no door, tho' none enter'd therein but the chief priefts. $L u$ cian de dea Syria. I fuppofe it was in imitation of the ancient ufage, without doors to fhut or open, as our temple here. For the ancients thought it wrong, to confine the deity, as it were, within any cover'd place: 'till Mofes, by God's direction, made a tabernacle cover'd with kins, which was to adumbrate the Meffiah Son of God, who was to be cloathed with our nature. And Solo-

## STONEHENGE

mon's temple was built in imitation of this tabernacle. But before that, the ancients meant no more by temples, or altars, as they were firft call'd, than a certain known and confpicuous place, ornamented in a particular manner, that thould mark out a kebla, or a place towards which we are to addrefs the Deity, and that for uniformity fake. As the Turks and Arabians do now, who are the defcendants of $I / \mathrm{bmael}$, and had this cuftom from Abrabam. Tho' the fupreme Being be omniprefent, yet for our convenience, where time, place, and fuch kind of circumftances are neceffary to a public action, he would have, as it were, the place of his prefence made notorious. As in the $\mathcal{F e w i l h}$ difpenfation he did in a moft extraordinary manner, by the /bechinab. And from Solomon's temple, all the reft of the world borrow'd the farhion of temples, properly fo call'd, built magnificently and with roofs. For the facred houres mention'd in fcripture before then, were only little chapels, Phrines, like our Druids $k i f$ vaens, which fometime they carried about in a cart, fometime were fix'd in cities, for publick ufe; as Bctb Dagon, and the like. Thefe were but kifivaens improv'd, niches turn'd into facella, in imitation of two or three fones in $A$ brabam's altars, which we may well call the kebla, and find many of them among our Druid antiquities.
The cell is form'd by a radius of 12 cubits and a half, from the two centers a and $b$, as to the inward curve; the outward takes a radius of 15 cubits; for there fones are two cubits and a half thick. The two circles are turn'd into an oval, by a radius of 30 cubits, (after the ufual manner) fet in the two centers $c$ and $d$, where the two circles interfect. The former centers are 12 cubits and a half diftant from each other, the length of the radius. The fame oval is obtain'd by a ftring of 60 cubits, the ends ty'd together, and turn'd round upon two centers, according to the gardiners method. An oval form'd as this is, upon two centers coinciding with each other's circumference; or, which is the fame thing, whofe centers are diftant from each other the length of their radius, is moft natural and moft beautiful, being the fhape of an egg. Moft probably thefe religious philofophers had a meaning, in thus including an egglike figure, within a circle, more than mere affectation of variety. Whatever that was, we may reafonably conclude, that from the method in antiquity, of making the kebla of a curved figure, the chriftians borrowed theirs of turning the eaft end of their churches in that manner; and that the Druids in the work before us, have produc'd the nobleft kiffvaen or kebla that is known.

My purpofe in drawing many prickt lines upon the plate, is not difficult to be underftood. Nor does it require particular explanations. To avoid affectation or tedioufnefs, I leave them to the readers amufement: only obferve, that Mr. Webb's equilateral triangles have no hand in forming the cell. The intent of it is very diftant from a regular polygon. But that it is incomparably more beautiful; than fuch a one would have render'd it. It is as a magnificent niche 27 cubits long, and as much broad, meafuring in the wideft place.

This part is call'd इnros or concba templi and adytum, into which, we may fuppofe, none but the upper order of priefts, together with the high-prieft, were commonly to enter, during the time of miniftration, in religious rites. We may imagine the beauty of the appearance here upon thofe occafions, when an innumerable company of the Druids affifted, all in white furplices. The center of the excentricity of this oval is but three cubits nearer the entrance, than the center of the whole work. And they have cut off but one trilitbon, which they make the opening of the adytum; meeting the eye to great advantage, from the grand entrance. By the aforefaid contrivance, there is left a fpace of five cubits between the jambs of the opening of the adytum, and the inner circle in front, juft the fame as is between the inner and outer circle. The inner circle there performing the office of cancelli to it, as we obferv'd before. If a choir of this form was put in practice, and executed by a mafterly hand, it would have a very extraordinary effect, and perhaps excel the too fimilar


## 91 STONEHENGE

concave of a cupola. Our Druids had undoubtedly fuch a notion, in placing this within a circle. And for the fake of this, they turn'd the two circles into a fmaller fpecies of an ellipfis.

There's a Druid antiquity like our adytum in thape, call'd Eglwys Glominog, on the top of Arennig vaur in Lbanykil parih, Merionydhbire, but made of a continued wall. The ancients thought the world of an egg-like fhape, and as the world is the temple of the Deity, they judg'd it proper to form their temples, fo as to have a refemblance thereto. The ancient hieroglyphic of the Deity is a circle, and I have reafon to believe it more ancient than the flood. Plato, who learnt much from the anceftors of our Druids, fays in Diogenes Laertius, that God is fpherical, which he muft mean hieroglyphically. So our Druids, as well as he, may mean the infinity of nature in the Deity, who made the world, by this fcheme of Stonehenge; at leaft they underftand by the circle, the feat and refidence of the Deity, the heavens, which include all things.

It feems to me, that Inigo Fones from this adytum projected the plan of the Surgeons theatre in London, a fabric for feeing and hearing much admired by all good judges. And which my Lord Burlington, out of a fpirit truly noble, and a great love for the architect's memory, has lately repair'd, with his own charges and excellent k ill. I find the Surgeons theatre (or rather amphitheatre) is form'd from the fame proportion as our adytum, the tranfverfe and conjugate diameters being as 4 to 3 , viz. 40 foot and 30 foot. And this appears to me a ftrong prefumption, that Inigo Fones did not make the ground-plot of Stonebenge, publifh'd under his name. The Surgeons amphitheatre is a good dcal lefs than our cell.

Such is the noble and eafy geometry of the adytum of Stonebenge. The ftones that compofe it, are really ftupendous, their height, breadths and thicknefs are enormous, and to fee fo many of them plac'd together, in a nice and critical figure, with exactnefs; to confider, as it were, not a pillar of one ftone, but a whole wall, a fide, an end of a temple of one ftone; to view them curioully, creates fuch a motion in the mind, which words can't exprefs. One very remarkable particular in the conftruction of this adytum, has efcaped all obfervers: which is this. As this part is compos'd of trilithons (as I before call them) fett two and two on each fide, and one right before; they rife in height and beauty of the ftones, from the lower end of the adytur:, to the upper end. My meaning is this. The two hithermoft trilithons correfponding, or thofe next the grand entrance, on the right hand, and on the left are exceeded in height, by the two next in order; and thofe are exceeded by the trilithon behind the altar, in the upper end of this choir. So that in laying down the meafures of the parts, that compofe this place, the reader mult be content to take my word. Mr. Webb's meafures cannot be precife in all of them, feeing he knew nothing of this particular; and that his notion of an hexagon, is contradicted by it, as well as by fact. "He fays p. 6o. the fones "of the greater hexagon feven foot and a half in breadth, three foot nine " inches thick, and twenty foot high, each ftone having one tenon in the " middle." His meafure of feven foot and a half in breadth, only thews the vaftnefs of the ftones, it is no precife meafure, for the founders regarded not any precifenefs in their breadth: becaufe two together were defign'd to make a compages, whereon to fet the impoft, and this I call a trilitbon. .Each trilithon ftands by its felf, independant of its neighbour, not as the ftones and impofts of the outer circle, link'd together in a continued corona, by the impoits carried quite round. Indeed the breadth of a ftone at bottom is feven feet and a half, which is 4 cubits and a half. Two ftones therefore amount to nine cubits, and there is a cubit of interval between them, making in the whole ten cubits. But they were not careful of the particulars, only of the whole, in one of thefe compages or trilithons.

## STONEHENGE

The fones of the cell are made to diminih very much, towards the top, moft apparently with a defign, to take off from their weight, and render them what we call top-heavy, in a lefs degree. Hence the interval between the two upright ftones of the compages widens fo much upwards. This muft certainly contribute very much, to their ftability. In affigning 20 foot for their height, Mr. Webb has well taken the medium. A very fmall matter more than 20 feet makes exactly 12 cubits of the Hebrews, Egyptians and Druids. The reader remembers the proportion I affign'd between the Englifh foot and this cubit. 20 inches and $\frac{4}{}$ make a cubit, therefore 20 feet and 4 make 12 cubits. The true cafe as to the height of the trilitbons, is thus
Tas. XV. refpectively, and which may be feen in TAB. XV. with the harmony and fymmetry, in the proportion of the whole. We may obferve their gradual rifing in height, all from the fame bafe, like pillars of higher orders and more diameters. But the intelligent reader muft needs fee, that our founders never had fight of Greek or Roman pillars, and never pretended to imitate them, or take any one idea from them. And of thefe three different orders or degrees of altitude, in thefe trilithons, one exceeds the other by a cubit. So that their heights refpectively are 13 cubits, 14 cubits, 15 cubits.

The impofts of there trilitbons are all of the fame height. Mr. Webb p. 6 r . "informs us, the architrave lying on the top of the great flones of the " hexagon and mortaifed alfo into them fixteen foot long, 3 toot 9 inches broad, " 3 foot 4 inches high." Mr. Webb's 16 foot long, is too fcanty, it amounting to 9 cubits and 2 palms, but the intent of the founders was to make thefe impofts equal both in length and breadth to the foundation of the upright ftones that fupports them, I mean the two ftones at bottom, the fuftaining part of the compages, which in its whole breadth makes 10 cubits; and 10 cubits long the impofts are to be affign'd. Moft certainly whoever undertake to meafure them, whether from thofe fallen on the ground, or ftill in their proper place, will be apt to fail in giving them juft length. Both becaufe I. 'tis obfervable that there impofts are form'd fomewhat broader upwards, than in their bottom part; but this may not be taken notice of by every one. This was done very judicioully upon an optical principle, which it is plain the founders were aware of. For a ftone of fo confiderable an elevation, by this means only, prefents its whole face in view. Therefore they that meafure it at bottom will not take its true length. 2. If they take the dimenfion, either from a ftone ftill in its proper place, or from one fallen down, they will be very liable to fhorten the meafure. For in the firft cafe, the upper edge of thefe impofts, muft needs have fuffer'd from the weather, in fo elevated an expofure, thro' the fpace of 2000 years. It is very apparent they have fuffered not a little. Large and dæp furrows of age are vifible all around them. But if they meafure thofe fallen, they muft well imagine fuch have doubly fuffered, from weather, and from the people every day diminihing all corners and edges, to carry pieces away with them. So that in this care, analogy and fymmetry only can fupply thefe defects. Thus we found before, that the breadth of the impofts of the outer circle is equal to their ichnographical breadth: fo it is here, being 10 cubits. Befides, the outer face of thefe impofts is longer than the inner, as being in the larger circle. Therefore ten cubits is to be underfood their medium meafure.

Mr. Webb gives it as a general meafure, that they are 3 foot 9 inches broad. He has before told us, the uprights which fupport them were 3 foot 9 thick; take that twice, it makes 7 foot and a half, which he affigns for the breadth, of the uprights. This is all juft within a trifle, and it is not expected that he who was not aware of the cubit, by which thefe works were made, fhould do it with greater accuracy. The truth of the whole is this: $W_{\text {e }}$ b 's 7 foot and balf is 4 cubits and a half, as we faid before; the half of it is 3 foot 9 , and a very little more. But this muft be taken for the leaft breadth of the impofts, that
… -


at the ends. For in the middle they are fomewhat broader. Tho' the infide faces are ftrait, yet, as we obferv'd, in proper place, of the impofts of the outer circle; fo here, they are rounded behind: their outer circumference anfwer- ТАв. XI. ing to the great oval upon which they are founded. So likewife their ends are made upon a radius of that oval, whence the innner face of the impoft is fomewhat fhorter than the outer, and is another reafon why their lengths may eafily be taken fomewhat too fhort. I have drawn the impofts in their true fhape in the ground-plot. The artifice of the tenons and mortaifes of thefe Tав. XI. trilithons and their imponts, what conformity they bear to that of the outer circle, is exceedingly pretty, every thing being done truly geometrical, and as would beft anfwer every purpofe, from plain and fimple principles. In the bottom face of the impoft, if divided into three fquares, the two mortaifes are made in the middle of the two outermoft fquares. Draw diagonal lines from corner to corner; where they interfect, is the center of the mortaife; which central diftance from one to the other, is feven cubits of the Druid meafure. Each tenon is a cubit broad upon its longeft diameter, for they are of an oval figure. An admirable contrivance, that the impofts fhould lie firm upon the heads of the uprights, and keep the uprights fteady in their places, to ftrengthen and adorn. We may remark this pretty device, in the management of the tenons and mortaifes. Cut an egg acrofs upon its fhortert diameter or conjugate; one half thereof reprefents the hhape of the tenons of the outer circle. Cut it acrofs upon its tranfverfe diameter, one half is the fhape of the tenons of the adytum. 'Tis evident the meaning of it is this. The tenons of the outer circle are higher in proportion, than the others, becaufe the impofts are lefs and lower than the others, and on both accounts more liable to be difturb'd, either by accident or violence, than the others: therefore more caution is us'd for their prefervation. This is an inftance of art, noble and fimple withal. Mr. Webb fays the impofts are 3 foot 4 inches high, which is precifely 2 cubits, a fixth part of the height of the medium order of trilithons; as the impofts of the outer circle are a fixth part of the height of the ftones of the outer circle. The, medium order of trilithons is above 24 foot high, i.e. 14 cubits. The lower order is 13 cubits, viz. thofe next the entrance. The upper trilitbon behind the altar was 15 cubits. Each rifing a cubit higher than the other, as we before obferv'd.

I promis'd to fhow the reader what Stonebenge is, and what it was. The latter, I prefume, is done in the four prints, Tab. XII, XIV, XV, XVI. be- T^в. XII, ing geometric orthographical fections of the whole work, all neceffary ways, XV, XV, fuch as architects prepare in defign, when they fet about a building. 'Tis whol- XVI. ly needlefs to fpend many words in explaining them. What the work is, of our adytum at prefent, is fhown in the fubfequent prints, Tab. XVIII, Tab. XXI, XXII. The Vth correfponds with the XIIth. The one fhows the front of XVIII, the temple when in perfection, the other as now in ruins. The XVIth may be XXI, XXII. compar'd with XIX and XX. all prefenting a view from the adytum toward the entrance. Tab. XVIII. is a contrary view, when one fanding by the entrance, looks toward the adytum. The fame is prefented in Plate VII. which I call a peep into the fanctum fanctorum. XXII. is the fame, but a little oblique. This plate fhows at prefent, what the XIVth does in its original. Plate XV and XXI. correfpond, fhowing the adytum on one fide, in its perfect, and in its ruinous ftate. Particularly they explain, what I fpoke of, as to the orderly rifing of the trilitbons in height, one above another, from the lower end to the upper end of the adytum. TAb. XXII. illuftrates it, by exhibiting to view, Tas.XXII, the other and moft perfect fide of the adytum. 'Tis an oblique profpect of it, from the entrance.

The quantity of the folid is well adjufted, in proportioning the ftone-work of this adytum, to the intervals upon the ichnography. Each trilitbon is 10 cubits, and each interval about 6. The jambs, or vacuum of the entry expand
themfelves to 25 cubits, which is about 43 feet. From which meafure my Lord Pembroke demonftrated the falfity of $W$ ebb's hexagonal fcheme, when his Lordhip firft did me the honour to difcourfe about Stonelbenge. In Mr. Webb's defigns, we find two jambs (taking one trilithon away) expand but little above 3 I feet, by his own fiales. Tho' I don't pretend, but that fome of my foregoing meafures, may here and there poffibly vary a little, upon a very ftrict trial, and where proper judgment is not us'd, becaufe the fones in fome parts may protuberate, or great parts of them may have fallen off; yet 10 foot difTab. XIX, ference from truth cannot be allow'd of. In the Plates XIX and XX. obferve XX. $\quad$ the infide of that upright fone, which makes the northern jamb of the chief entrance of the outer circle. A very great piece is fallen off towards the top, which difcovers its tenon and the mortaife of the impoft above it. And in the management of fuch prodigious ftones as thefe are, fix'd in the ground, and ramm'd too like pofts: 'tis not to be wonder'd at, if by chance we find fome little variation. Tho' for my own part, I obferv'd none; rather wonder'd, how it was poffible for them, without lewices and the like devices, to fet them in their places to fuch precifenefs. And the reader, whofe mind has receiv'd no prepoffeffion, cannot but be abundantly fatisfy'd, that the multitude of meafures I have given from Mr. Webb's own account, are perfectly agreeable to the fcale of cubits, deduc'd from works of the Egyptians and others: and that in round and full numbers, not trifling fractions. If we collate the numbers given, with the Roman fcale, the meafures appear very ridiculous and without defign; and that is a fure way of confuting the opinion, of its being a Roman work. But as thefe ftones are generally rough, and by time muft fuffer in all dimenfions, 'tis not practical to take their true meafure, without neceffary judgment, and relation had to fymmetry.

Of thefe greater ftones of the adytum, as I obferved before, there are none wanting. They are all on the fpot, 10 upright ftones, 5 cornihes. The trilithon firft on the left hand is entire in fitu, but vaftly decay'd, efpecially the corninh. There are fuch deep holes corroded, in fome places, that daws make their nefts in them. The next trilithon on the left hand, is entire, compos'd of three moft beautiful ftones: The cornih happen'd to be of a very durable kind of Englifb marble, and has not been much impair'd by weather. My Lord Wincbelfea and myfelf took a confiderable walk on the top of it, but it was a frightful fituation. The trilithon of the upper end of the adytum, was an extraordinary beauty. But alas through the indifcretion probably, of fome body digging there, between them and the altar, the noble impoft is diflodg'd from its airy feat, and fallen upon the altar, where its huge bulk lies unfractur'd.

Recidit in folidam longo pof tempore, terram
Pondus, © exbibuit junctam cum viribus artem. Ovid Met.
The two uprights that fupported it are the moft delicate fones of the whole work. They were, I believe, above 30 foot long, and well chizell'd, finely taper'd and proportion'd in their dimenfions. That fouthward is broke in two, lying upon the altar. The other ftill fands entire, but leans upon one of the ftones of the inward oval.

## Fam jam lapfura cadentique Imminet afimilis-

The root-end or unhewn part of both, are rais'd fomewhat above ground. We cannot be fure of the true height of this, when it was perfect: but I am fure I 5 cubits, which I have affign'd, is the loweft. The next trilitbon, that toward the weft, is intire, except that fome of the end of the impoft is fallen clean

P28. TABXV.



;

## $D E \quad S \quad C \quad R \quad \dot{B} \quad \mathbf{D} \quad$.

29
clean off, and all the upper edge is very much diminifh'd by time. As Lucretius fays,

> Minui rem quamque videmus,
> Et quafil longinquo fuere omnia cernimus avo, Ex oculifque, vetuftatem, fubducere noftris.

The laft trilitbon, that on the right hand of the entrance into the adytum, has fuffer'd much. The outer upright being the jamb of the entrance, is fill ftanding, the other upright and impoof are both fallen forwards into the adytum, and broke each into three pieces. I fuppofe from digging near it. But from one piece of the impoft lying loofe, in the middle, between the jambs of the adytum, Mr. Webb in the plan of his ruins of Stonebenge (being his 6th Scheme) forms the remains of his imaginary 6th trilithon, fuppofing it one of the ftones of the inner or leffer hexagon, as he calls it. Yet if this fragment was really a ftump of fuch a ftone, as he would have it, fill it would not create an hexagonal form of the cell, but ftand juft in the middle of the entrance, and block it up in a very abfurd, unfeemly, and incommodious a manner. And nothing can be more certain, than that there never was fuch a thing in being. That fone of the trilitbon which is ftanding, has a cavity in it which two or three perfons may fit in, worn by the weather.

Stonebenge is compos'd of two circles and two ovals, refpectively concentric. At the diftance of two cubits inward from the greater oval, defcribe another leffer oval, on which the ftones of the inner oval are to ftand: 19 ftones in number, at about the central diftance of 3 cubits. This leffer oval is to be defcrib'd by a ftring and the 2 centers, as before. Or by 2 circles from a 10 cubit radius, and the 2 centers $a$ and $b$, as of the other before was fpoken. Mr. Webb fays, p. 60, " the ftones of the hexagon within, 2 foot 6 inches in breadth, one " foot and a half thick and 8 foot high, in form pyramidal." His two foot and a half is our cubit and half, for the breadth of thefe ftones; being but a third of the breadth of the ftones of the greater oval. And the interval between ftone and ftone, the fame. Their height is likewife unequal, as the trilitbons, for they rife in height as nearer the upper end of the adytum. Mr. Tab. XV. Webb's 8 foot affign'd, is a good medium meafure, for it is juft 4 cubits and 4 palms, the third part of the height of the medium trilitbon. From the ruins of thofe left, we may well fuppofe, the firft next the entrance and loweft were 4 cubits high; the moft advanc'd height behind the altar might be five cubits, and perhaps more. The fones are fomewhat of what Mr. Webb calls a pyramidal form, meaning that of an Egyptian obelifk, for they taper a little upwards. They are of a much harder fort than the other fones, as we fpoke before, in the leffer circle. The founders provided that their leffer bulk fhould be compenfated in folidity. They were brought fomewhere from the weft. Of thefe there are only 6 remaining upright. The fumps of two are left on the fouth fide by the altar. One lies behind the altar, dug up or thrown down, by the fall of that upright there. One or two were thrown down probably, by the fall of the upright of the firft trilithon on the right hand. A fump of another remains by the upright there, ftill ftanding. Their exact meafures either as to height, breadth or thicknefs, cannot well be afcertain'd. For they took fuch as they could find, beff fuiting their fcantlings, but the fones were better Chap'd and taller, as advancing towards the upper end of the cell.

## C H A P. VI.

Of the number of the fones. Of the altar-fone. Of what has been found in digging, about the temple. A plate of tin of the Druids writing. A plate of gold, fuppofed to be of the Druids writing.

THUS have we finifhed the work, or principal part of this celebrated wonder; properly the temple or facred ftructure, as it may be called. Thọ' its loftieft creft be compos'd but of one ftone, laid upon another. "A " work, as Mr. $W_{e} b b$ fays juftly, p. 65 . built with much art, order and pro" portion." And it muft be own'd, that they who had a notion, that it was an unworthy thing, to pretend to confine the deity in room and face, could not eafily invent a grander defign than this, for facred purpofes: nor execute it in a more magnificent manner. Here fpace intleed is mark'd out and defin'd: but with utmoft freedom and opennefs. Here is a kebla intimating, but not bounding the prefence of the Deity. Here the variety and harmony of four differing circles prefents itfelf continually new, every ftep we take, with opening and clofing light and fhade. Which way fo ever we look, art and nature make a compofition of their higheft gufto, create a pleafing aftonifhment, very appofite to facred places.

The great oval confifts of 10 uprights, the inner with the altar, of 20 , the great circle of 30 , the inner of $40.10,20,30,40$ together, make 100 upright ftones. 5 impofts of the great oval, 30 of the great circle, the 2 fones ftanding upon the bank of the area, the ftone lying within the entrance of the area, and that ftanding without. There feems to have been another ftone lying upon the ground, by the vallum of the court, directly oppofite to the entrance of the avenue. All added together, make juft 140 ftones, the number of which Stonebenge, a whole temple, is compos'd. Behold the folution of the mighty problem, the magical fpell is broke, which has fo long perplex'd the vulgar! they think 'tis an ominous thing to count the true number of the ftones, and whoever does fo, fhall certainly die after it. Thus the Druids contented themfelves to live in huts and caves: whilf they employ'd many thoufands of men, a whole county, to labour at thefe publick fructures, dedicated to the Deity.

Our altar here is laid toward the upper end of the adytum, at prefent flat on the ground, and fqueez'd (as it were) into it, by the weight of the ruins upon it. 'Tis a kind of blue coarfe marble, fuch as comes from Derby/bire, and laid upon tombs in our churches and church-yards. Thus Virgil defcribes an ancient altar, after the Etrufcan fafhion, and which probably had remain'd from patriarchal times.

> ⿸dibus in mediis nudoque fub atheris axe Ingens ara fuit.

Æne. II.
Servius upon the IIId Georg. fays, in the middle of a temple was the place of the Deity: the reft was only ornamental. This altar is plac'd a little above the focus of the upper end of the ellipfis. Mr. Webb fays, p. 56. the altar is 4 foot broad, 16 in length. 4 foot is 2 cubits 2 palms, which at four times meafures 16 foot. I believe its breadth is 2 cubits 3 palms, i.e. 1 and a half: and that its firft intended length was 10 cubits, equal to the breadth of the trilitbon before which it lies. But'tis very difficult to come at its true length. 'Tis 20 inches thick, a juft cubit, and has been fquar'd. It lies between the




## Described.

two centers, that of the compaffes and that of the ftring: leaving a convenient fpace quite round it, no doubt, as much as was neceffary for their miniftration.

Mr. Welb fays, the heads of oxen, and deer, and other beafts have been found upon digging in and about Stonebenge, as divers then living could teftify, undoubted reliques of facrifices, together with much charcoal, meaning woodafhes. Mr. Camden fays, mens bones have been found hereabouts. He means in the barrows adjacent, and I faw fuch thrown out by the rabbets very near the temple. But eternally to be lamented is the lofs of that tablet of tin, which was found at this place, in the time of King Henry VIII. (the EEra of reftitution of learning and of pure religion) infcrib'd with many letters, but in fo ftrange a character, that neither Sir Thomas Elliot a learned antiquary, nor Mr. Lilly matter of St. Paul's fchool, could make any thing out of it. Mr. Sammes may be in the right, who judges it to have been Punic ; I imagine if we call it $I r i j h$, we fhall not err much. No doubt but it was a memorial of the founders, wrote by the Druids: and had it been preferv'd till now, would have been an invaluable curiofity. To make the reader fome amends for fuch a lofs, I have given a fpecimen of fuppofed Druid writing, out of Lambecius's account of the Emperor's library at Vienna. 'Tis wrote on a very thin plate of gold, with a fharp-pointed inftrument. It was in an urn found at Vienna, roll'd up in feveral cafes of other metal, together with funeral exuvic. It was thought by the curious, one of thofe epiftles, which the Celtic people were wont to fend to their friends in the other world. So certain a hope of a future ftate had the Druids infus'd into them. The reader may divert himfelf with endeavouring to explain it. The writing upon plates of gold or tin is exceeding ancient, as we fee in $\mathfrak{F o b}$ xix. 24.

|  |  |
| :---: | :---: |
| B. INTVR2E.DAJUVA |  |
| MENEV. $\lambda$ B $2 \pi T$ TIV入 |  |
| ЗB^・ヘC, R $\triangle$ NJ•++N\| |  |
| RI. SVAAXPIAIXS. THOBA |  |
| R \( |  |
| ) ABAVCOV |  |

Plutarch in his pamphlet de demonio Socratis tells a fimilar ftory. "About "t the time of Agyilaus, they found a brazen tablet in the fepulchre of Alcmena " at Thebes, wrote in characters unknown, but feem'd to be Exyptian. Chomu" phis, the moft learned of the Esyptian prophets then, being confulted upon " it, confirm'd it, and faid it was wrote about the time of Hercules and Pro"tcus king in Esypt. Tzetzes, chil. 2. hift. 44. mentions Proteus a king in " lower Ligypt by the fea fide, pretends he was fon of Neptune and Pbenicia, throwing him up thereby to very ancient times, thofe of the firft famous navigators, our Hercules and the Pbenicians. He is faid to have lived in the ifland afterward call'd Pharos, from the watch-tower there erected. Here Homer fings, that Proteus diverts himfelf with his ploce or fea-calves, moft undoubtedly

## STONEHENGE

doubtedly his hips. But at that time of day, every thing new and ftrange was told by the Greeks in a mythologic way.

In the year $\mathbf{1 6 3 5}$, as they were plowing by the barrows about Normanton ditch, they found a large quantity of excellent pewter, as much as they fold at a low price for $5^{\text {l }}$. fays Mr. Aubry in his manufcript collections, relating to antiquities of this fort. There are feveral of thefe ditches, being very fmall in breadth, which run acrofs the downs. I take them for boundaries of hundreds, parifhes, $\mathcal{E} c$. Such as the reader may obferve in my Plate XXXI. of the barrows in Lake-fild. I fufpect this too was a tablet with an infcription on it, but falling into the hands of the countrymen, they could no more difcern the writing, than interpret it. No doubt but this was fome of the old Britijl fannum, which the Tyrian Hercules, firnam'd Melcartbus, firt brought ex Cafiteride infilla, or Britain. Which Hercules liv'd in Abrabam's time, or foon after.

Mr. Wcob tells us, the Duke of Buckingham dug about Stonehenre: I fear much to the prejudice of the work. He himfelf did the like, and found what he imagin'd was the cover of a tburioulum. He would have done well to have given us a drawing of it. But whatever it was, vafes of incenfe, oil, flower, falt, wine and holy water, were ufed by all nations in their religious ceremonies.

Mr. Thomas Hayward, late owner of Stonebenge, dug about it, as he acquainted Lord Wincbelfera and myfelf. He found heads of oxen and other bearts bones, and nothing elfe. In 1724. when I was there, Ricbard Hayns an old man of Ambrefoury, whom I employed to dig for me in the barrows, found fome little worn-out Rounan coins at Stonehenge, among the earth rooted up by the rabbets. He fold one of them for half a crown, to Mr. Merril of Golden Square, who came thither whilft I was at the place. The year before, Hayns was one of the workmen employ'd by Lord Carlon to dig clay on Harradon hill, eaft of Ambrefoury, where they found many Roman coins, which I faw. I fufpect he pretended to find thofe at Stonelenge, only for fake of the reward. My friend the late Dr. Hurwood of Doctors-Commons told me, he was once at Stoncknyse with fuch fort of Roman coins in his pockets, and that one of his companions would have perfuaded him, to throw fome of them into the rabbit-holes: but the Doctor was more ingenucus. Neverthelefs were never fo many fuch coins found in Stonebenge, they would prove nothing more, than that the work was in being, when the Romans were here; and which we are affured of already. I have a brafs coin given me by Gobn Collins Efq; collector of the excife at Stamford. The heads of 'fulius and Augrifus averfe: the reverfe a crocodile, palin-branch and garland. col. nem. the colony of $\mathrm{N}_{\mathrm{e}}$ moufus in France. It was found upon Salifury plain; and might be loft there before the Roman conqueft of Britan under Claudius, by people of France coming hither; or in after-ages: no matter which.
fuly $517^{2} 3$. By Lord Pembrok's direction, I dug on the infide of the altar about the middle: 4 foot along the edge of the ftone, 6 foot forward toward the middle of the adytum. At a foot deep, we came to the folid chalk mix'd with flints, which had never been fir'd. The altar was exactly a cubit
 maffes of the impoft, and one upright fone of that trilitbon which ftood at the upper end of the adytum, being fallen upon it. Hence appears the commodioufnefs of the foundation for this huge work. They dug holes in the folid chalk, which would of itfe'f keep up the ftones, as firm as if a wall was built round them. And no doubt but they ramm'd up the interftices with flints. But I had too much regard to the worl, to dig any where near the ftoncs. I took up an oxe's tooth, above ground, without the adytuin on the right hand of the lowermoft trilithon, northward. And this is all the accourt, of what has been found by dizging at Stonebenge, which I can give.
-


CIn invard hien of Somehew.

[^1]

# Described. <br> <br> C H A P. VII. <br> <br> C H A P. VII. <br> \section*{Of the area round Stonehenge. The bowing fones. The manner of Sacrifcing. 

 of Sacrifcing.}

$\mathrm{O}^{\mathrm{F}}$F the court round the temple of Stonebenge, fomewhat is faid already, and of the two ftones flanding within the vallum: and of the two cavities remarkable, which have fome correfpondency therewith. I fuppofed, they were places, where two great vales of water food, for the fervice of the temple, when they perform'd religious rites here. And I endeavour'd to illuftrate it by a coin of the city Heliopolis. 60 cubits is the diameter of Stonebenge, 60 more reaches the inner edge of the circular ditch of the court. The ditch originally was near 30 cubits broad, but thro' long tract of time, and the infinity of coaches, horfes, $\mathcal{E}^{\circ}$. coming every day to fee the place, 'tis levell'd very much. The intire diameter of the court, reaching to the outward verge of the ditch, is 4 times 60 cubits, which is about 410 foot. The five outer circles of the ditch are fruck with a radius of $80,90,100,110,120$ cubits.

Juft upon the inner verge of the ditch, at the entrance from the avenue, lies a very large fone, at preeient flat on the ground. Mr. Webb, p. 57. pretends to give us the meafure of it, confounding it with the other two before-mention'd to be within the vallum, to which they have no relation, no fimilarity in proportion. This is to favour his notion of three entrances of the area, dependant upon his hypothefis of equilateral triangles. He there tells us at the letter $F$, "the parallel ftones on the infide of the trench were four foot broad " and three foot thick; but they lie fo broken and ruin'd by time, that their " proportion in height cannot be diflinguih'd, much lefs exactly meafur'd." Thus he, but 'tis invita Minervá; for all three ftones, in all appearance, are as little alter'd from their firft fize, as any ftones in the work. The two ftones within the vallum are very fmall fones, and ever were fo. The one fands; the other leans a little, probably from fome idle people digging about it. This ftone at the entrance is a very great one, near as big as any one of the whole work, and feems too as little alter'd from its original form : only thrown down perhaps by the like foolih curiofity of digging near it. Inftead of Webb's four foot broad, it's near feven : but to fpeak in the Druid meafure, four cubits. It is at prefent above 20 foot long. If it ftood originally, and a little leaning, it was one of thofe ftones which the Welfh call crwm lechen, or bowing-ftones. However, Mr. Webb muft falfify the truth very much, in making this and the two former any thing alike in dimenfion, fituation and ufe. But he does fo, much more in the next, which is doubtlefs a crum leche, ftill fanding in its original pofture and place in the avenue. 'Tis of much the like dimenfion as the other, tho' not fo fhapely, and fands in like manner on the left hand, or fouth, of the middle line, of the length of the avenue. I furmife, the Druids confiderd the propriety of making the other a little more fhapely than this, becaufe within the area, and nearer the facred fabric. There is the diftance of 119 feet between them, to fpeak properly, 80 cubits. This interval Mr. Webb contracts to about 43 foot, and fuppofes there was another ftone to anfwer it on the right hand, as alfo another to anfwer that on the infide the ditch. And he fuppofes the like of thofe before-mention'd, both within and without the ditch, at his two fancy'd entrances. But of thefe, there is nec vola nee vefigium, and I dare fay, never was. This fone has a hole in it, which is obfervable of like fones, fet thus near our like temples: as we thall fee in the progrefs of this work. The ftone is of 24 foot in circumference, 16 high above ground, 9 broad, 6 thick. The ufe of it I can't certainly tell ; but I am inclin'd to think,

Tab. XXIII.

## STONEHENGE

that as part of the religious wormip in old patriarchal times, confifted in a folemn adoration, or three filent bowings: the firft bowing might be perform'd at this ftone, juft without the ditch, the fecond perhaps at the next ftone, juft within the ditch. Then they turn'd by that fone to the left hand, as the manner was, in a proceffion round the temple, both the priefts and animals for facrifice. At thofe two ftones and water-vafes, probably there were fome wafhings, luftrations, or fprinklings with holy water, and other ceremonies, which I don't pretend to afcertain. Then upon the entry into the temple, perhaps they made the third bow, as in prefence of the Deity. After this, in the court, we may fuppofe the priefts prepar'd the hecatombs and cuftomary facrifices. If that great ftone juft within the ditch, always lay, as it does now, flat on the ground, and in fitu, (which I am not unwilling to believe) then, I apprehend, it was a table for drefling the victims. Ezekiel, in defcribing the temple of Ferufalem, fpeaks of fuch in the entry, xl. $30,40,4 \mathrm{I}, 42,43$.
'Tis juft to think, the ancient form of facrificing here, like that of the Romans, Greeks or elder nations, was pretty much the fame as that among the Ferws, and that as in patriarchal times; and in hort, no other than the original practice of mankind, fince the firft inftitution of facrifices, at the fall. Therefore we fhall fubjoin it from Homer's defcription, in Iliad I. It quadrates extremely well, in all appearance, with the place and temple before us.

Straightway in hafte, a chofen hecatomb
To God, prepar'd, the well-built altar round,
They place in order. Then their hands they wafh,
And take the falted meal. Aloud the prieft,
With hands uplifted, for the affembly prays.
After the prayers, they wav'd the falted meal,
And then retiring flay the animals.
The fkins being ftript, they cut off both the thighs,
And cover them with cawl; firft offer'd crude.
The prieft then burns a part on plates, $\dagger$ thereon red wine,
Libation pour'd. The miniftring young men
Stand by him, with their five-fold fpits in hand.
But when the thighs are burnt, out of the reft
Entrails and flefh, harlets and ftakes they make, Upon the fits transfixt. Then roafted well They fet all forth. After the duty done; A feaft they next prepare. Plenty of food Diftributed around, chearful repaft. Banquet being o're, the youths huge goblets crown, And fill to all in cups. Then facred hymns Sung to the Deity, conclude the day.

+ In another place he adds,


## With choice cloven bits of wood, Without leaves -

Thefe are moft ancient rites, fymbolical of the purity of the facrifice of the Me $f / j i c h$, pointed at by, and deriv'd from the Mofaic difpenfation, where every thing of facred purpofe was to be perfect.

Thus much is fufficient to give the reader an idea of the ancient manner of facrificing, fuch, no doubt as was practis'd at this very place entirely the $\mathrm{He}-$ brew rite. I fuppofe only the priefts and chief perfonages came within the area, who made the proceffion with the facrifices along the avenue. The multitude kept without, on foot or in their chariots.

CHAP.


# Described. <br> <br> C H A P. VIII. 

 <br> <br> C H A P. VIII.}

## Of the Avenue to Stonchenge.

THE Avenue of Stonehenge was never obferv'd by any who have wrote of it, tho' a very elegant part of it, and very apparent. It anfwers, as we have faid before now, to the principal line of the whole work, the northeaft, where abouts the fun rifes, when the days are longeft. Plutarch in the life of Numa fays, the ancients obferv'd the rule of fetting their temples, with the front to meet the rifing fun. Promacbidas of Heracleum, and Dionyjius Thrax take notice of the fame thing. And this was done in imitation of the Mofaic tabernacle and Solomon's temple: probably a patriarchal rite. This avenue extends itfelf, fomewhat more than 1700 feet, in a ftrait line, down to the bottom of the valley, with a delicate defcent. I obferve the earth of the ditches is thrown inward, and feemingly fome turf on both fides, thrown upon the avenue: to raife it a little above the level of the downs. The two ditches continue perfectly parallel to the bottom, 40 cubits afunder. About midway, there is a pretty depreflure, natural, which diverfifies it agreeably. Stonehenge, I faid, is not on the higheft part of the hill. I found, the reafon, why the Druids fet it juft where it is; becaufe it is precifely 1000 cubits from the bottom to the entrance of the area. When I began my inquiries into this noble work, I thought it terminated here, and Mr. Roger Gale and myfelf meafur'd it fo far with a chain. Another year, I found it extended itfelf much farther. For at the bottom of the valley, it divides into two branches. The eaftern branch goes a long way hence, directly eaft pointing to an ancient ford of the river Avon, called Radfin, and beyond that the vifto of it bears directly to Harradon hill beyond the river. The weftern branch, from this termination at the bottom of the hill 1000 cubits from the work at Stonebenge, as we faid, goes off with a fimilar fweep at firft; but then it does not throw itfelf into a ftrait line immediately, as the former, but continues curving along the bottom of the hill, till it meets, what I call, the curfiss. This likewife is a new unobferv'd curiofity belonging to this work, and very much enlarges the idea we ought to entertain, of the 'magnificence and prodigious extent of the thing. The temple which we have been hitherto defcribing, confiderable indeed as it really is, in itfelf; yet now appears as a fmall part of the whole. I fhall therefore defribe all thefe parts feparately, to render them more intelligible: and then thow their connection, and what relation they have, to one another, as well as I can. But it is not eafy to enter at once, into the exceeding greatnefs of thought, which there people had, who founded it; bringing in all the adjacent country, the whole of nature hereabouts, to contribute its part to the work. Therefore I hall difcourfe of it backward and forward; firt going from Stonelbenge to its termination, or more properly its beginning, and then return again. Explaining all the way, what is its prefent condition, and what, 'tis reafonable to fuppofe, was its original, when the Druids made their firft defign. This together with the feveral views I have drawn of it, will give us nearly as good a notion of the whole, as we can at this day expect, and perhaps preferve the memory of it hereafter, when the traces of this mighty work are obliterated with the plough, which it is to be fear'd, will be its fate. That inftrument gaining ground too much, upon the ancient and innocent paftoritial life; hereabouts, and everywhere elfe in England: and by deftructive inclofures beggars and depopulates the country.
At the bottom of the valley, and the end of the ftrait part of Stonchenge $\mathrm{T}_{\mathrm{A}}$. avenue, 1000 cubits from Stonebenge, as we faid, the eaftern wing of the avenue turns off to the right, with a circular fweep, and then in a ftrait

тab. xXviII.
line proceeds eaftward up the hill. It goes juft between thofe two moft confpicuous groups of barrows, crowning the ridg of that hill eaftward of Stonehenge; between it and Vefpafian's camp, feparated from them both by a deep

TAB. XXVI.

TAB.
XXIV.
king's graves, each. I call that moft northerly, the old feven kings graves, for there are really 7 , tho' but 6 moft apparent; they are all fet at greater diftance, all broader, flatter, and as it is moft reafonable to fuppofe, older than the other. The other are fet clofer together, of a more elegantly turn'd figure, campaniform, and in all appearance, much later than the former. Therefore I call thefe, being fouthwatd and directly between Stonebenge and the town of Ambrefbury, the new feven kings barrows. Of the feven old, the moft northerly one and probably the oldeft, is exceeding flat and as it were, almoft funk into the earth with age; fo that it is fcarce vifible at a diftance. The avenue runs up to the top of the hill, juft between them: and they make as it were wings to it, and I believe were defign'd as fuch, when fet there. When the avenue firft turns off in the valley, it is much obfcur'd by the wheels of carriages going over it, for a great way together: for this is the road to $L a$ vington. Neverthelefs a curious eye, without difficulty, fees all the traces of it fufficiently, till it is got higher up the ealy afcent of the hill, and out of the common road. Then it is very apparent and confifts of the two little ditches as before, (when coming directly from Stuzebenge) exactly parallel, and ftill 40 cubits afunder. And it is made with the fame degree of variation, or about 6 degrees fouthward from the true eaft point. So that it is evident again, the Druids intended it chould go full eaft, but their compafs by which they fet it, varied fo much at that time, according to my opinion of the matter. To perpetuate the mark of it as much as I can: I meafured the diftance of it from the fouthern ditch thereof, to the ditch of the neareft i.e. moft northerly of the new 7 kings barrows, and when in the right line of thofe 7 barrows: it is 257 feet. I know not whether there was any defign in it, but it is exactly 150 cubits. From the northern ditch of the avenue here, to the neareft of the old feven kings barrows, is 350 foot; which is exactly 200 cubits.
Whilft we are here upon the elevation of this hill, between thefe two groups of barrows, 'tis 2700 feet from the beginning of this wing of the avenue at the bottom of the valley, where it commences. It ftill continues in the very fame direction eaftward, till unfortunately broke off by the plow'd ground, 300 feet from hence. This plow'd ground continues for a mile together, as far as the river's fide at Amber/bury. So that 'tis impoffible to trace it any farther. The firft plow'd field, that fouthward, is Mr. Hayward's; the other is of a different eftate, call'd Counte/s-farm. And the plowing of there two go on at right angles one of another. That piece on the north fide of the avenue, of the latter tenure, goes along the line of the avenue, is long and narrow, and has (as ufual with greedy farmers) encroach'd upon and fwallow'd up fo much of the length of the avenue. And that amounts to 750 feet more in length, which muft certainly be added to the avenue. This is all along the eaftern declivity of the hill we are upon, that of the twice feven kings graves, and reaches near the bottom of the valley, between it and the hill whereon flands $V e f p a f i a n$ 's camp. Now reafon and the judgment I have got in converfing with works of this kind, tell me, the founders would never begin this avenue at the bottom of a valley, but rather on a confpicuous height, which is vifible from a great diffance of country round. We muft fuppofe the intent of the avenne was to direct the religious proceffion to the temple; and that at the beginning of it, they made fires early in the morning of that day, when they held their grand feftivals, to give notice to all the adjacent country. Therefore when we crofs this valley ftill eaftward, with the former direction of the compafs, and mount that next hill, whereon ftands Vefpafian's camp: we find exactly fuch a place as we could wih, and extremely fuitable to that purpofe. For it commands


## $D \quad \mathbf{D} \quad \mathbf{S} \quad \mathbf{R} \quad I^{\cdots} \mathbf{B} \quad \mathbf{E} \quad \mathbf{D}$

mands a very extenfive profpect both upwards and downwards of the river, and on the other fide of it, for many miles; all about that part of the country where it is highly reafonable to think the old Britons liv'd, who frequented this temple. This eminence is north of Ve/pafian's camp, north-welt from Ambrefbury church. Here is a very large fcene of the country taken in. It has a fine gentle rife for half a mile and more, even quite from the ford at Radfin. You fee the moft delightful river Avon flank'd with villages on both fides, from almoft as far as new Sarum, and then to the head of it, 5 miles off. It was the cuftom of the Druids to give notice, by fires, of the quarterly days of facrifice. Thus the Druids in Ireland before chriftianity, us'd to kindle a fire call'd in their language Tlacbdgba, on All faints eve, to perform a general facrifice : as Mr. Llweyd mentions in his Irifb dictionary. Mr. Toland fpeaks of others too. I obferv'd there has been a bank acrofs the bottom of the valley, for the more eafy paffage of the religious ceremony, and this much corroborates my conjecture of the avenue reaching hither.

Plate XXIV. explains all that I have laft faid about this avenue, and fhews its direction to Haradon Hill, on the other fide the river.

I am apt to believe from the conformity I have obferv'd in thefe wiorks, that there was a facellum or little temple here upon this hill, where the avenue began. We fuppofe this might eafily be deftroy'd when they began to plow here, being fo near the town. I have found feveral of thefe kind of large ftones, either travelling to Stonebenge, or from it. One as big as any at Stonebenge, lies about 3 miles off northward, in Durington fields. Another in the water at Milford, another at Figbelden; they feem to have been carried back to make bridges, mildams or the like, in the river. There is another in the London road, eaft from Ambrefbury, about a mile from the town. Another in the water at Bulford. A ftone ftands leaning at Preßbute farm near the church, as big as thofe at Stonebenge. What confirms me in the conjecture that there was a facellum here originally, is, that an innumerable company of barrows on the oppofite hill, on the other fide of the river coming down Haradon, and in the line of the avenue feem to regard it; as is ufual in thefe works. For thofe barrows are not in fight of Stonehenge itfelf, by reafon of the interpofition of the hill whereon ftand the double groups of feven king's graves. And even thofe two groups feem to regard this little temple as well as the great one, curving that way. The diftance from hence to Stonebenge is $4000 \mathrm{cu}-$ bits.

In order to have a juft notion of this avenue, it is neceffary to go to the neighbouring height of Haradon hill, on the other fide the river. The largeft barrow there, which I call Hara's and which probably gave name to the hill, is in the line of the avenue; the ford of Radfin lying between, as we fee in the laft Plate. I ftood upon this hill May II. 1724. during the total eclipfe of the fun, of which I gave an account in my Itinerarium. Here is a moft noble view of the work and country about Stonebenge. Whoever is upon the fpot cannot fail of a great pleafure in it; efpecially if the fun be low, either after rifing or before fetting. For by that means the barrows, the only ornaments of thefe plains, become very vifible, the ground beyond them being illuminated by the funs flaunting rays. You fee as far as Clay-bill beyond Warminfter 20 miles off. You fee the fpot of ground on the hill, whereon ftands $V e / p a f i a n ' s$ camp, where I conjecture the avenue to Stonehenge began, and where there was a facellum, as we conceive. From hence to that fpot a valley leads very commod:oully to Radfin, where the original ford was.

This Radfin-farm feems to retain its Celtic name: meaning a ford or paffage for chariots, the old way of carriage here ufed. Rbedeg currere, rbedegfain curfitare, in Irifb reathaim. Fin in the old Iriß, is white. It regards the chalky road which went up from the ford. 'Tis a pretty place, feated in a flexure of the river, which from hence feems to bend its arms both ways, to

TAB. XXIV.

Tab. XXIV.

TAB.
XXVI.
embrace the beginning of the avenue. The place is very warm, fhelter'd from all winds, and efpecially from the north. I am perfuaded it was originally a feat of an Archdruid or Druid. See Mr. Toland difcourfing of the Druids houfes, p. 11 i. The nuns of Ambrefoury too had a chapel there. The ford is now quite difus'd, becaufe of the bridge by the town's end ; and the road of it is foreclos'd by hedgerows of paftures on both fides the lane, leading northwards from Ambrefoury to north Wiltfbire. This road lying between Radfin and the beginning of Stonebenge avenue, is fweetly adorn'd with viorna. We are fuppofed now to ftand on the tumulus of Hara, an old Irijb royal name, and poffibly the king who was coadjutor in founding Stonebenge, who lived, it's likely, in the eaftern part of WilfJire: for which reafon they directed the avenue this way.

## Et nunc fervat bonos fedem, tuus, oflaque nomen.

Here are very many barrows upon this fide of the hill, all looking toward the facred work. Hence we furvey Ambrefbury, Vefpafian's camp, and Stonebenge, the curfius, and little Ambrefoury. Likewife a very ancient barrow which anfwers to that of $V_{e} / p a f i a n ' s$ camp, feeming to be plac'd here with fome regularity and regard to the facellum at the beginning of the avenue. This is a long barrow, which I fuppofe the Archdruids who liv'd at Radfin, and perhaps the chief perfon concern'd in projecting the magnificent work. The reader muft indulge me the liberty of thefe kind of conjectures; there is no evidence pofitive left in fuch matters of great antiquity. I have fome little reafon for it, which I hall mention when we fpeak of the barrows. There is this prefent ufe, to affix thereby names to things, that we may talk more intelligibly about them.

We are next to advance down Haradon-hill in the fame direction, nearer TAB.XXV. Radfin, from whence I drew Plate XXV. This valley leads us very gently to the river.

> Incipiunt, mollique jucere colles demittere clivo fiub Ufgue ad aquam.

TAB. This and the two views in Plate XXVI. give us a good notion of the country $\mathrm{XX} \vee \mathrm{I}$. on this fide. There are feven barrows together, in the road from Ambrefoury to Radfin, one great one and fix little ones, which regard the facellum, but cannot poffibly to Stonebenge. This was a family burying-place probably of fome confiderable perfonage, who liv'd at Ambrefoury. Thefe plates fhow us too, the avenue marching up the next hill, where the old and new feven kings barrows receive it again, as wings to it. This is fhown more diftinct in the next plate, Tав. XXVII. where the corn ground has began to encroach upon
Tab.
XXVII. it. I could fcarce forbear the wifh,

## Pereat labor irritus anni.——

When you are gone a little farther toward Stonebenge, and arriv'd at the top of the hill, if you turn back you have the view prefented to you like that $\mathrm{T}_{\text {A }}$. XXIV. beyond A the beginning of the avenue, is Radfin, beyond that Hara-
xxviII. don. The profpect forward, toward Stonebenge, is Shown Tab. XXVIII. There you fee the union of the two wings of the avenue, at the commencement of the ftrait part of it C. Again, you may obferve the nature of the weft wing of the avenue, going with a continued curve round the bottom of the hill, till it enters the Hippodrom or curfus. At a diftance you fee Yanjbury camp, thought to be another of Vefpafian's. Next you defcend into the valley to the union of the wings of the avenue, and afcend the agreeable part of


sukeley delin. Aninwardv.
of it, to the temple. Along here went the facred pomp. How would it delight one to have feen it in its firft fplendor!

## -_Gam nunc folennes ducere pompas <br> Ad delubra juvat, cafofque videre juvencos. Virg.

I have often admir'd the delicacy of this afcent to the temple. As foon as you mount from the bottom, 'tis level for a great way together: and the whole length of it is a kind of ridge, for it flopes off both ways from it on each fide; fo that the rain runs off every way. Juft about half way there is a depreffure, as a paufe or foot pace, thowing one half of the avenue afcending, the other defcending, both magnificent, in the ancient gufto. There was a temple of Jupiter Labradaus near Mylafa a city of Caria, much frequented. The way leading thither was called facred, and pav'd 60 furlongs, thro' which their proceffion went. Pbilofratus fays, you went to the temple of Diana at Ephefus, by a ftone portico of a fadium. Paufanias in Pbocicis fays, the avenue to the temple of Minerva Cranea near Elatea is afcending, but fo gently that it is imperceptible. Again in Chap. X. we read of a pav'd way, to the oracle at Delphos. But the natural pavement of our avenue is much finer. I take notice, that Fupiter Labradous was a ftatue holding a halbard in his hand, which inftrument like a fecuris or amazonian ax, was as a feepter to the Lydian kings. And apparently our Englifh halbard is the very word, with an afperate way of pronunciation prefix'd, Labrada. So our Druids carried about a fharp brafs inftrument which we often find, call'd a celt; (I know not whence) with which they us'd to cut the Mifletor, at their great feftival in midwinter. I have reprefented one hanging at our Druids girdle, in Tab. I. it Tab. I. was to be put into the fit at the end of his ftaff, when ufed. But of this hereafter. Now with the Poet in his celebrated Ode

> Mos unde deductus per omine Tempus, Amazonia jecuri Dextrasas obarmet, querere diftul: Nec fire fas eft omnia-
being arriv'd again at Stonebenge, from the laft print, TA B. XXVIII. though fmall, we may fee the beauty of the curve in the outer circle of that work, XXVIII. efpecially from the avenue, when the eye is below it. We obferve the fame in the grand front view. Tав. V.

And now we are return'd to the facred fabric, we will difcourfe a little upon thefe temples in general, and fo conclude this chapter.

In Macrob. Saturn. I. 18. mention is made of a famous round temple in Tbrace, where they celebrate moft magnificent religious rites. It is upon the hill Zilmi/fis. The temple is open at top. I fuppofe like ours, not a little round hole like as in the Pantbeon, nor is it a fmall round facellum like thofe little round temples at Rome to Romulus, to Vefta, छ$c$. It is not reafonable to think they fhould build a Pantbeon in Tbrace, nor can I underfand it otherwife, than that, it was like our Stonebenge, and in truth an ancient patriarchal ftructure of a primitive model. The Deity here wormipp'd was call'd Sabazius fays he, fome make him $\mathcal{F u p i t e r}$, fome the fun, fome Baccbus. Thefe are the firft perverfions of the Fehovab of the Ferws. In my Judgment, the name Sabazius is a corruption of the Hebrew name of God niver fabaoth, Deus exercituum, a title that would well fuit the warlike Thracians. In time Idolatry debafed every thing. When they perform'd the religious rites of Baccbus, they cried Evobe, Sabbai, and call'd him Evius, Evan, Sabazius, \&c. Evoke is a corrupt manner of pronouncing $\mathcal{F}$ Febovab, and this facred cry is

## STONEHENGE

truly no other than what frequently occurs in holy fcripture. vah Sabaoth. He is the king of glory, Pfalm xxiv. io. But I have difcourfed on this head in my Paleographia Sacra $\mathrm{N}^{\circ} \mathrm{I}$. which will be continued.

Diodorus Siculus in his Book II. mentions a very eminent témple of a round form, among the Hyperboreans, as he calls them, who inhabit an ifland fituate in the ocean over-againft Gaul, which is not lefs than Sicily. He gives an odd account from thence mix'd with fable, and feemingly fome reports of Stonebenre itfelf.

Mr. Toland is confident; this hyperborean region is our Scletland inles, whence Abaris the Druid and hyperborean philofopher, famous in Grecian fory. Whilft I am writing this, March 6. 1739-40. we had an account read before the Royal Socicty, much confirming Mr. Toland's notion; fpeaking of the admirable temperature of the air there, not fubject to fuch extremities, fuch fudden changes, as even in Britain itfelf. . There are fuch temples as ours there.

Arnobius in VI. fpeaking of the origin of temples, "We don't, fays he, " make temples to the Gods, as if we defign'd to fhelter them from the rain, " the wind,' the fun: but that we may therein prefent ourfelves before them, "" and by our prayers, after a fort, fpeak to them as if prefent." We may well -affirm this of our temple, built after the manner of the patriarchal ones, tho' probably an improvement, and fomewhat more magnificent. Ours conffifts of two ovals and two circles. Many in our ifland, which I fuppofe older than Stonebenge, confift of one oval, or niche-like figure made of three ftones only, (of which our adytum is a more magnificent fpecimen) and a circle of rucie ftones fix'd in the ground; of which our work, crown'd with a circular cornifh, is a more magnificent ffecimen. Sometime I meet with a niche without a circle, fometime a circle without a niche. We may well fay, the circle is analogous to our chapels, churches, or cathedrals, according to their different magnitude ; the niches correfpond to our choirs, altars, and more facred part of the facred building, the more immediate place of the refidence of the Deity. They are what now the Turks and Arabians call the kebla, deriv'd, as we faid before, from the patriarchal practice, and particularly from the great patriarch Abrabam. I doubt not but the altars which he and his pofterity made, mention'd in fcripture, were a ftone upon the ground before three fet in a nichelike figure,' and the whole inclos'd in a circle of fones. At other times they fet only one fone for a kebla, as fometime our anceftors did likewife. This practice was propagated generally among all ancient nations. Among many it was forgotten, or not practifed, where they had but little religion at all. Among others, after idolatry had prevail'd with them, they thought all former manners of workip like their own, and miftook the ftones which were kebla's or places of workhip, for the objects of worhip. Hence Maximus of Tyre fays, the Arabians worlhipp'd he knew not what, for he faw only a great ftone. Which, 'no doubt, was the kebla toward which they directed their devotion, as they had learnt from Abrabam, or the like patriarchal anceftors. So Paufanias in Achaicis fays, the ancient Greeks worhipp'd unhewn ftones inftead of ftatues; more particularly among the Pbarii, near the ftatue of Mercury, were 30 fquare ftones, which they workhipp'd. If our author could not make his narration agreeable to common fenfe, he might well miftake this ancient patriarchal temple, fomewhat like ours of Stonebenge, for a circle of deities: he himfelf being a ftranger to any other than image-wothhip. I fhall handle this matter more largely hereafter, and now let us defcend again from the temple to the curfus. Only I would clofe this chapter with this fhort reflection. This avenue is proof enough (if there needed any) that our work is a temple, not a monument, as fome writers would have it. But it requires no formal confutation.


## C H A P. IX.

## Of the Curfus. Games exercis'd on boly fefivals. The Druids underfood geometry.

ABOUT half a mile north of Stonehenge, acrofs the firf valley, is the curfus or bippodrom, which I difcover'd auguft 6. 1723. 'Tis a noble monument of antiquity: and illuftrates very much the preceding account of Stonibenge. It was the univerfal cuftom, to celebrate games, feafts, exercifes and fports, at their more publick and folemn meetings to facrifice. Which was done quarterly and anniverfarily, at certain ftated feafons of the year. Macrob. Satur. I. fays, "Upon holy days dedicated to the gods, there are facrifices, " fearts, games and feftivals. For a facred folemnity is, when facrifices are " offer'd to the gods, or holy feaftings celebrated, or games perform'd to their " honour, or when holy days are obferv'd." This great work is included between two ditches running eaft and weft in a parallel, which are $35^{\circ}$ foot afunder. When I mention 350 foot, I feak in the grofs, and as we fhould fet it down in an Englifh fcale: but if we look into Plate VI. where I have given a Tab. vi. comparative view of our Engli/b foot, and the moft ancient cubit ; at firf fight we difcern, this meafure means 200 of the Druid cubits. This curfiss is a little above 10000 foot long: that is, it is made of 6000 Druid cubits in length. A moft noble work, contriv'd to reach from the higheft ground of two hills, extended the intermediate diftance over a gentle valley: fo that the whole curfus lies conveniently under the eye of the moft numerous quantity of fpectators. To render this more convenient for fight, it is projected on the fide of rifing ground, chiefly looking fouthward toward Stonebenge. A delightful profpect from the temple, when this vaft plain was crouded with chariots, horfemen and foot, attending thefe folemnities, with innumerable multitudes! This curfus, which is two miles long, has two entrances (as it were:) gaps being left in the two little ditches. And thefe gaps, which are oppofite to each other, in the two ditches, are oppofite to the ftrait part of Stonebenge avenue.

I mention'd before, that at the bottom of the ftrait part of Stonebenge avenue, in the valley, the avenue divides itfelf into two parts. One goes directly eaft toward Radfin, the other goes northweftward, and enters our curfus nearly at the fame diftance weft from the gaps or entrances before-mention'd: as thofe gaps are from the eaft end of the bippodrom. Thefe gaps being at a convenient diftance from that eaft end, may be thought to be in the nature of diftance pofts. It feems to me, that the turf of the adjacent ground on both fides, has been originally taken off, and laid on the whole length of this curfus, becaufe it appears fomewhat higher in level. Tho' this was an incredible labour, yet a fine defign for the purpofe of running. The earth of the vallum is likewife thrown inward.

The eaft end of the curf/us is compos'd of a huge body of earth, a bank or long barrow, thrown up nearly the whole breadth of the curf/us. This feems

Tab. xxvili.

Tab. XXIX. to be the plain of feffion, for the judges of the prizes, and chief of the fpectators.' The weft end of the curf/us is curv'd into an arch, like the end of the Roman circus's. And there probably the chariots ran round, in order to turn again. And there is an obfcure barrow or two, round which they return'd, as it were, a meta.

This is the fineft piece of ground that can be imagin'd for the purpofe of a horfe-race. The whole is commanded by the eye of a fectator in any part. In the middle is a valley, and pretty fteep at prefent: yet only $f 0$, as that a

## STONEHENGE

Britifh charioteer may have a good opportunity of fhowing that dexterity, fpoken of by Ceffar. But the exquifite foftnefs of the turf prevents any great damage by a fall. The ground of it hereabouts declines fomewhat northward. The main part of this bippodrom is upon a gentle ridge running eaft and weft. This render'd the place cooler.

On the fouthern ridge, toward the weft end of it, are many confiderable barrows: but none towards the eaft end, for that would obftruct the view of Stonebenge. There are many barrows but of no confiderable bulk, on the north-fide, upon the extenfive afcent, toward the great north long barrow. This magnificent work of the curf/us is drawn due eaft and weft: except a fmall variation of 4 or 5 degrees fouthward from the eaft. If we meafure

TAB.
XXIX.

Tab. along the bank, from the eaftern meta, at 700 cubits exactly, we come over againft the middle line of the ftrait part of the avenue to Stonebenge: $500 \mathrm{cu}-$ bits further conducts us to the gaps or oppofite entrances, I before mention'd; which we fuppofe as diftance pofts. The whole interval between the eaftern meta and thefe gaps, is 1200 cubits. At 1000 cubits more, we come to the place where the weft wing of the avenue enters the fouthern ditch of the curflus. That weft wing too, is juft 1000 cubits long to its union, with the ftrait part of Stonebenge avenue. Likewife the frait part of Stonebenge avenue is juft 1000 cubits long, as mention'd in its proper place. This weft wing begins, in the bottom of that valley, which croffes the middle of the curfus and fweeping along by the bottom of the hill, in a gentle curve, meets with the lower end of the ftrait part of Stonebenge avenue, where the wing or avenue unites to it, with an equal angle. So that the whole work is laid out with great judgment and fymmetry; and curioully adapted to the ground, which was well confider'd, before the plot was mark'd out, by the firft furveyors. From the bottom of the valley croffing the middle of the curfus, to the weftern meta

## TAB. $\mathbf{X X X}$.

 is 3800 cubits more, making in the whole 6000 cubits. The north end of the eaftern meta does not extend fo far as the northern bank of the curfus: I fuppofe, the reafon is, that there might be liberty that way, to ftop the horfes, at the end of the courfe. Therefore they fet out, on the fouth fide of the curfis and return'd by the north fide. I obferve the ditch and bank towards the eaftern end of the curfus much obfcur'd, by the trampling of men and horfes, frequenting the fpectacles here: this being the moft throng'd.The Curfus is directly north from Stonebenge: fo exactly, that the meridian line of Stonebenge paffes precifely thro' the middle of the Curf/us. And when we ftand in the grand entrance of Stonebenge and obferve the two extremities of the Curfus the eaftern and weftern meta, they are each exactly 60 degrees from the meridian line; on each hand: making a third part of the circle of the horizon. By which we fee, the Druids well underftood the geometry of a circle, and its meafure of 360 parts.

Paufanias in Beotic. fays, 'among the Thebans, by the gate Pretis is the ' Gymnafium of Folaus and likewife the fadium, which is a bank of earth ' thrown up, fuch as that at Olympia and of the Laurii. In the fame place is ' the heroical monument of Golaus. A little beyond, to the right is the bippo'drom, and in it Pindar's monument. The fame author in Arcad. VIII. writes, ' that before the walls of Mantinea, in a field, was a fadium made for horfe' races, in honour of Antinous. Not far from it was the temple of Neptunus 'equeftris and others.' So that we fee it was the manner of the ancient Greeks thus to define their places for fports by banks of earth, and that near their temples.

After the Romans had borrow'd the ufe of the Britibs chariots for travelling and the like, they us'd them too in the Circenfian games. Thus Sidonius Apollinaris his poem upon it, Lib. XXII.

Inftant verberibus fimul regentes,
F. amque $\mathcal{~ p e c t o r a ~ p r o n a ~ d e ~ c o v i n n o ~}$

Extenfi rapiuntur.
Again,


Again,

> Tunc cotus juvenum fed aulicorum Eloi fimulacbra torva Carapi Exercent, Spatiantibus quadrigis. tandem murmura buccine Irepentis Sufpenfas tubicen vocans quadrigas, Effundit celeres in arva currus. Hinc agger fonat, binc Arar refultat, Hinc jege pedes atque eques reffectit, Stridentum © moderator effedorum.

Such, we may well imagine, was the fcene of this place, in ancient days. And as the poet mentions the river Arar, I may take notice, in paffing, that I have feen, feveral other places of fports and racings, which I take to have belong'd to the ancient Britons. As particularly thofe two great banks call'd Rawdikes in the meadow near Leiceffer, which fpectators look on as unaccountable. Another fuch work, I have feen in the meadow by Dorchefer, the ancient Roman city and epifoopal fee, in Oxford/Jire. Both are by the fide of rivers. Another upon the river Lowther by Perith in Cumberland.

Thefe places by rivers, were more agreeable to the Greek tafte, as in a hotter country. Another like place of fports, was in the chalky valley juft without the town of Royfon, on the fouth fide of it, by the London road. The old Roman road there, or Hernien-ftreet paffes over one corner of the work, as being of later date. I may, perhaps, defcribe thefe more largely, another time. We read in Homer and Virgil that races were celebrated at funerals.

## C H A P. X.

Of the barrows, or Sepulcbral tumuli about Stonehenge. Generally fet in groups, which are family burial places; and in figbt of Stonehenge. They are fingle burial places. How the body is pofited. What bas been found in digging into thefe barrows.

ICOME in the laft place to fpeak of the barrows, obfervable in great numbers, round Stonebenge. We may very readily count fifty at a time, in fight, from the place; eafily diftinguihable: but efpecially in the evening, when the lloping rays of the fun thine on the ground beyond them. Thefe barrows are the artificial ornaments of this vaft and open plain. And it is no fmall entertainment for a curious perfon, to remark their beauties, their variety in form and magnitude, their fituation. They are generally of a very elegant campaniform fhape, and done with great nicety. There is likewife a great variety in their Chape, and turn, and in their diameters, in their manner of compofition. In general, they are always upon elevated ground, and in fight of the temple of Stonebenge. For they all regard it. This fhews, they are but fuperficial infpectors of things, that fancy from hence, great battels on the plain; and that thefe are the tumultuary burials of the flain. Quite otherwife; they are affuredly, the fingle fepulchres of kings, and great perfonages, buried during a confiderable face of time, and that in peace. There are many groups of them together, and as family burial places; the variety in them, feems to indi-

## STONEHENGE

cate fome note of difference in the perfons there interr'd, well known in thofe ages. Probably the priefts and laity were fomeway diftinguih'd; as well as different orders and ftations in them. Moft of the barrows have little ditches around, extremely well defin'd. In many is a circular ditch 60 cubits in diameter, with a very frmall tumulus in the center. 60 or even 100 cubits is a very common diameter in the large barrows. Often, they are fet in rows, and equidiftant, fo as to produce a regular and pretty appearance, and with fome particular regard to the parts of the temple, the avenues, or the curfiss. For inftance, where the avenue begins at the firft elevation, from Radfin ford, advancing towards Stonebenge, feven large and flat old barrows are on the right hand of the avenue, towards the eaft end of the curfiss, feven large barrows of a newer (hape, are on the left hand: both thefe groups before fpoken of, are plac'd in a fimilar manner, in regard to the avenue, and as wings or openings to it. Upon every range of hills, quite round Stonebenge, are fucceffive groups of barrows, for fome miles: and we may even obferve, that great
barrow by Lord Pembroke's park at Wilton, which I call the tomb of Carvilius, is fet within view of Stonebenge.

In 1722, my late Lord Pembroke, Earl Thomas, who was pleas'd to favour my inquries at this place, open'd a barrow, in order to find the pofition of the body obferv'd in thefe early days. He pitch'd upon one of thofe fouth of Stonebenge, clofe upon the road thither from Wilton: and on the eaft fide of the road. 'Tis one of the double barrows, or where two are inclos'd in one ditch : one of thofe, which I fuppofe the later kind, and of a fine turn'd bell-
Tав. IX. farhion. It may be feen in Plate IX. On the weft fide, he made a fection from the top to the bottom, an intire fegment, from center to circumference. The manner of compofition of the barrow was good earth, quite thro', exceps a coat of chalk of about two foot thicknefs, covering it quite over, under the turf. Hence it appears, that the method of making thefe barrows was to dig up the turf for a great face round, till the barrow was brought to its intended bulk. Then with the chalk, dug out of the environing ditch, they powder'd it all over. So that for a confiderable time, thefe barrows muft have look'd white : even for fome number of years. And the notion of fanctity annex'd to them, forbid people trampling on them, till perfectly fettled and turf'd over. Hence the neatnefs of their form to this day. At the top or center of this barrow, not above three foot under the furface, my Lord found the fkeleton of the interr'd; perfect, of a reafonable fize, the head lying toward Stonelenge, or northward.

The year following, in order to profecute this inquiry, by my Lord's order, I begun upon a barrow north of Stonebenge, in that group fouth of the curfus. 'Tis one of the double barrows there: and the more eafterly, and lower of the two: likewife fomewhat lefs. It was reafonable to believe, this was the fepulture of a man and his wife: and that the leffer was the female: and fo it prov'd, at leart a daughter. We made a large cut on the top from eaft to weft. After the turf taken off, we came to the layer of chalk, as before, then fine garden mould. About three foot below the furface, a layer of flints, humouring the convexity of the barrow. Thefe flints are gather'd from the furface of the downs in fome places, efpecially where it has been plow'd. This being about a foot thick, refted on a layer of foft mould anothe, foot: in which was inclos'd an urn full of bones. This urn was of unbak'd v, of a dark reddifh colour: crumbled into pieces. It had been rudely wrot $t$ with frall mouldings round the verge, and other circular channels on the u.tfide, with feveral indentures between, made with a pointed tool, as depicted in Plate XXXII. where I have drawn all the forts of things found in this barrow. The bones had been burnt, and crouded all together in a little heap, not fo much as a hat crown would contain. The collar bone, and one fide of the underjaw are grav'd in their true magnitude. It appears to have been a girl of about


## Destribed.

14 years old, by their bulk and the great quantity of female ornaments mix'd with the bones, all which we gather'd. Beads of all forts, and in great number, of glafs of divers colours, moft yellow, one black. Many fingle, many in long pieces notch'd between, fo as to refemble a ftring of beads, and thefe were generally of a blue colour. There were many of amber, of all hapes and fizes, flat fquares, long fquares, round, oblong, little and great. Likewife many of earth, of different fhapes, magnitude and colour, fome little and white, many large and flattifh like a button, others like a pully. But all had holes to run a ftring thro', either thro' their diameter, or fides. Many of the button fort feem to have been cover'd with metal, there being a rim work'd in them, wherein to turn the edge of the covering. One of thefe was cover'd with a thin film of pure gold. Thefe were the young lady's ornaments. And had all undergone the fire: fo that what would eafily confume fell to pieces as foon as handled. Much of the amber burnt half thro'. This perfon was a heroin, for we found the head of her javelin in brafs. At bottom are two holes for the pins that fartned it to the ftaff. Befides, there was a Marp bodkin, round at one end, fquare at the other, where it went into a handle. I ftill preferve whatever is permanent of thefe trinkets. But we recompos'd the afhes of the illuftrious defunct, and cover'd them with earth. Leaving vifible marks at top, of the barrow having been open'd, to diffuade any other from again difturbing them: and this was our practice in all the reft.

Then we op'd the next barrow to it, inclos'd in the fame ditch, which we fuppos'd the hufband or father of this lady. At fourteen inches deep, the mould being mix'd with chalk, we came to the intire fkeleton of a man. The fkull and all the bones exceedingly rotten and perin's'd, thro' length of time. Tho' this was a barrow of the lateft fort, as we conjecture. The body lay north and fouth, the head to the north, as that Lord Pembroke open'd.

Next, I went weftward, to a group of barrows whence Stonebenge bears eaft north-eaft. Here is a large barrow ditch'd about, but of an ancient make. On that fide next Stonebenge are ten leffer, fmall, and as it were crouded together. South of the great one is another barrow, larger than thofe of the group, but not equalling the firf. It would feem, that a man and his wife were bury'd in the two larger, and that the reft were of their children or dependants. One of the fmall ones, 20 cubits in diameter, I cut thro', with a pit nine foot in diameter, to the furface of the natural chalk, in the center of the barrow; where was a little hole cut. A child's body (as it feems) had been burnt here, and cover'd up in that hole: but thro' the length of time confum'd. From three foot deep, we found much wood afhes foft and black as ink, fome little bits of an urn, and black and red earth very rotten. Some fmall lumps of earth red as vermilion: fome flints burnt thro'. Toward the bottom a great quantity of ahes and burnt bones. From this place I could count 128 barrows in fight. See a vaft multiplicity of 'em, TAB. XXXI.

Going from hence more foutherly, there is a circular difh-like cavity dug in the chalk, 60 cubits in diameter, like a barrow revers'd. 'Tis near a great barrow, the leaft of the fouth-weftern group. 'Tis between it, and what I call the buhbarrow, fet with thorn-trees, TAB. XXXII. This cavity is feven feet deep in the middle, extremely well turn'd, and out of it, no doubt, the adjacent barrow is dug. The ufe of it feems to have been a place for facrificing and fearting in memory of the dead, as was the ancient cuftom. 'Tis all overgrown with that pretty flrub erica vulgaris, now in flower, and fmelling like honey. We made a large crofs fection in its center upon the cardinal points; we found nothing but a bit of red earthen pot.

We dug up one of thofe I call Druid's barrows, a fmall tump inclos'd in a large circular ditch. I chofe that next to bulhbarrow, weftward of it. Stonebenge bears hence north-eaft. We made a crofs fection ten foot each way, three foot broad over its center, upon the cardinal points. At length we found

Tab.
xxxi.

тав. xxxil.

Iquarith hole cut into the folid chalk, in the center of the tumulus. It was three foot and a half, i.e. two cubits long, and near two foot broad, i.e. one cubit: pointing to Stonebenge directly: It was a cubit and half deep from the furface. This was the domus exilis Plutonia cover'd with artificial earth, not above a foot thick from the furface. In this little grave we found all the burnt bones of a man, but no figus of an urn. The bank of the circular ditch is on the outfide, and is 12 cubits broad. The ditch is 6 cubits broad (the Druid's ftaff) the area is 70 cubiss in diameter. The whole 100.

I open'd another of thefe of like dimenfions, next to that Lord Pembroke firft open'd, fouth of Stonebenge. We found a burnt body in a hole in the chalk, as before. Mr. Roger Gale was with me.

In fome other barrows I open'd, were found large burnt bones of horfes and dogs, along with human. Alfo of other animals as feem'd; of fowl, hares, boars, deer, goats, or the like. And in a great and very flat old fahhion'd barrow, weft from Stonebenge, among fuch matters, I found bits of red and blue marble, chippings of the fones of the temple. So that probably the interr'd was one of the builders. Homer tells us of Acbilles flaying horfes and dogs, at the funeral of his friend Patroclus.
Lord Pembroke told me of a brafs fword dug up in a barrow here, which was fent to Oxford. In that very old barrow near little Amberfoury, was found a very large brafs weapon of 20 pounds weight, like a pole-ax. Said to be given to col. Wyndham. In the great long barrow fartheft north from Stonebenge, which . I call north long barrow, and fuppofd to be an Archdruid's, was found one of thofe brafs inftruments calld celts, which I hold to belong to the Druids, wherewith they cut off the minletoe, as before mention'd. Mr. Stallard of Amberfoury gave it to Lord Burlington, now in Sir Hans Sloane's cabinet: 13 inches long. They dug a cell in a barrow eaft of Amberfoury, and it was inhabited for fome time. There they found all the bones of a horfe. This is the fum of what is moft material, that fell within my obfervation, relating to the barrows about Stonebenge. We find evidently, thefe ancient nations had the cuftom of burning their dead bodies, probably before the name of Rome. So lachrymatories we read of in fcripture, ancienter than Greek or Roman times, Pfalm lvi. 8.

TAb. XXXI. the barrows in Lake-feld. This is as a church-yard, the bu-rial-place of fome town, or large family. I mention'd before, that the ditches obfervable here, are bounds of parifhes, hundreds or lordhips. The countrymen fometime call this group, the prophets barrows. Becaufe the French prophets 30 years ago, fet up a ftandard on the largeft barrow, and preach'd to the enthufiaftic multitude.

TAb. XXXIII. buhh-barrow, a barrow planted by the fhepherds. 'Tis fouth of Stonebenge, and commands a pleafant profpect of the temple, the curfus, the avenue, and of all the barrows arounds this plain. You fee the hills a little on this fide Abury, whereon runs the Wanjilike, the boundary of the Belgic. kingdom.

Tab. XXXIV. the tumulus of Carvilius who fought Fulius Cafar. 'Tis on the other fide of Wilton (Carvilium) by Lord Pembroke's park: and planted with four trees, as one of the vifto's to the park.

TAb. XXXV. one of the temples at Perfepolis a patriarchal one, open: but made after Solomon's temple, fquare: with mouldings and ornaments. I take it to be of the fame age as Stonebenge.

CHAP.

TAB. XXIIII
$\therefore$ 和

## C H A P. XI.

Of the original name of Stonehenge, and a conjecture of the general time of building fucb kind of works. Of Wanfdike, by whom made and when. Of Vefpafian's camp. Stonehenge was calld d the Ambers, or Main Ambres: which mean the anointed fones, i. e. the confecrated, the facred fones. The meaning of the word Ambrofia. The Tyrian Hercules brought the Druids bither, with Abraham's religion. Apher a grandfon of Abraham's, bis companion.

IHave inform'd the reader, to the beft of my fkill, what was, and what is the ftate of Stonebenge, both above, and below ground. I apprehend, it will be expected, that I hhould fay fomewhat, concerning the antiquity and time of erecting thefe works, efpecially of Stonebenge. But what can we fay, of a matter fo very remote? where the oldeft memoirs and reports of the oldeft nation inhabiting the ifland, can give us no fatisfaction about it: but are as far to feek, as to the founders of this wonderful work, as we are, at this time, and are forced to apply to magic: in order to account for it. Notwithfanding, I hall endeavour to fatisfy the readers curiofity, in this point, as well as 1 can; by giving him my own opinion about it. Not doubting of his candour, in fo arduous an attempt: which may perhaps be an amufement to him, whether it gains his belief, or not. Therefore, I hall recite, in fhort, what occurs to me, on this fubject. I. As to the antiquity of thefe temples in general. 2. Of the time of founding Stonebenge.

The former will anticipate, in fome fort, what I promis'd, in treating of the temples of the Druids in general. But I am naturally led to it, here, by obferving, that the name of the adjacent town of Amberjbury, points out a relation to the work of Stonebenge, and to the ancient name of it. For as we took notice at firft, the prefent name of Stontrange, is purely Saxon, given by our lateft anceftors, by a people wholly ftrangers to the purport of the thing, that had no notion, no report of its having once been a facred place; and fignifies no more than hanging-ftones, or a ftone-gallows. The ancient Britons call'd it cboir-gaur, which the Monks latiniz'd into chorea gigantum, the giants dance; a name fuited to the marvelous notion they had of the ftructure, or of the reports of magic, concern'd in raifing it. But I had rather chufe to think cboir gaur in $W_{e} l j$, truly means, the great church; the cathedral, in our way of fpeaking. A general title, which the Welfh inhabitants, the remnants of the Belga, conquer'd by the Romans, gave it; as well knowing the true ufe of it, and even frequenting it in a religious way. Tho' they had driven off the firft poffeffors of it, and the builders: I mean in Divitiacus his time, or fooner, before the Roman invafion.

There is a very plain reafon: that Stonebenge was built, before the Wanfdike was made, and that was the laft boundary of the Belgic kingdom in Britain. The fones of which Stonebenge is compos'd, were fetcht from beyond that boundary, confequently then an enemies country. It feems not improbable, that the Wandike was made, when this Belgic kingdom was at its height, and that time we may well guefs at, from Cafar. "He tells us in Bcll. Gall. Lib. II. 4. "the Belgre are of German original. By force of arms, they poffers'd " themfelves of the countries, fouth of the Rbine and towards the ocean, dri" ving out the Gauls. They were a very warlike nation, and could produce " 100000 men in arms. That one of their kings Divitiacus, in the memory

## STONEHENGE

" of fome then living, obtain'd the government, both of great part of Gaul " and in Britain too." I believe the Belga and Sicambri, all one people of German original. Our Wel/h call themfelves Cymri, and from them Cumberland has its name. It is very juft to think this Wan/dike was made in the time of Divitiacus, both becaule of the greatnefs of the work, fuiting fo potent a prince, and becaufe it is the laft boundary: after that time, the Roman power fwallowing up all divifions.

I judge, we may reafonably place the time of making the Wanflike, about 50 years before Coflar wrote, we may fay auc. 650 . Divitiacus probably ordered it to be made in perfon. And it feems to have been drawn from the upper end of the $T_{\text {Tes river, }}$ about Wbit-cburch, and Andover, in Hamphire: to the Avon river, about Brifol. Thefe two rivers and the Wanfidike feparated the Belyic kingdom from the old Celtic Britons. They by this means, were driven from this beautiful country, and from their ftately temple of Stonebenge, by thefe powerful invaders. It is remarkable enough, that the inhabitants of Somerfff/Jire, the ancient feat of the Belga, retain fill the Belgic, liquidating pronunciation, $v$ confonant for $f . z$ for $s$.

The Devizes is a town in the middle of the length of Wanfdike, very probably erected, among others, to fecure this ditch or fortification. It feems to have been the capital fort or frontier town, and to have its name from the king, as a trophy or monument of his power: built by him in perfon. Anonymus Ravennas may poffibly call it Punctuobice, but we have no certainty, that his copy retains the word uncorrupt, or that he tranfcribed it right: nor what alteration the Romans made in the original word, nor what was made in the later and barbarous times. However there feems enough therein, as well as in the prefent name of the town, to countenance our conjecture. The former part of the word punctuo, which Mr. Baxter thinks monftrous, may come, perhaps, from the German word pooghen, which fignifies an arduous work, and might regard the caftle here, which is faid to have been once, the ftrongeft in Europe. Neubringenfis calls it Divije. They tell us legendary fories of its being built by an old Briti/b king.

Divifus was probably the name of this Belgic Monarch, or Duiguis: as Gluiguis king of Demetia in Wales is wrote Glivijus in Toland, p. 186. and the termination may have been form'd into Latin, from the Celtic word taeog dux. Whence, perhaps, the Etrufcan Tages, fo much boafted of in their antiquities; likewife the modern Doge of Venice. So that Divitiacus may well be Divifus dux. The name of the Wanfdike, I hewed to be purely Celtic, p. 4.

It is an ancient oriental cuftom to make thefe boundary ditches. Thus the land belonging to the feveral tribes of Ifrael was marked out by a ditch, as we read in the accounts of the holy land. Particularly the author of le voyage de la terre fainte, printed 1675. Paris, p. 57. fays, "he travell'd five or fix miles " along fuch a ditch going from Foppa to ferufalem, which parted the tribes " of Benjamin and $\mathcal{F} u d a b$." 'Tis recited $\mathfrak{F} \circ \rho b u a \mathrm{xv}$.

The monkifh writers make much ado about Aurelius Ambrofus, a chriftian king of the Britons (in the time of our great anceftorHengif) building Stonebenge, by the help of Merlin Ambrofus the magician, in memory of the Briti/b nobility flain treacheroully by Hengit, at Ambrefbury. Some fay the fact was committed ad pagum Ambri, others call it comobium Ambrij, others ad montenn Ambrij. One while they refer the name to Ambrofus, another time to an Abbot Ambrius, and this was among our Roman Britifb anceftors, who were chriftians. They add too, that Merlin fetch'd thefe ftones out of Ireland, that they had been brought before, out of Africa into Ireland: that he fet them up here in the fame form, by art magic; and that the fones were of a medicinal Virtue. Thefe matters we read in Girald. Cambrenf. de admirand. Hib. c. 18. Higden's Polychron. v. Geof: Monmoutb VIII, Matt. Wefminfer, \&c.


This calls to my memory, what the above-mention'd Dr. Harwood inform'd me, he had heard the great Sir Cbrifopber Wren fay, that there were fuch ftructures as Stonelenge, in Africa, being temples dedicate to Saturn. But I need not be tedious in obferving, how abfurd the Monkibb reports are; of a chriftian king erecting Stonebenge, as a fepulchral monument for the Britijb nobility, maflacred in the monaftery of Ambrefoury. At the fame time they fay, their bodies were buried in the church-yard of the monaftery. Nor how they confound the names of Ambrofius the king, Ambrius the abbot, the town, abby and mountain of Ambry, and perhaps of Merlin too, for one of them was call'd Ainbrofius. But their affirming, the edifice came out of -Africa into Spain, thence into Ireland, thence into Brituin, and of its being erected here in the fame form, by art magic; and that the ftoncs are of a medicinal virtue: thefe notions lead us to the original truth, of the Druid founders, and that Stonebenge had originally, the name of Ambres, and from it the adjacent town of Ambrefoury had its name.

To purfue this matter a little further. Between Stomebense and the town, hanging over the river, upon elevated ground is a fine and ancient camp, commonly call'd $V_{e / p a f i a n ' s, ~ a n d ~ n o t ~ w i t h o u t ~ m u c h ~ p r o b a b i l i t y, ~ a t t r i b u t e d ~ t o ~ h i m . ~}^{\text {a }}$. We have often had occafion to mention it before. That great man, deftin'd by providence for executing his final vengeance, on the people of the $\mathcal{F}$ cow, and thereby accomplifhing our Saviour's predictions; by his fucceffics in this place, fav'd a road to the imperial dignity. Having conquer'd the ifle of Wigbt, he purfued his good fortune, higher up into this country, where he made this camp, and another acrofs the heath, call'd Yanefoury; which feems to retain the latter part of his name. The camp we are fipeaking of near Ambrefbury, is an oblong fquare, nicely placed upon a flexure of the river, which clofes one fide and one end of it. There is an old barrow inclos'd in it, which, doubtlefs was one of thofe belonging to this plain, and to the temple of Stonehenge, before this camp was made. It is pretty to obferve, that the road from Stonebenge to Ambrefoury, runs upon the true via pratoria of the camp. The Generals tent or pratorium was in that part fouth of the road, between it and the river, toward little Ambrefoury. There is another gate of the camp, at the lower end, northward, the porta pratoria ordinaria, in the Roman language. Now I apprehend, that Stonebenge was originally call'd the Ambres, from thence this camp was call'd Ambrefourgh, and thence the name of the town underneath.

Mr. Camden writes, " that near Penfans in Cornwall, is a very remarkable " ftone, call'd main Ambre, which tho' it be of a vaft bignefs, yet you may " move it with one finger: notwithftanding a great number of men cannot " remove it from its place. The name is interpreted the ftone of Ambrofius." A picture of it in Norden's hiftory of Cornwall, p. 48. I have feen one of thefe rocking ftones, as call'd commonly, in Derby/bire. Mr. Toland in his hiftory of the Druids, mentions it too, and fays there are fuch in Wales and in Ireland. Sir Robert Sibbald mentions them in Scotland, all rightly judg'd to have been done by the Druids. Sir Robert fpeaking of the rocking fone near Balvaird (or the Bards town) in Fife: "I am inform'd (fays he) that this fone was " broken by the ufurper Cromzeell's foldiers. And it was difcover'd then, that " its motion was perform'd, by a yolk extuberant in the middle of the under " furface of the uppermoft fone, which was inferted in a cavity, in the fur" face of the lower ftone." This is the artifice of the fones at Stonehenge, but applied here by the Druids for a moveable principle, as there, for ftability. I call them mortaife and tenon: and before obferv'd them to be of an egglike form; which Sir Robert calls a yolk. The Main Amber in Cornwall was likewife deftroy'd in the civil wars, by one of Oliver's governors. Thefe reformers had a notion of thefe works being fuperfitious matters. Main Anbbre is lapis Ambrofus, or petra Ambrofia. And that name leads us to confider the famous

## STONEHENGE

potre Ambrofur, on the coins of the city of Tyre. A fpecimen of them, I have drawn on the Plate following.


Thefe, and many more of the like fort, ftruck by the city of $\mathcal{T} y r e$, in honour of their founder Hercules, may be feen in Vaillant's fecond Volume of colony coins, pag. 69, 148, 218, $251,337$.

They reprefent two great, rough ftones, call'd petre ambrofie, with an altar before them, and an olive tree; Hercules the hero of Tyre, the famous Navigater of antiquity, their founder, facrificing. On fome of the coins petre ambrofice wrote in Greek. He is reprefented indeed like the Greek Hircules, but in the latter times of the Roman empire, when thefe coins were ftruck, they at Tyre were as far to feek about the true meaning and origin of their firf antiquities, as we of ours. And what knowledge they had of them, was from legendary reports of the Greeks, who chiefly, among the heathens, had the knack of writing. Thefe reports, as we may find in Nonnus his Diony/acs, 40. and 41. acquaint us, that Hercules invented fhipping, as a latin poet too intimates, Tibullus.

## Prima ratem ventis credere docta Tyrus.

They acquaint us that he ordered T'yre to be built, where the petrec ambrofie ftood, which were two moveable rocks, ftanding by an olive tree. He was to facrice on them, and they fhould become fixt and ftable: rather, the City fhould be built with happy aufpice, and become permanent.

Here are our Main Ambres, made artfully moveable, a kind of altars, or pillars, the fame as the pillars of Hercules fo fam'd, and as little underftood. They were the original patriarchal altars, for libations and facrifices, and mean, in general, their Altars, whether moveable or immoveable: or as we may fpeak, their temples, which imply an altar properly, inclofed with ftones and a ditch, or ground dedicated and fet apart for public celebration of religious rites. For the word Ambrofus means in general, confecrated, dedicated to religious ufe.

Befide the petre ambroface of Tyre, and our main ambres of Britain and Ireland, we meet with another in Hephaftion's Hiftory III. 3. "Speaking of Her"cules, he mentions the Gygonian ftone, as he calls it, near the ocean, which " may be mov'd with the ftalk of an a/pbodel, but can't be remov'd by any "force." It feems this word Gygonius is purely Celtic. For gwingog fignifies motitans, the rocking ftone; and greyon is what the boys with us call a gig, or little top. For thefe Gygonian ftones are of that fhape, pyramidal.


No wonder thefe matters are well nigh loft, in the mift of extreme antiquity, when even the meaning of the word ambrofius was hardly known, either to the antients or moderns, till Mr. Baxter difcover'd it, in his gloffary. It fignifies oil of rofes, rofaceum: the moft antient kind of perfume. In the 4th Ody $/ y$, v. 445. Edotbea a fea goddefs, teaches Menelaus and his companions, to cure the odious fmell of the fea calves.

She put ambrofia to their nofes, fweetly fmelling. Again, in his hymn to Venus, the graces walht the goddefs, and anointed her with oil ambrofial: fuch as becomes the immortals.


Lafty, in Iliad. XXIII. Venus anoints Hector's body with ambrofial oil of rofes,

Which is a tautology. For from length of time, they fcarce knew the true meanir:g of the word in Homer's age.

Virgil feems to underfand but fomewhat of the original meaning of the word, fpeaking of $V_{\text {enus }}$; her hair was anointed with ointment perfum'd.

Ambrofiaq; come divinum vertice odorem
Spiravere —————neid.
In Pliny Nat. Hift. XIII. I. we find the oleum rhodinum moft antient, common and fimple. And this is the true ambrofia, which from its very antient ufe in facred rites, had almoft loft its meaning; and was us'd to fignify, one while, the food of the gods, another time, immortality; again, whatever is divine, or appropriate to the gods. But fimply, it figuifies oil of rofes, ftill from its firft ufe, in facred matters, it imports anointed, in a religious fenfe; confecrated, dedicated. Then main ambres, ambres, petro ambrofic, fignify the ftones anointed with holy oil, confecrated; or in a general fenfe a temple, altar, or place of workhip.

The truth is, it was a patriarchal cuftom to confecrate their altars, pillars, or in a general word temples, by anointing with oil, either fimple or perfum'd. Rofe oil being the oldeft, engrofs'd the general name of the action; fo that a ftone anointed with oil of rofes, is a main amber, or lapis ambrofuls. The fame is an altar, or ftone dedicate to religious ufe. The plural number, petre ambrofire, import a church or temple, in our way of fpeaking.

We have an illuftrious inftance of this practice in the holy Scriptures, and the earlieft. Gen. xxviii. This is not commonly underftood by writers. 'Tis the moving and memorable hiftory of young $F^{7}$ acob, fent away from his father's houfe alone, to take a long journey to fome unknown relations. He came to a place, call'd afterward Betbel, and fleeping with his head on a ftone for a pillow, had a celeftial vifion; and a promife from God, of the higheft importance to him and all mankind. Awaking, he thought the place had been holy ground, where, perhaps, his grandfather Abrabam had before-time built an altar; an houfe of God, or gate of heaven, as he elegantly names it. "Thercfore he rofe up early in the morning, which was one circumftance (in " patriarchal

## STONEHENGE

" patriarchal times) of the work he was going about, and took the ftone that " he had put for his pillow, and fet it up for a pillar; and poured oil upon the " top of it, and called the place Betb-el, i.e. the houre of God. Then he vow-
"ed, that if God would pleafe to profper him in his journey, and bring him
" back into his own country, he would build a temple there, and confecrate to
" God the tythe of his fubftance, as was the manner in thofe times."
This is in reality a votive, patriarchal temple, altar or houfe of God, which he not only vows to build, but at the fame time endows it. The fone which Facob anointed, was not an altar properly, lying on the ground whereon to make a libation, but he fet it up as a pillar. It was one of the upright ftones, which the fcripture calls pillars, as ftanding of itfelf; a part of the circle of ftones, inclofing the altar. And by the act of anointing, Facob confecrated it, as the manner then was, deftined it for a facred purpofe, as an earneft of his will in good time to fulfil it. And this he did fulfil, chap. xxxv. building the celebrated temple of Betbel. Here Feroboam fet up one of his golden calves. At laft it was deftroy'd by $V$ efpafian.

In Exod.xxiv. 4. " we have an inftance of Mofes rifing up early in the morning " and building an altar, and fetting up 12 pillars around it." This was before the tabernacle was made, which introduced the cuftom of cover'd temples.

But fo famous was that patriarchal temple of $\mathcal{f} a c o b$ 's, which he built at $B e$ thel; that the heathen called all their temples of that fort, when they were perverted to idolatrous purpofes, Bretbylia, lapides Batyli, and the like. Which indeed is but another manner of expreffing lapis Ambrofius, or our Main Ambre. And according to cuftom, the fabulous Greeks having loft the true hittory of its origin, affix'd many ftrange ftories to it; as of Saturn devouring fuch a ftone, wrapt up in a 1 kin, inftead of his Son Fupiter: which feems to be form'd from the memory of praying at thefe places, in the name of the mediatorial deity, as the patriarchs did. And Sanchoniatbon tells us, the god Ouranus devifed Batylia, or animated ftones. He means our rocking ftones, gygonian ftones. I hall how in my difcourfe on that fubject, that by Ouranus, he means righteous Noab, who, according to patriarchal ufage, builded an altar unto $\mathcal{Y} e$ bovab, Gen. viii. 20. meaning one of thefe patriarchal temples. In time, by the corruption of mankind, thefe places were defecrated to idolatrous purpofes; and writers pervert the intent of them. So that God Almighty, raifing up the Mofaic Difpenfation, was oblig'd to interdict the very ufe and practice of thefe open temples, and introduce the cover'd one of the tabernacle; by way of oppofition to heathenifm, as well as with other important views.

We find now the meaning of anointed ftones in antiquity, and the olivetree fet by the ftones on the Tyrian coins. As the very learned Author of Ar chaoologia Graca obferves, on the affair of confecration, "they were more " or lefs fumptuous and expenfive, as other parts of divine worfhip, accord" ing to the ability of the worhhippers." Young Facob a traveller us'd plain oil, part of his viaticum, others us'd perfum'd oil, or ambrofia. That author cites us from Atbencuus, the method of confecrating Fupiter Ctefias's ftatue with a libation call'd ambrofia: and others by anointing with oil, prayers and libations, Exodus xxx. 22. We have the holy precious ointment made under the $\mathcal{F e r v i f}$ difpenfation for the like purpofe. And we ufe fuch, for inauguration of our kings, to this day.

The Tyrian Hercules who built Tyre and fet up the petra Ambrofia in thofe coins, (if I miftake not) liv'd as early as the time, of facob's anointing the ftone at Betbel. The great Bocbart, who penetrated very deep into the Pbrenician learning, looks upon it as a clear matter, that in Goflua's time, the Pbonicians fent innumerable colonies, into the mediterranean coafts, and even to the ocean. In the preface to his admirable work Canaan, he fays, " he has a great fufpicion, that colonies went abroad this way, before that " time. Particularly, he afferts, that Hercules, in Eufebius firnamed Defanaus, " who

" patriarchal times) of the work he was going about, and took the ftone that
" he had put for his pillow, and fet it up for a pillar; and poured oil upon the
" top of it, and called the place Betb-el, i.e. the houfe of God. Then he vow-
" ed, that if God would pleafe to profper him in his journey, and bring him
" back into his own country, he would build a temple there, and confecrate to
" God the tythe of his fubftance, as was the manner in thofe times."
This is in reality a votive, patriarchal temple, altar or houfe of God, which he not only vows to build, but at the fame time endows it. The fone which Facob anointed, was not an altar properly, lying on the ground whereon to make a libation, but he fet it up as a pillar. It was one of the upright ftones, which the frripture calls pillars, as ftanding of itfelf; a part of the circle of ftones, inclofing the altar. And by the act of anointing, Facob confecrated it, as the manner then was, deftined it for a facred purpofe, as an earneft of his will in good time to fulfil it. And this he did fulfil, chap. xxxv. building the celebrated temple of Betbel. Here Feroboam fet up one of his golden calves. At laft it was deftroy'd by $V$ efpafian.

In Exod.xxiv. 4. " we have an inftance of Mofes rifing up early in the morning " and building an altar, and fetting up 12 pillars around it." This was before the tabernacle was made, which introduced the cuftom of cover'd temples.

But fo famous was that patriarchal temple of $\mathcal{F a c o b}$ 's, which he built at Bethel; that the heathen called all their temples of that fort, when they were perverted to idolatrous purpofes, Brethylia, lapides Batyli, and the like. Which indeed is but another manner of expreffing lapis Ambrofius, or our Main Ambre. And according to cuftom, the fabulous Grecks having loft the true hiftory of its origin, affix'd many ftrange ftories to it; as of Saturn devouring fuch a fone, wrapt up in a 1kin, inftead of his Son Fupiter: which feems to be form'd from the memory of praying at thefe places, in the name of the mediatorial deity, as the patriarchs did. And Sanchoniatbon tells us, the god Ouranus devifed Batylia, or animated ftones. He means our rocking ftones, gygonian ftones. I hhall fhow in my difcourfe on that fubject, that by Ouranus, he means righteous Noab, who, according to patriarchal ufage, builded an altar unto Yelbovab, Gen. viii. 20. meaning one of thefe patriarchal temples. In time, by the corruption of mankind, thefe places were defecrated to idolatrous purpofes; and writers pervert the intent of them. So that God Almighty, raifing up the Mofaic Difpenfation, was oblig'd to interdict the very ufe and practice of thefe open temples, and introduce the cover'd one of the tabernacle; by way of oppofition to heathenifm, as well as with other important views.

We find now the meaning of anointed ftones in antiquity, and the olivetree fet by the ftones on the Tyrian coins. As the very learned Author of $A r-$ chaoologia Graca obferves, on the affair of confecration, "they were more " or lefs fumptuous and expenfive, as other parts of divine worfhip, accord" ing to the ability of the worhippers." Young $\mathcal{F a}$ abob a traveller us'd plain oil, part of his viaticum, others us'd perfum'd oil, or ambrofia. That author cites us from Athenaus, the method of confecrating Fupiter Ctefias's ftatue with a libation call'd ambrofia: and others by anointing with oil, prayers and libations, Exodus xxx. 22. We have the holy precious ointment made under the $\mathcal{F}$ erwifb difpenfation for the like purpofe. And we ufe fuch, for inauguration of our kings, to this day.

The Tyrian Hercules who built Tyre and fet up the petra Ambrofie in thofe coins, (if I miftake not) liv'd as early as the time, of $\mathcal{F}$ acob's anointing the ftone at Betbel. The great Bocbart, who penetrated very deep into the Pbrenician learning, looks upon it as a clear matter, that in $\mathcal{F} f f$ fua's time, the Pboenicians fent innumerable colonies, into the mediterranean coafts, and even to the ocean. In the preface to his admirable work Canaan, he fays, " he has a great fufpicion, that colonies went abroad this way, before that " time. Particularly, he afferts, that Hercules, in Eufebius firnamed Defanaus,
" who


## DESCRIBED.

" who was famons in Pboenicia before the Exodus, is the fame, who conquer'd
" Antous in Africa: which in Eufebius, is fet 56 years before. He is call'd Her"cules primus, and that is 63 years before the Exodus, in Eujebius's chrono-
". logy." Again, he judges it to be 2000 years diftance between the later Roman times and the firit Hercules. Now from Confantine the great, 2000 years carries us up to facob's time. And he proves, from Arifotle de mirabilibus, that Hercules built Utica in Africa, at that time; wherein Eufebius fays he was famous in Pbrenicia, and this muft be when Hercules was old. He having conquer'd Antaus in that country, when he was young.

But I find in the fame Eufibius, Prometbeus is fet III years fill earlier, before the firft mention of Hercules, this is during the life of the patriarch $70-$ Jeph. Prometheus and Atlas were brothers, and ftudents in Aftronomy, with whom the ftory of Hercules is always conjoin'd. And fo high at leaft, I muft place the time of our Tyrian Hercules, who is the fame as $D_{\ell}$ fanaus. But Marianus tranfcribing Eufebius calls him Dofenaus. And He/jchius fays Dorfanes is a name of Hercules, with the Indians. But by the Indians, it is likely, the Pleenicians and Arabians are meant; for the ancient Greeks call all the country to the eaft of the mediterranean fea, India. And then we may in fome meafure underfand the report of Ammianus Marcellinus, who takes it from Timagenes, an old Greek Hiftorian, but a Syrian by nation, fpeaking concerning the peopling of Gaul, "that the more ancient Hercules conducted the Dorien/es, " to the countries bordering on the ocean." Perhaps the Dofareni are meant, an Arabian nation, mention'd by Ptolemy. A Deity of the Arabians was called Dufaris or Dofaris, mention'd by Step. Byzant, Suidas and Tertullian. A difficult word, which Bochart cannot trace from the Arabian language; nor is it eafy to fay, what Deity he was. No wonder fuch matters are obfcur'd, thro' fo long diftance of time. Some think him Bacchus, fome Mars, and why not Hercules? for after mankind laps'd into idolatry, thefe three were much confounded.

I find fufficient teftimony, of the Tyrian Hercules coming from Arabia, about the red fea, or having companions, that were natives of that country. For this reafon they nam'd an ifland at the city of Gadis, which they built, Erythia, Erytbrea; which Pliny IV. 22. fays, was fo called from the firfo poffeffors, the Tyrians, who came from the Erythraan fea: which is the red fea. Solinus fays the fame. That fea had its name from Erythras, as the Greeks and the fame Pliny write; who is Edum or Ejuu, brother of $\mathcal{F} a-$ cob. The words are fynonymous, fignifying red. The reports of Hercules's expedition to that illand Erytbraa now Cadiz, is famous in all the old Greek writers.

This relation we have given of the Tyrian Hercules, that he lived about the time of Abrabam, or foon after, according to Eufebius's chronology; that he came from about the red fea, and had companions in his travels, that lived thereabouts, is much confirm'd by what Gofephus writes, from Alexander Polybifor; who cites it from a very antient author, called Cleodemus, firnam'd Malcbus, who wrote a hiftory of the Gewes, agreeable with the Mofaic. He fays, Abrabam had feveral Sons by Keturab, he names Apber, Suris and Fapbra. That Apher and $\mathcal{F}$ apbra were auxiliaries to Hercules, when he fought in Lybia againft Antaus. That from Apber the country was nam'd Africa. That Hercules married his daughter, and begat of her Dodorus. Fofepbus in the fame chap. of the firf book of his antiquities, writes, that Abrabam had fix fons born of Keturab: men, heroic and wife. That they and their pofterity were fettled in Troglodytis, in the country of Arabia forlix, reaching to the red fea. He makes Opber or Apher grandfon to Abrabam, by Midian his fon. That Apher waged war in Lybia and conquer'd it, and plac'd his fons there, who call'd the Country Africa from their father. So Scbindler in his lexicon, pag. 136 1.

## STONEHENGE

Making proper allowance for relations of fuch very antient matters, tranfmitted by hiftorians of different countries, different languages, and fo often tranfcribed and tranlated, before they come down to us; here is enough to confirm and explain, what we have before advanc'd: both as to time and place, and matter. And we cannot but fee what relation our Main Ambres and the gyyonian ftone by the ocean, have to the petre ambrofia, which Hercules fet up at Tyre: which is the drift of my difcourfe. That very gygonian ftone, for ought I fee, may be our rocking-ftone near Penfans, it ftands by the fea-fide. Nor do I fee any abfurdity, if we judge, that it was erected there, by Hercules in perfon. Near it is that other famous Druid temple call'd Bijcareoon, confifting of 19 pillars in a circle and a central kebla. The entrance is made of 2 fomewhat larger ftones, than the reft: not improbably one of the Herculean labours. It is affirm'd by the beft authors, that our Tyrian Hercules, the more ancienter Hercules, built the city of Gadis, at Cadiz now. And where-ever Hercules came, there we read of his pillars. Thus Avienus.

> Hic Gadir urbs eft, dicta Tarteflus prius, Hic fiunt columne pertinacis Herculis.

Arrian II. of the life of Alexander, remarks, "that Gadis was built by the "Pbenicians. There was a temple of Hercules. The form, the facrifices " and ceremonies there perform'd, are all afior the Pbocnician manner." Stra$b_{0}$ in his Lib. III. fays there were two pillars in this temple, dedicate to Hercules; which the learned Triftan in his commentaries on medals, p. 384. fays, he doubts not, but they were petree ambrofie, in imitation of thofe of the fame name, in the temple of Hercules of Tyre, which Herodotus in Euterpe fpeaks of. He appears to have been an extraordinary genius, and a man of great piety withal. Therefore where-ever he came, he made thefe patriarchal temples, or fet up pillars of ftone, as antiquity called them. Juft as the patriarchal family did in the land of Canaan. And Hercules feems to me, to have been a great man, raifed up by providence, to carry the reform'd patriarchal religion, to the extremeft part of the then known weftern world. Here, I fuppofe, the religion of Abrabam remain'd pure, for many ages, under the Druids, till perhaps corrupted by incurfions from the continent. It is remarkable, that the Romans, who were fo catholic, (different from thofe we now abfurdly call $R_{o}$ man catholics) as to permit all religions, perfecuted only that of the Druids, and the chriftian: whence we are naturally led to think, there was a good deal of refemblance. Indeed, the Druids are accufed of human facrifices. They crucified a man and burnt him on the altar; which feems to be a moft extravagant act of fuperfition, deriv'd from fome extraordinary notices they had of mankind's redemption: and perhaps from Abrabam's example mifunderftood. But as to human facrifices fimply confidered, the Romans themfelves and all other nations upon earth at times, practis'd them.

To this Hercules, antiquity affixed very many names, from different notions of him, retain'd in different countries; and after idolatry took root, he was worhipp'd under thofe names of confecration, according to the old method. For inftance, one of his names was Palamon. Palamon, fays Hefycbius, is Hercules. The Greeks made him a fea Deity, who had been fo great a fea-captain. They call him Melicerta, which is his Pbonician name Melcartus, king of the city. Ovid tells us the fory in Met. IV. Nonnus calls him Afrocbiton , farry-robed, from his being made a contellation in heaven. In the Gallic picture of him, which Lucian faw, he is reprefented with a fphere in one hand, under the name of Ogmius. Mr. Toland in his hiftory of the Druids, Thews us the true interpretation of that word, from the Irijb language; after the learned had in vain attempted the explication of it. From thence we infer he brought the ufe of letters hither. Crefar informs us, the Druids had them.



## Described.

He is called $A / f i s$, by the eafterns, which fignifies the valiant: the fame as $H c_{=}=$ jus of the Germans.

Befide the patriarchal cuftom of building thefe places of worhip, and confecrating them with oil, we find many other footfeps of that moft ancient religion, in the hiftory of Hercules. Silius fpeaking of the ftrange rites ufed in the Gaditan temple of Hercules, fays, the priefts officiated there barefooted, practis'd chaftity, had no flatues, us'd white linen furplices. And it is a notorious cuftom with the ancient Pboenicians, to pay tithe. Indeed they paid tythe to Hercules. Which only imports, that it was a precept and practice introduc'd by Hercules. And after they had deified Hercules they practis'd it toward him. This was a common method, when idolatry began. I thall treat more largely of thefe affairs; when I difcourfe expreflly of the patriarchal religion. Likewife, I fhall prove more fully, from chronological characters, that this Hercules liv'd at the time, we are fpeaking of, in the canon Mofaice cbronoloric. What I now recite, concerning thefe matters, I could not well avoid, as they in my apprehenfion. relate to the name of Stonehenge.

Pliny Nat. Hift. VII. 56. gives us a teftimony, of our Hercules, under the name of Melcartus, (as Bochart rightly corrects it) firt bringing tin into Grecce, from the Ca/jiteridiflands. By which the Britijb are meant. The tin of Tyre, which the merchants of Greece, came to buy, at the fairs of that city, is mention'd Ezckiel xxvii. 12. which, no doubt, came from hence. But it is much earlier mention'd, among lead and other metals, when the Midianites had it in Mofes's time, Numbers xxxi. 22. the Cbaldce and Arabic verfion there, ufe the word kafira, the IIierofolymitan kifara. No wonder the Midicunites fhould then abound with tin: when we were told by 70 隹bus, that Apber fon of Midian, was one of Hercules's companions. The LXX. in that paffage of Numbers call it raswineer. But tin is mention'd earlier ftill, in $\mathcal{F} o b$ xix. 24. and $\mathfrak{F o b}$ liv'd in this fame country, on the borders of Arabia.

It is very evident from Bockert, that the Pbocnicians, had faild quite round Britain, by what he writes of Tbule. How then can we doubt but the great ifland, which they found in the extremeft weft, was Britain? but they kept their gainful navigation hither fo fecret, for many centuries, that even Herodotus the earlieft Greek writer profeffes he knows not, whence the tin comes. Britain was the only country, where it could come from, in any quantity, as Pliny fays. But from this great fecrecy of the Pbenicians, we have loft the high antiquities of Britain, as unknown to the Greeks; the only heathen nation that had the addrefs to commit things to writing. Therefore we muft be content with what fmall remains of this kind, can be firh'd out of the wreck of time, by fuch conjectural methods, as antiquaries cannot avoid infifting on.

In Devon/hire is Hartland point fo call'd corruptly, as the excellent Camden obferves, for Herculis promontorium. And upon the Durbam fea coaft is a town on a promontory call'd Hartlepool. A village call'd Hart near it. I take it to have been call'd by the Greek traders here Heracleopolis. And hence, probably came that fine old altar in Greek, dedicated to the Tyrian Hercules, which Mr. Roger Gale and I copied, in Corbridge church-yard.

From thefe and many other confiderations of this kind, which I fhall hereafter treat of more largely and profeffedly: I cannot but join in opinion with Franc. Pbilelpbus in his epiftles, and Lilius Giraldus in his Hercules mention'd by Mr. Camden, in the laft quoted paffage, and with many other writers, that the very ancient Pbenician or Tyrian Hercules conducted an eaftern colony hither, upon the aborigines; with whom came the Druids, the builders of Stonebenge and the like works among us. And let this fuffice for what I promis'd upon the firft head of this chapter, viz. to feeak of the antiquity of thefe works in general. 2. We are to fpeak of the time of founding Stonehenges

## C H A P. XII.

A conjecture about the time of the founding of Stonehenge. An uniform variation in fetting thefe works, not to be accounted for, but by fuppofing the Druids us'd a magnetical compa/s. Their leader, the Tyrian Hercules, was polfe/s'd of a compafsbox. The oracle of Jupiter Ammon had a compafs-box. The golden fleece at Colchis was a compafs-box. Both thefe temples were founded by Apher, Hercules his companion, and grandfon to Abraham. Apher, Aphricus, or Phryxus the fame perfon, feems to bave given name to Britain. The Druids fet their temples and other works by it. The bifory of the mariner's compafs, fince that time. The bifory of the variation of the magnetic needle. A conjecture of the time of building Stonehenge, from thence.

IN my Enquiries into thefe works of the antient Druids in our ifland, I obferved a greater exactnefs in placing them, with regard to the quarters of the heavens, than one would expect, in works feemingly fo rude; and in fo remote an age, to which we muft neceffarily refer them. What more particularly mov'd my attention, was a certain variation from cardinal points, which I obferved regular and uniform, in the works of one place. And that variation was different, in works of another place; yet equally regular and uniform in that place. Suppofe (for inftance) the works about Abury in Wilf/bire generally vary 9 or io degrees to the left hand, from cardinal points: i.e. weftward from the north. And the works at Stonebenge generally vary to the right hand, from cardinal points, and that to the quantity of 6 or 7 degrees. The principal diameter or groundline of Stonebenge, leading from the entrance, up the middle of the temple, to the high altar, (from which line the whole work is form'd) varies about that quantity fouthward of the north eaft point. The intent of the founders of Slonclbenge, was to fet the entrance full north eaft, being the point where the fun rifes, or nearly, at the fummer folltice. As well becaure that is the fartheft elongation of the great celeftial luminary, northward; the complement of our earthly felicity, in ripening the fruits of the earth: as becaufe then they celebrated one of their principal religious meetings or feftivals, with facrifices, publick games, and the like. Such was the cuftom of all the antient nations. The Ifthmian, Nemaan, Olympian, Pytbian games, famous in the works of the learned nations: thofe of Tyre II. Maccabees iv. 18. dedicated to their and our founder, the antient Tyrian Hercules, who, I fuppofe, conducted the firft Pbocnician colony, with our Druids, into Britain: thefe were all held at this time of the year. A cuftom continu'd from patriarchal times.

This exactnefs with which the Druids fet their works, and the uniformity of their variation, make me believe, this variation was not the effect of chance or negligence.

By a fuperficial reflexion upon it, we fhould be apt to fufpect, it was owing to their obferving the fun's rifing on the longeft day of the year, or fummer folftice, and fetting their line by it. For this is fuppofed to be a method by which they formerly fet our Churches: marking the fun's rifing at the equinox. But the Druids were too good aftronomers and mathematicians to need fo mean an artifice: nor does it correfpond to the quantity precifely enough. Befides, this fame variation appears where it cannot poffibly regard the fun's rifing at that time.


For, I obferv'd the like variation, or very near, in all the other parts relating to this temple before taken notice of; befide the avenue leading up to the temple from the north eaft, in a ftrait line; which has the before-mention'd variation all the way. At the bottom of the hill, this avenue divides into two wings, each going off from the laft mention'd part, with a decent fweep; the one to the left hand, weftward, the other to the right hand, eaftward. They go off with a like angle, and that angle varies the like quantity. The weftern wing goes to the cur/ius, before obferv'd, the place upon the downs, half a mile off Stonebenge, made for races with chariots and horfes. The right hand wing of the avenne runs directly eaftward for a mile together, pointing to a place on an angle of the river, called Radfin. This part of the avenue, which was intended by the founders, to have been drawn precifely eaft and weft, varies about 5 or 6 degrees to the fouth.

Likewife, that great work of the curfus itfelf, which ftretches its length acrofs the downs, from eaft to weft, like a line of latitude upon the globe, varies fuch a like quantity, from true eaft and weft, the fame way. The meridian line of Stonebenge paffes exactly through the middle of this curfus.

Further, at the eaft end of this curjus, the huge bank of earth, above 200 foot long, made acrofs the end of the curfus, as a meta, and whereon fat the princes and judges of the prizes: This bank of earth is drawn exactly at a right angle with the curfics, confequently due north and fouth, but with the variation before fpoken of. Thefe, and other like obfervations here, as well as in other Druid Works, appear'd to me no otherwife to be accounted for, but that the Druids us'd a magnetical compafs, in laying down the works: and that the needle vary'd fo much, at that time, from the true meridian line.

I remember I open'd this affair, near 20 Years ago, to Dr. Halley, who was of the fame fentiment. Nor am I the firft who fufpected the Pbernicians of old were poffeffed of this great fecret, as well as the Cbinefe, from times immemorial. Iam not moved to think otherwife by what Bochart writes againft it. The very name of the magnet lapis Heraclius ftrongly fuggefts, the Tyrian navigator before-mention'd knew it, as is well argued by Fuller in his Mifcellanies, IV. 19. And many things occur, in the mythology of the antients, wherein (if I miftake not) I difcern moft evident traces of this knowiedge of the directive power of the magnet. We are not to defpife the fables of the antients, but to make the beft ufe of them, and fearch out for their latent truths. My predeceffor Cumberland, obferves in Sanchoniatbon, p. 325." that Apol" lodorus (for inftance) hath many truths in his mythic hiftory, deriv'd from the " tradition of Pbecnicians and Egyptians, planting Atbens." And the Greeks, thofe happy practitioners in writing, as well as other arts, took the unlucky turn of the marvellous, to fo exorbitant a degree, as to write nothing without it. In Apollodorus, put out by the learned Dr. Gale, p. 114. we have an account of the roth labour of Hercules, his conqueft of Cadiz, or Gadira, as then call'd, or Erytbea. We are told, the hero fet up the 2 pillars at the Streights mouth, at Gibralter, or then Tarte/ius; which we may reafonably fuppofe fome temple made of thefe rough fones, or fome main ambres, like thofe we mention'd before, the petra ambrofia in the Tyrian coins. Then, " fays our author, going on his journey, the rays of the fun were fo vehement " upon him, that he had the boldnefs to draw his bow againft him. The " god admiring the intrepidity of the man, gave him a golden cup with which " he fail'd over the ocean." Pifander in his Ild. book, (in Atbeneus Deipnof. XI.) writes the fame, only that Oceanus lent him the cup. Panyafis in his I. of the hiftory of Hercules, fays, he begg'd it of Nereus, fon of Sol, and with it fail'd to Erytbea. (Macrob. Saturn. XXI. 5.) Tbeoclytus, in Atbeneus aforefaid, in his II. de tempeft. mentions the fame thing. He faid it before in his $\mathcal{T}_{i}$ tanomacbia. Pberecydes, in his III. of hiftory, quoted both in Atbeneus and Macrobius, tells a fory fomewhat like that of Apollodorus, but more particular.

## STONEHENGE

Sereius Æn. VII. mentions it, but as fome of the former, makes the cup of brafs, inftead of gold. Alexander Eplefius the like. All very antient writers. Lucian fays, that Hercules fail'd in a fea-conch thell. What can we underftand by all this, mention'd by fo many grave authors, but a compafs-box, which enabled him to fail the great ocean, and penetrate to our northern ifland, lefs obnoxious to the funs vehement heat? Add to this, in the fame place, Apollodorus fpeaks of his fighting Albion and Dercynus, by Mcla, called Bergion, Sons of Neptune; which were the moft antient names of the Britannic Ifles, before the name of Britain. Diodorus Siculus, in his IV. book delivers a like account of this roth labour of Hercules, but in a mere hiftorical manner. And adds, that when he return'd by Sicily, he dedicated a grove to Geryon the hero, where, to his time, the people did religious rites. For this affair of facred groves, we know our Druids were famous. He built a temple likewife at Gades. We are not to fuppore it a cover'd edifice, like what pofterity call'd a temple, but an open one, according to the mode of thofe days. Cover'd temples, at that time, being a thing unknown in the world. Afterward, a magnificent temple, properly, was there built to him. Mela witneffes, that it was our Egyptian Hercules, who was there worhhipped. For I fuppofe our Egytian and the Tyrian Hercules to be all one. The fame mention'd by the name of $A / f i s$, in Manethons XVII. Dynafty, in Fofepbus c. App. in Africanus, Eufebius, and Syncellus. Apollonius 1I. 14. writes, it was not the Theban but the Egyptian Hercules that came to Gades: which is confirm'd by Hecateus. And Hcrodotus, in Euterpe fays, Hercules is a very antient deity among the Egyptians, not fo, among the Greeks. And I fuppofe this hero lived at, or very near the time of the patriarch Abrabam.

Thele were the times about the beginning of idolatry. And Hercules was far from being an idolater himfelf, though worfhipp'd afterwards, for his great exploits, and perhaps on this very account of his inventing or knowing the ufe of the compafs. This is the Hercules kneeling on one knee, a conftellation in heaven, taken notice of by Dionyjus Halycarn. by Tzetzes, Hyginus, H/cbylus and others. It feems to indicate his piety; for which the aftronomers his difciples plac'd him in the heavens. He kneels upon the arctic circle, and fupports the zodiac on his fhoulders; tho' this is not underitood by the painting on our modern globes. The Pbenicians, his fucceffors in the tin trade of Britain, kept the trade and the very name of the Ifland as a great fecret; as well as the ufe of the compars, till it was loft with them. But it feems highly probable, becaufe Lucian defcribes Hercules with a fphere in his hand, that he affixed the prefent Afterifms of the zodiac: and his fucceffors, the Pbonicians, propagated them.
'Tis next to our prefent purpofe, to confider that famous oracle of $\mathcal{F u}$ uiter Aminon in Africa, to be referr'd to the moft early times of idolatry: render'd illuftrious by Alexander the Great taking a journey to it. Which gives us the opportunity of knowing fomewhat of it.

> Quamvis Ætbiopum populis, Arabumq; beatis Gentibus, ac Indis, unus fit Jupiter Ammon. Lucan.

All thefe nations, with Egypt and Africa, were peopled by the pofterity chiefly of Ham. They were the firft that fell into idolatry, and worfhipped their common progenitor, call'd Amy'nus, in Sancboniathon. Hecateus fays, Amoûn, as the Egyptians write it, is the word of thofe that invoke god, and that they meant fomewhat very myfterious by it. The hiftorv of its origin is this. Baccbus, the hero, or demigod, travelling through the fandy defarts of Africa, with a great army, was periming with thirft; he pray'd to his father Fupiter for relief, who fent a ram that fhow'd him a fpring, fav'd him and his hoft. Out of gratitude, the hero builds a temple there, to the deity who thus aided


Digitized by GOOgle
aided him under the form of a ram. There is no room to doubt, that this is in part copied from the tranfaction of the children of I/rael, in the Arabian wildernefs. They have added to it, a name and notion borrowed from patriarchal tradition, of a divine perfon, fymboliz'd by a ram; horned, anointed, which is all one. We chriftians mean Mefiab. Innumerable paffages in old authors, which I might cite, innumerable monuments of antiquity in fculpture, Ihew, that $\mathcal{F u p i t e r}$ Ammon was figur'd as a ram, with a ram's head, with rams horns. They applied the patriarchal notion of the Mefiah, to their progeniror Ham , in an idolatrous way: and deified him under that character. There is a very remarkable paffage in Herodotus, which, it is worth our while, to tranferibe.
ln Euterpe cap. 42. that author tells us, why the Theban Egyptians pay fo great a regard to the fheep. "Hercules on his importunity to $\mathfrak{F u p i t e r}$, " that he might have the honour perfonally to fee him, at length prevaild. " And the god confented to exhibit himfelf to his view, under this device. " viz. Fupiter cut off a ram's head, put the fkin over his own head, and thus " appear'd to Hercules. Whence the Egyptians made the flatue of fupiter, " with a ram's head, and call fupiter Ammôun. Whence they hold heep " for facred animals, never kill them but once a year, upon the feftival day of " $\mathcal{F u p i t e r}$, when only one ram is facrificed, and his head put upon the fatue " of $\mathcal{F u f i t e r}$; all that are there prefent, beat the ram, and at latt he is buried " in a facred urn."

It is impoffible not to fee, that this is derived from that hiftory recorded, Exodus xxxiii. Mo/es defires of Fehovab repeatedly, that he might fee him. He calls it fecing his glory. He is anfwer'd at length. "I will make all my " goodne/s pafs before thee, and I will proclaim the name of 7 febovab before " thee. Thou canit not fee my face, but I will put thee in a cleft of the " rock, and cover thee with my hand, whillt I pafs by. Thou fhalt fee my " back parts only." Here he notorioufly promifes Mofes, that he fhall fee him, in a fymbolical form. In the next chapter, Gelbovab defcended in the luminous cloud, or Shechinah, and proclaimed the name of $\mathcal{F}$ ebovab; recites thofe attributes that relate to his dealings with mankind, in the ftrongeft point of light; "his goodnefs and mercy, and long-fuffering, forgiving ini"، quity, tranfgreflion and fin: but adds, he will by no means clear the guilty, " but vifit the fathers iniquity upon the children." Wherein our original and fatal tranfgrefiion is fufficiently intimated, and that God's juftice is equal to his mercy; and the neceffity of a divine redemption by facrifice, which in fcripture language is call'd, "the lamb flain from the foundation of the world."

All this the moft ancient nations had a knowledge of, from patriarchal tradition. When they laps'd into idolatry, they applied thefe good notions to their new idolatry, and made ftatues from the fymbolical and figurative forms of fpeech, us'd in true religion. Their facrificing the ram on the feftival day of Fupiter, their beating the ram, putting his head on the fatue of their deity, burying him in a facred urn: all moft evidently pointing out the notions they had, in the moft early times, of the fuffering ftate of the Mefiah. And fuch was the origin, in fhort, of Fupiter Ammon. But it appears, by what learned authors write, on Curtius's defcription of his flatue, that a magnetical compafs box made one confiderable part of his facreds. This we read in Hyde Perf. relig. p. 495. in Curtius publifh'd by Pitifcus, and by Rader the jefuite, and Schottus in Ortelius, by Fuller, Herwart and others. "This " compafs box with the ftatue of the deity, was fet in a golden thip " (the golden cup of Hercules) and carried in proceffion on the fhoul"ders of the priefts, accompanied by women finging an hymn in their " own language." I doubt not, but the circumftance of carrying this golden Thip, on the fhoulders of the priefts, is an imitation of the Mofaic ark in the march of the Ifraelites, thro' the wildernefs, during their forty years pil-

## STONEHENGE

grimage. 'Tho' they miftook the reafon of the thing; the Ferwi/b church then being in a military and travelling ftate. But where the camp refted, the ark was repofited, in the adytum of the tabernacle: fo likewife when in poffeffion of the land of Canaan. This is fufficient proof, that the Lybians herein, copied after the Ifraelites, not vice verfa, as our moderns are willing to think, in thefe cafes.

Curtius tells us, the habit of Ammon's ftatue was made of Smaragd and other precious ftones, wrought in Mofaic work. Which I take to be too, in imitation of the pontifical attire, under Mofes's adminiftration: particularly of the facred, oracular pectoral, made of Mofaic work, with gems. I apprehend, that befide the ftatue of Ammon, there was a figure of (the upper part at leaft of) a ram, on the compafs box: which was the oracle. And it is eafy ta guefs how this may be managed for the purpofe; even beyond the trick of Fanuarius's blood, and other Popifb devices.

Hence we may better underftand the famous golden fleece, which occafioned the Argonautic expedition, one of the earlieft and moft memorable Era's of the Grecian hiftory. If we fuppofe this golden fleece to be a compafs box, we fee the reafon why the choice youth of Greece fet out upon that voyage: which, as all other matters of ancient hiftory, among the Greeks, is fo unaccountably puft up with the leaven of fable. It became navigators to run any hazard for fuch a treafure. If we enquire into its origin, it is thus. Pbrixus fon of Atbamas and Nepbeles (according to the Greeks) had a hip given him by his mother. The thip is call'd in the fable a golden ram, or the ram with a golden fleece (the fame thing as Hercules's golden cup.) In this, he and his fifter Helle, flying the ill-ufage of their mother-in-law Ino, fail away by fea. Helle affrighted in the voyage, falls overboard and gives name to the Hellefpont. Phrixus continues the voyage, and goes to Æetes king of Colchis, where he hangs up his golden ram in the temple, to Fupiter Pbyxius, (one would be apt to imagine they meant Pyxius, alluding to the box.) Fafon made his farfam'd expedition thither afterward, and fole it. But the ram was placed in the heavens, among the conftellations, as a memorial; the firff fign in the $Z_{0}-$ diac: which fhews the high antiquity of the fory.

This account manifeftly pretends very great antiquity, and fome fignal event. I obferve this Ino their mother-in-law, is faid to be the nurfe of Baccbus, and throwing herfelf with her fon Melicerte into the fea, became a goddefs, under the name of Leucotbea. Her fon became a god, under the name of Palamon. This Melicerte is allowed by all the learned, to be no other than our Melcartus above-mention'd. Palemon is Hercules, fays Hefychius. Palamon is his name of deification. Paufanias in the beginning of his corintbiaca informs us, this apotheofis of Ino and Melicerta was the occafion of founding the famous Iftbmian games. Plutarch fays the fame, and Pbavorinus. Again, I obferve, Pbrixus is faid to be fon of Nepbele (a cloud) whence call'd nubigena by Columella. We muft hence expect fomewhat very fecret and obfcure. Further, all writers fay openly this ram or hhip of Pbrixus was oracular and could fpeak upon occafion. So all the writers of the Argonautics too will have the fhip Argos to be loquacious and oracular. Magnes another name of the load-ftone is often call'd Adamas, which feems to be no other than Atbamas. Apollodorus makes Magnes the fon of Eolus, who marrying Nais, inhabited the ille Seriphus. Æolus was a great failor, invented fails, and fludied the winds, therefore deified and made the god of the winds. I fuppofe it all ends in the myfterious invelopement of the knowledge of the magnetic compafs.
I hope for the readers candour, in reciting thus much from antient fable, which I did as concifely as poffible. But in matters of obfcure antiquity, we muft make ufe of all helps. And in heathen antiquity we have no other. A ftrictly hiftorical way of writing in former times, is only to be expected in the

facred canon of the Fexes. And what is remarkable, after God's holy firit had deferted them, their writers became the greatelt fablers in the world, and, if poffible, out-did the Greeks, in that way.

One would imagine, the fafhion of thefe moft antient charts, was to divide the circle into 12 parts, and affix the celeftial figns of the zodiac to them; beginning with the eaft at aries, where the fun rifes at the equinoxes; and thence they might call the box by the name of aries, as hhewing the eaft where aries is plac'd. As now the Turks and Arabians call it kibla noma, i. e. Thewing the kibla, or fouth point, the way toward which they turn their faces in devotion. So we only enquire for the north point ; and call it the lode-ftone, becaufe it Chews the lode-ftar or north pole. But'tis all one; any one point in a circle being found, the reft are found too.

From what has been faid, it feems probable, that the fable of the hero finding out the fpring in the fandy defarts of Africa, by the help of a ram fent from Fupiter, means the travelling over thofe immenfe plains by the help of a compafs, which they call'd by the name of a ram, or a golden ram. And that the poffeffors of the antient oracle of Ammon had fuch a fecret, which they cunningly applied to the facreds of their deity. Probably, in that moft early age, they had not improv'd the ufe of it to the pitch and manner that we enjoy, with a needle; and that fet upon a central pin: but having found out the verricity of the magnet, they put it into a boat, which was to fwim on water, and therein it would have liberty to turn itfelf to its proper direction. And this is the fentiment of the learned Dr. Wallis, in the Pbilofophical Tranfätions, No. 278. This boat was the better a handle for the mythologifts to call Hercules's veffel a golden cup, becaufe cups were made in the fhape of a boat, and had the fame denomination, cymbium.

Thofe learned commentators upon Curtius abovementioned agree, there was a ftone along with the ftatue of Ammon, carried about in the golden Thip; and perhaps, hence the antient navigators took the hint of applying the figure of the ram to their compaffes, however form'd, and gave it the name of the ram, or golden fleece, which the Greek fables, their mott antient hiftory, ring of: and hence their hips deriv'd their oracular quality. Pbrixus's ihip, the golden ram, being faid to fpeak on occafion, as well as the fhip argos. The ftupendous properties of this ftone, without difficulty, would perfuade even thofe above the vulgar, that there was a divine principle in it, quite metaphyfical, confequently oracular. And in the dawnings of idolatry, the evil agent who was vigilant to pervert every thing to his own purpofe, would not fail to make great ufe of the fecrets of the magnet. The intire notion of oracles among the heathen, is caufed by the devil's mimickry of God's tranfactions among the patriarchs and the fezes. But I believe the Egyptians took their notion of carrying a boat in all their religious proceffions, from this magnetic boat, of which both Herodotus and Plutarch inform us. For they intended it to fignify the movement and defcent of the divine ideas from the fupreme mind; efpecially the very fountain and principal of thofe ideas: and it muft be own'd to be admirably well chofe. Hence the top and the bottom of the verge or limbus of the celebrated Ifiac table, is adorn'd with a boat. In one a ram, in the other a bull. Meaning the origin of the chain of ideas flowing from the divine mind. 'Tis highly probable, that with the ram is the copy of fupiter Ammon's boat, mention'd by Curtius. And I fuppofe this is Herwart's opinion, but I have not yet feen his book. Of this I fhall difcourfe larger in my explication of the Bembin table. However Herodotus tells us in his II. book, that the temple of 7 fupiter Ammon took its rife from Pbenicia. I only mention this for the fake of thofe that are over acting the credit of antiquities in Egypt.

We learn in Plutarcl's difcourfe de Ifid. © Ofir, that the hip argos of the Greeks, was in reality the hip that our Hercules fail'd round the world in.

Further, this oracular fhip has its name argos, fays my friend Mr. Baxter, gloff: ant. rom. from the Hebrew and Syrian word argan, an ark. Which confirms what I faid above, concerning the carrying about the fhip of Ammon on the fhoulders of the priefts. Strabo in II. of his geography, mentions the temple of Leucotbea, built by Pbrixus at Colchos; that there was an oracle there; and that the fheep was never flain at the place. This fhews its relation to that of 7 fupiter Ammon. Leucotbea is the name of confecration of Hercules his mother, Hercules himfelf being call'd Palemon; both made fea deities: from the extraordinary fame of Hercules, the firft and great fea captain. Paufanias in Atticis fays, he was buried in the Corinthian Iftbmus; where the Iftbmian games were kept to his memory. But Mela writes, that his remains were at Gades. It's probable there was only an honorary monument of him at the I/tbmus, as founder: as the honorary monument of Yolaus mention'd to be among the Thebans, by the Stadium, p. 42.

Mr. Baxter in gloff: ant. rom. v. afcania makes Pbrixus to be Apbricus, and the fame perfon as $\mathfrak{F}$ upiter Ammon, or the founder of the temple of $\mathfrak{F}$ upiter Ammon; rather, of that prior to $\mathcal{F}$ upiter Ammon. We are not to regard the little artifices of the Greeks, who draw all celebrated events and perfons of antiquity, into their own country. Apbricus, no doubt, is the Apbre before-mentioned, fon of Midian, fon of Abrabam; whom Cleodemus makes an affociate of Hercules, in his Lybian wars. Fofephus makes him the conqueror of Lybia, and that he gave name to Africa. 'Tis not unlikely but that he is the hero that travell'd over thefe barren fands by the help of the compafs, as his countrymen the Arabians have from times immemorial practifed, in travelling over their own defarts. And might probably erect a patriarchal temple there; and in times of his pofterity it degenerated into the idolatrous temple of $\mathcal{F u p i t e r}$ Ammon. And there the compafs box of the hero remain'd, and was converted into part of the heathen facreds.
'Tis no very frange matter, if they at another time call this fame hero Baccbus, therein confounding him with the like travels of the Ifraelites, through the Arabiandefarts. We are not to expect thefe hiftories of old times involv'd in fable, abfolutely confiftent. But if this account be agreeable to truth or near it ; then we may imagine the fame Apbre, by the Greeks call'd Pbrixus, according to Mr. Baxter, pafs'd the Helle/pont, made the expedition into Colcbis, and built a like temple there. And a compafs box called the golden ram, was made alike part of the object of their adoration. This is exceedingly confirm'd by the report of Herodotus and Diodorus $S$. who fay, the Colcbi practifed the rite of circumcifion, a matter which the learned cannot account for; but appears plain from hence : thefe being the defcendants of Abrabam. They fay, at the fame time, that the Etbiopians practire the like: and that 'tis no recent cuftom among them, but from the beginning. I apprehend by Etbiopians are meant $A$ rabians, who are pecple defcended from :Abrabam. Herodotus fays likewife the Egyptians circumcis'd, which muft be accounted for in this fame manner; fome Arabian or Etbiopian nation bringing the cuftom among them. As a further confirmation of Pbrixus being Apbricus, Bocbart fhews the Colcbic and Hebrew tongue is much a-kin. And thus we may account for what Mr. Toland, p. 133. fays, that the idiom of the Iri/b language (which we fuppofe the remnant of the moft antient oriental,) has a mixture of Arabic in it.
I faw a book in Dr. Mead's library, Mufeo de las medallas defonocidas E/panolas, p. 35. No. 82, 83. are two ancient unknown medals, fuch as they often find in Spain. The firft a head (not of the beft workmanhip) on the obverfe, young, but heroical enough, a necklace on. Behind it A $\Phi$ PA in the old $P b o c-$ nician character, like the Samaritan. Reverfe a horfeman, and under the exergue another word in like Punic character. The other No .83 . has the fame head in the obverfe, but without the necklace: and A $\Phi$ P A before, in plain Greek, behind a dolphin. The reverfe as the laft. There is another fuch coin in the
P. 62. TAB.XXXII.


Female Celric ormaments found in a liarron north of Somikenge which $\mathcal{I}$ onent it 5 Tuly 2783. among bumt bones, all drann as big as the $\mathcal{L}$ ifes.


Digitized by GOOgle

## D E S C R I B E D.

fame book, no difference, but the name and dolphin tranfpos'd. I verily believe this is our Aphra, or Apher in our Englifb trannlation call'd Epher, Gen. xxv. 4. ftruck by fome city in Spain, who acknowledged him their founder.

It is remarkable enough, what Mr. Norden writes, in his hiftory of Cornwall. The Corni/h men univerfally fuppofe that the ferws are the people who firt work't in their rocks, for tin: and in old neglected tin-works, they find fome of their tools. The workmen call them attal farazin, the $\mathcal{f}$ erwe caft off works, in their Hebrew fpeech, fays Norden. Now I apprehend he means our Arabians: and it is a circumftance confirming the former notions. And to it we may refer the origin of the odd reports, of our Stonebenge coming from Africa and the like. By the Greeks, Hercules Melcartus or Melicerta, and Pbrixus or Apricus are made half brothers: by 70 oppbus, Hercules is fon-in-law to Apbricus. The Phonicians paid tythe. So the Arabians, in Pliny, the like: being patriarchal cuftoms.

Apbricus or Pbryxus we may very well fuppofe to be father of the Pbrygians. And his expedition thro' the propontis to the Euxine fea, the Greeks colour over with their Helle and Hellefpont. But we cannot entertain too high a refpect for him, becaufe I fee it no lefs reafonable, to refer the origin of the Britons to him. I mean that eaftern colony that came hither with Hercules, upon the old poffeffors or aborigines Albionites, which gave the more famous name of Britain to the ifland. The Brigantes is the fame name, fays Mr. Baxter the common and more ancient name of this people: who being driven northwards by inundations of foreigners from the continent in after times, the name became more appropriate to the inhabitants of York/bire and the neighbouring counties. In Tacitus the Brigantes are called maxima Brittanorum natio. At the fame time they forc'd the ancienteft poffeffors, the Albionites or Albanians ftill more northwards. Likewife many of thefe Brigantes pafs'd into Ireland, where they became a famous nation. The Bryges, Pbryges, Pbrixi, Brifones, Brigantes, Britones are intirely fynonimous words in different dialects. And this affignment of the origin of our anceftors, very well accounts for that notion of their Pbrygian or Trojan defcent, fo riveted in the minds of the old Britons. A notion which prevail'd among fome of the Gallic nations on the continent, and they had retain'd the memory of it, in the time of Ammianus Marcellinus, who mentions it. Likewife in Cefar's time, fome Gallic nations, claimed kindred with the Romans; probably upon this very account.

This is, in fhort, fome prefumptive evidence we have, of Hercules and Apbricus planting Britain, introducing the Druids with the patriarchal religion: and concerning the knowledge they had of the ufe of the compafs. This whole matter will be further confidered, when I come to treat of it exprefly. At prefent we will continue the hiftory of the compafs, as it became more fully known to the world.
Martinius in his Atlas, and Gilbertus de magnete, Lib. I. 2. fhow us, the Cbinefe have us'd the magnetic needle from times immemorial: that they have a trick of telling fortunes with it: as the heathen afore-mentioned made it oracular. The Arabians likewife have us'd it, for travelling over the great and wild defarts, of weeks together, where there is no track to guide them; nor have they any notion of time when they began this practice. Herwartius publifhed admiranda etbnice theologia, wherein he endeavours to prove that the old Egyptians had the ufe of the magnetic needle, and that the Bembin table contains the doctrine of it, invelop'd in hieroglyphicks. The learned Fuller in his Mijcellanies Lib. 4. 19. afferts, that the Pbenicians knew the ufe of it, which they endeavour'd to conceal by all poffible means, as they did their trading in general. That it was loft with them, as many other arts, their ars plumaria, the dying of purple, (the invention of our Hercules of Tyre ) the Hebrew poetry, and other curious knowledge, which is perifhed.

## STONEHENGE

'Tis not unlikely that the lodeftone being applied to religious ufe, was one caufe of its being forgot: together with the fecrecy of the Pbenician voyages. Suetonius in Nero, fpeaks of a prophetic needle, which the emperor us'd to pay his devotions to. Thelearned Burman fhews, that moft, or all of the old MSS. and printed books, read it acuncula, acucula, or acungula; which, in my opinion, the criticks have caufelelly corrected into icuncula: becaufe they had no notion of the magnetic needle being underfood by it.
Monfieur Faucket, a famous.French antiquary, in his antiquities of France, quoies fome verfes from a poet in that country, who wrote A. D. 1180 . wherein is as plain a defcription of the mariner's box, as words can make. The poet mentions it by accident, not as a thing new and ftrange. Oforius in his difcourfe of the acts of king Emanuel, refers the ufe of the compafs among the Eurofeans, to Gama and the Portuguefe, who found it among fome barbarous pyrates, about the Cape of Good Hope; who probably were fome remains of the old Pboceicians, or Arabians, or at leaft have preferved from them, this practice. About A. D. I260. Paulus Venetus is faid to have brought it from Clizina; by the great author on the magnet, our countryman Gilbert. Genebrand in his cbron. fays, the ufe of the lode-ftone reviv'd among us about A. D. 1303. by Fl. Melvius a Neapolitan, and others attribute it about that time to fobn Goia a Neapolitan. Fofeph de Cofta fays, fome Mabometan feamen whom Vafquez de Gama met with near Mofambick, who had faild thofe feas by the ufe thereof, taught it him. I obferve our ancient Britons, the $W e l f$, call a fteers-man or pilot llywydd, whence no doubt comes our Engli/h word lodeftone, and lode-ftar, the north-pole. Llyw is the helm of a fhip in Britijb. Lodemanage in Skinner's etymology an old Englifb word, fignifying the price paid to the pilot. Our lords of the Cinque Ports keep a court at Dover, by that name. There things feem to indicate fome memorial of the magnet left among the $W_{e} / b$, from the oldeft times: and of its application to failing.
Thus have we given a kind of hiftory of this prodigy in nature, the magnetic needle: to confirm our furpicion, that the Britibl Druids knew the ufe of it, and ufed it in thefe works of theirs, which we have been treating of. We learn in the Pbilofophical Tranfactions, Lowthorp, Vol. II. p. 601. that there are confiderable veins of the magnet, in our own country, in Devon/bire; where the Pbocnicians and Druids muft needs he very converfant.

We return now to our firft fubject Stonebenge, and apply what has been faid, to the obfervation we there made. It is not to be thought, that the Druids, men who employed themfelves in thofe noble fudies, which Crefar gives us an account of, and who were at the pains of bringing thefe valt ftones together, from fuch a confiderable diftance of 16 miles: I fay, it is not to be thought, . but that they would be nice and exact in placing them. And this, not only particularly, in refpect of each other, upon the projected groundplot: but alfo in general, in refpect of the quarters of the heavens. And this I found to be a juft furmife, when I examined their works for feveral years together, with fufficient accuracy, with a theodilite. As I took notice before, the works of one place regarded the cardinal points, but with a certain uniform variation therefrom. Whence I grounded my conjecture, that they were fet by a compafs, which at that time varied, according to that quantity obferv'd. Of which property of variation we may well. fuppofe, the Druids were ignorant. This I now propofe for the rule of inveftigation, of the time when Stonebenge was erected. Hoping the reader will judge as favourably of the attempt, as things of this great antiquity require.

The variation at Stonebenge is about 6 or 7 degrees, from the north eaftward. I have in order to form our hypothefis, fet down a fcheme of the ftate of the variation in England, from the beft obfervations I could meet with. Dr. Halley takes notice, that the variation at Paris is always 2 degrees and a half


Digitized by GOOgle

# Described. 

more eafterly than with us. Orontius Finceus in 1550 obferv'd it to be there, about 9 degrees, eafterly, therefore to reduce it, I have flated it at II degrees 30. and from thence continued it, to the prefent time, as in the enfuing table.


By this table it appears, that in the fpace of 180 years, the variation of the magnetic needle in England, has fhifted from in degrees and a half eaftward, to $I$ I degrees and a half weftward. In 90 years the medium of thofe extremes, which was 1657 , there was no variation at all; the needle pointing due north and fouth. But alas our obfervations extend no farther. We know not the bound of the variation, on either hand: nor the quantity of its motion, when thereabouts. Mr. Geo. Grabam thinks it is now near the weftern bound. It is very flow, in all probability, when upon the return, and as it were, flationary: like the fun's motion at the tupics, when it is returning. So that the nice determination of its circle, and of its motion, is referved for remote pofterity. Dr. Halley conjectures, that the whole period of variation, is perform'd in about 700 years. Upon this fuprofition, in grofs, we we may thus found our conjcture, of the time of buiiding of Stonebenge.

By what we can find, the variation is about 9 minutes in a year, or a degree and a half in io years, at this part of its circle. Now I obferv'd at Stonebenge, that the eaftern wing of the avenue, the curfis and other parts belonging to the temple, abated fomewhat in their variation, eafward, being fomewhat lefs than that of the temple itfelf. It is highly reafonable to believe, that the great work of Stonebenge could not take lefs than half a fore years in building: and that thofe other works were made in fucceeding years, not long after it was finifhed. From hence I gather, which way the magnetic variation was moving, at the time of founding Stonehenge, viz. from eaft toward no variation and fo to weft. This muft be the foundation of our calculus.

Therefore at the time of the founding of Stonebenge, the variation was about the fame quantity and place, as abont A. D. 1620 . in our preceeding table. Suppofing with Dr. Halley, the revolution of this variation be about 700 years, three intire revolutions thereof, bring us to about the year of the city of Rome 280. which is about 460 years before our Saviour's time: 420 years before Crefar invaded Britain. About 100 years before our Saviour's birth, Divitiacus made the Wanjdike north of Stonebenge, and drove the poffeffors of this fine country of the $W$ ilfflire downs, northwards. So that the Druids enjoyed their magnificent work of Stonebenge, but about 360 years. And the very

STONEHENGE, \&c.

great number of barrows about it, requires, that we fhould not much fhorten the time. Sir Ifaac Nereton in his Chronology, reckons 19 years for a medium of a king's reign. So that in that fpace, there were about 19 kings, in this country. And there feems to be about that number of royal barrows (in my way of conjecturing) about the place.

I obferve, this time we have affign'd for the building of Stonebenge, is not long after Cambyfes's invafion of Egypt. When he committed fuch horrid outrages there, and made fuch difmal havock, with the priefts and inhabitants in general, that they fled the country to all parts of the world. Some went as far as the Ea/t Indies, and there taught many of the antient Egyptian cuftoms; as is taken notice of by the learned. It is not to be doubted that fome of them fled as far weftward, into the ifland of Britain, and introduced fome of their learning, arts and religion, among the Druids; and perhaps had a hand in this very work of Stoncbenge: the only one that I know of, where the ftones are chizel'd. All other works of theirs, are of rude ftones, untouch'd of tool, exactly after the patriarchal and $\mathcal{f e w i} / \mathrm{h}$ mode: thercfore older.

This was at a time, when the Phoenician trade was at height, the readier a conveyance to Britain: it was before the fecond temple at Yerufalem was built: before the Grecians had any hiftory.

## Direftions to tbe binder.

All the half fheet plates are to be bound up with the book, as fingle leaves, according to their pages, and without guards, viz. Plate, No. $1,2,4,6,7,8$, 9, $10,12,14,15,16,23,24,25,26,27,28,29,30,31,32,33,34,35$. Thofe Plates, $\mathrm{N}^{\circ}$. 11, 17, 19, 21, are to be once folded in the middle, and bound up with guards. Thofe Plates, $\mathrm{N}^{\circ} .3,5,13,18,20,22$, are to be folded in three parts, and bound up with guards.
:Tap rapormar






## I N D E X.



Mr. Webb's drawings of Stonehenge falfe, $\quad$ 3, 22, 25
The cell not form'd from three equilateral triangles, $3,18,24,33$
But one entrance into the area,
$3,18,23,33$
He makes one fide of the cell out of a bit of a loofe fone, 29
He bas turn d the cell a jixtb part from its true hituation, 3,22
Demonftrated by Lord Pembroke's meafure, $\quad 20,22,28$
Demonftrated by trigonometry, 22
Proved by the firgeons amphitheater, London, being an imitation thereof, 25
Stonehenge not made by the Roman foot, 6
Webb makes the inner circle, of tbirty fones, inftead of forty, 20
He contracts I I 9 feet to 43, 33
$\begin{array}{ll}\text { He } \\ \text { Stonehenge not a monument, } & 120 \text { foot out of its true place, }\end{array}$

The Druids came with an oriental colony, upon the firft Celtic inbabitants, 62, 63

## I N D E X.

They were of the patriarchal religion,Page 1, 2, 17Which was the fame as chrifianity, ..... 2, 54
Stonehenge prov'd the work of the Druids from the infinite number of the like,all over the Britannic ifles,3, 8
Farther fuggeftions: becaufe accounted facred, made by magic, medicinal, camefrom Ireland, Spain, Afric, Egypt. In fome places the name of Druids re-maining,
Schetland ifles the Hyperboreans of the Greeks, thence Abaris the Pythagoreanpbilofopijer,40
Stonehenge not built by the Saxons, deduced from its name, ..... 7, 47
Demonftrated to be older tban Roman times, ..... 9, 10
Such in countries never conquered by the Romans, ..... 3
Stonehenge and fuch works built by the Phoenician colony, ..... 8, 9, 32, 49
The cathedral of the Arch-Druid, ..... 8, 10, 32
Called antiently the Ambres, ..... 9, 47
Thence Vefpafian's camp, and Ambrefbury nam'd, ..... 49
Stonehenge call'd choir gaur: the great cburch or catbedral, ..... 4, 47
Made with mortaife and tenon, unufial with the Romans,
Made with mortaife and tenon, unufial with the Romans, ..... 18 ..... 18
Made by the ancient Hebrew, Phœnician cubit, ..... $6,12,28$Its proportion to our foot,$6,11,15,26,30,32$
The ancient decem-pedum,12
The Druids were geometricians,16, 18, 27, 42
Knew the ule of the compa/s,57, 63
They carried a little ax to cut down milletoe, ..... 39, 48
The Druids letter, ..... 3I, 54
The patriarcbal temples were open, ..... $19,23,30,39,40,46,52,54,58$.
$23,24,58$
Patriarchal temples, ..... I $9,40,46,50,51,54$
Of rude forues, uncbizel'd, ..... $24,30,40,54$
Had no fatues, ..... 55
Patriarchal altars, ..... 30,50,52
Their temples fronted the eaft, ..... 35
Their temples were confecrated and endowed, ..... 52
Paying tytbe, ..... 52,55
33,34
Bowing, a part of worf
They officiated barefooted, ..... 55
They practifed cbaftity, before officiating, ..... ibid.
Their publick devotion was calld praying, or invoking, in the $N A M E$, ..... 52
They believ'd a future ftate, ..... 31
Thofe were the quarterly facrifices, ..... 37
The manner of facrificing, ..... 34, 54
They us'd water for purification, ..... II, I3, 14, 34

| Of the water vafes at Stonehenge, | $11,13,14,34$ |
| :--- | ---: |
| The fone table there, | 34 |
| Of the fones and cavities on the vallum, | 11,14 |
| Crwm-lechen, bowingfones, | 33,34 |
|  | Human |

## I N D E X.



| The time woben Hercules lived, |  |
| :--- | ---: |
| Hercules built patriarchaltemples, where-ever be came, | $52,53,58$ |
| Probably be made tbe Main Ambre by Penfans, and Bifcawoon, | 54,57 |
| Perfepolis a patriarchal temple, | 54 |
| Of the avenue of Stonehenge, | 19,46 |
| Of its two rwings, | 35,39 |
| Eaftern wing, its variation, | $35,38,41,57$ |
| Of tte Hippodrom or Curfus, | $36,56,57,64,65$ |
| Its variation, | $13,41,56$ |
| The Romans borrowed the Britifh cbariots, | 42,57 |
| The eaffern meta, its variation, | 42 |
| Otber like worrss, in otber parts of England, | 57 |
| The via Iceniana, | 43 |
|  | 9 |

Of the barrows or fepulchral tumuli, 43
Druid barrows, $\quad 10,45$
Arch-Druids barrows, 38
Urn burial, 44,46
The bodies lay north and fouth, 45
Beads of amber, glafs, gold, \&c. foun.t, ibid.
Horfes, dogs, and other animals buried with them, 46
Carvilius's tomb, 4, 44, 46

The marnetical compa/s known to Hercules, the Phœnicians and Arabians, 57 The oracle of Jupiter Ammon bad a compafs, 59, 61, 62
The golden fleece was a compafs, 60, 62
How the compa/s was forgot, $55,58,63,64$
Apher grandfon of Abraham, companion of Hercules, from Arabia, 53, 62, 63 He gave name to Africa and to Britain, $53,62,63$
$A$ jibeme of the variation of the compafs, 65 A conjecture therefrom, when Stonehenge was founded, 65

$$
F I N I S \text {. }
$$


[^0]:    ?

[^1]:    "heli" delin

