

Stonehenge and its barrows

William Long

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STONEHENGE

AND ITS

BARROWS,

BY

WILLIAM LONG, ESQ., M.A., F.S.A.

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The Committee of the Wiltshire Archæological and Natural History Society desire to express to the Author of this valuable paper, on the part of the Society, their deep sense of his kindness in undertaking this work at their urgent request, and their gratitude for his generosity in presenting the illustrations.

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* For these illustrations from "Ancient Wilts," vol. i., the writer has to thank Mr. J. Bruce Nichols, who has most kindly allowed him to have these copies taken in Lithography, by transfer from impressions from the original copperplates.

** For these illustrations the writer has to thank the Council of the Society of Antiquaries. They form a portion of those which illustrate Dr. Thurnam's papers in the "Archæologia," xlii., xliii.

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The remaining illustrations, with the exception of the copies from Aubrey's "Monumenta Britannica," made at Oxford, and the map, were engraved for the writer by Mr. Bidgood, Curator of the Somersetshire Archæological Society's Museum, at Taunton. The urns and cups are copied from engravings in the "Tumuli Wiltunenses."

Stonehenge and its Barrows.

By WM. LONG, Esq., M.A., F.S.A.

UPON the mind of the thoughtful visitor of Stonehenge,¹ two considerations can hardly fail to press, and with considerable force, as he recovers from his first astonishment; the one being the very sacred character of the place to those who had selected this spot,

¹ Spelt "Stanenges," "Stanhenges," by Henry of Huntingdon; "Senhange," "Stahengues," "Estanges," "Estanhanges," by Wace; "Stanhenge," by Layamon; "Stanhenges," by Higden; "Stonhenge," in the "Eulogium Historiarum;" "Stonege," by Borde; "Stone Hengles," by Hardyng; "Stonage," by Bolton; the author of the "Fool's Bolt;" "Stoneheng," by Webb; Charlton; and Aubrey; "Stonendge," by Drayton.

The Rev. Prebendary Earle, the well-known Saxon scholar, to whom the writer submitted the foregoing list of spellings, writes of them as follows: "In all these forms I only seem to see two states of mind, and these the two I have indicated. I. 'Stanenges,' 'Estanges,' 'Stonege,' 'Stonage,' 'Stonendge,' all seem to me essentially adjectival, epithetical, only in a large and collective way, as if one were to imagine a Greek λίθωμα, a mass of stones, after the pattern of στεφάνωμα πύργων, a diadem of towers. II. All the others seem to me breathe the idea of 'hanging,' and the structure of the word is that of two substantives in compound state, whereof the former plays the adjective to the latter, as in Stonewall. So this seems to be Stonehanging, and then the only question is how is the 'hanging' to be understood? The more architectural and elegant view will readily occur to you, and I suppose I touched on it before; but there is one idea, not graceful certainly, which might have been present to the crude mind of our rough ancestors, and that is this, 'Stone-Gallows;' for, I say it with reluctance, the Saxon word for Gallows was 'hengen.' But then on the other hand they used the word gracefully in 'henge-clif,' *rupes dependens*, or hanging cliff." Most Saxon scholars, as far as the writer is aware, look with disfavour upon the popular rendering of "Stonehenge" into "hanging stones," like Wace's "pierres pendues," and consider that the

and raised upon it this remarkable structure ; the other the (probably) long period during which it must have served as a "*locus consecratus*" to the surrounding people. What may have led to the choice of this particular site is not apparent ; but we need no modern Merlin to tell us that the work which was here carried out was one which must have required much labour, and must have been the result of a very deep religious feeling. It could have been no light fancy nor passing impulse which operated as the motive power for the transport and setting up of these huge stones, and the conveyance hither of others from a great distance ; but an earnest and deep-seated conviction on the part of the builders that it was their duty in this way, and at any cost of time and effort, to construct a fitting temple for the worship of their God. The same sanctity appears to have extended to the plain and hills around. Every elevation within a circuit of a mile-and-a-half is crowned with the grave-mounds of the distinguished dead, who would naturally wish to be buried near to the sacred precincts of this, their holy shrine. The building and its surroundings are in perfect harmony. They are as closely connected as a churchyard is with its church ; and no traces exist, as far

Saxons meant by it "stone hanging-places," or "stone-gallows," from the resemblance of the trilithons to such an instrument of punishment or torture. Mr. Herbert, who says that "hanging-stones" would have been expressed by the word "Hengestanas," believes that the word is properly "Stanhengest" as it is called by Simon of Abingdon, in his chronicle of the Abbots of that place, (Ussher's Brit. Eccles., p. 228, ed. ii. ; Dugdale cit. Gibson's Camden, i., 207, Gough's i., 150,) and that it was so designated, not because Duke Hengest "there performed a desperate act, and was engaged in the bloody scuffles consequent upon it ; but because he there ended his days, and was solemnly immolated to the vengeance of the successors of the Druids." Cyclop. Chris., p. 175. In this view, however, he would stand very much alone. Dr. Guest, (Philological Society's Transactions, vi., 1853,) combats Herbert's "stone of Hengest," and considers Simon of Abingdon's "Stone-Hengest" to be a clerical blunder for Stonehenges. He says "We find in many of the Gothic languages a word closely resembling *henge*, and signifying something suspended." "In the compound Stonehenge, the *henge* signifies the impost which is suspended on the two uprights." Sir John Lubbock, (Prehis. Res., p. 114,) would "derive the last syllable from the Anglo-Saxon word "ing," a field ; as we have Keston, originally Kyst-staning the field of stone coffins."

The writer, in his younger days, used to play cricket with a father and son named Stonage, of Bishops Waltham, Hants ; but this is the only occasion on which he has met with any form of the word as a man's name.

as the writer is aware, of any early human settlements nearer to this great necropolis, than High-Down or Durrington. Here must have been the Westminster Abbey, and possibly the Westminster Hall, of the people of that day, who occupied the vast down tracts of Southern Wilts. Here, at certain sacred seasons, must have been solemn gatherings for worship, for debate, and probably for amusement in the remarkable circus, which bounds Stonehenge to the north. And it would be difficult to believe that this place had not been so made use of for a considerable time. Years must have been spent in bringing hither and setting up the many and great stones of which it was composed, and it must have been a considerable period during which were being gathered around it the magnificent tumuli, which have been formed with so much care and labour. One might fairly fancy that, for two or three hundred years, at least, there may have been the peaceful use and enjoyment of this holy place. But upon these points men are not agreed. There is no "consensus" of Antiquaries about them. Every kind of theory has been proposed, and as regularly combated. And so it will be to the end of time. Each generation considers itself wiser than the preceding, and better able to explain those matters which to their fathers and grandfathers only appeared more difficult of explanation as they advanced in their enquiries. And thus it has come to pass that more books have been printed about the much-frequented Stonehenge than about all the other megalithic structures, collectively, which the world contains; and that the literature of this, the best known of them all, would fill the shelves of a small library. To the enquirer about Stonehenge it would be a work of time and trouble to seek out, in different places, and from many volumes, what he would be glad to know about it; and the present compilation¹ is

¹ The work which the writer, at the request of his Wiltshire Archæological friends, has taken in hand, would have been carried out, had he lived, by one, who, from long study of megalithic structures and tumuli, was eminently fitted for such a task. For many years Dr. Thurnam had contemplated a description of Stonehenge; and as he read, he jotted down references and made short extracts, which might be of use when he was in a position to undertake it. These memoranda, together with cuttings from newspapers, were most kindly given to the writer by Mrs. Thurnam, and they have been of material

an attempt to bring together for the benefit of the members of the Wiltshire Archæological and Natural History Society the more important notices, which are descriptive of the structure and its adjuncts, and of the views and theories which have been propounded respecting it. To one who has made Stonehenge his study it will possibly tell nothing with which he is not already familiar; but to others it may be convenient and useful to have in as concise a form as possible, a *resumé* of what the best authorities on this and on similar structures have written respecting it. A series of extracts, it is true, is not particularly pleasant reading; but a man's words are the dress of his thoughts, and no one can clothe the ideas of another in so suitable a drapery as the author himself, if only those ideas are clearly apprehended, and as clearly expressed.

While the much larger and much older megalithic structure at Abury has been in the shade, and comparatively disregarded, Stonehenge has been, for the last 700 years, written about, talked

service to him in the compilation of this paper. The subject in Dr. Thurnam's hands, could not fail of receiving a complete and masterly treatment; but it was not to be his work. He just lived to complete his valuable contribution to the Proceedings of the Society of Antiquaries, viz: his exhaustive account of "British Barrows, especially those of Wiltshire and the adjoining counties;" a work, which must henceforth be the text-book on the subject, and which exhibits in every line the scrupulous care and earnest striving after accuracy of statement which characterise all that Dr. Thurnam wrote. The writer cannot but think that the very great amount of research and close attention which this work required and received must have contributed, in no slight degree, to the sad and sudden termination of his valuable life. He told the writer shortly before his decease, that he would never have put his hand to it, had he been aware of the immense amount of labour which it would entail upon him. By Dr. Thurnam's death, the writer lost a much-valued friend and correspondent of many years standing; who had given him important assistance in the preparation of his paper on Abury; and whose pleasant intercourse never left aught but agreeable recollections behind it. The work above mentioned, and his portion of the "Crania Britannica," are valuable and important contributions to archæological literature; while his scientific reports on the treatment of his insane patients in Yorkshire and Wiltshire are highly esteemed by his brethren of the medical profession. He will always live in the affectionate remembrance of the writer, who would fain place this stone upon the tomb of his departed friend:

"His saltem accumulæ donis, et fungar inani
Munere."

about, and visited. Poets have sung about its mysterious character and origin, and historians have rehearsed from generation to generation the fabulous narrative set afloat by Geoffrey of Monmouth. Stonehenge has been much indebted to its situation for its celebrity and popularity. Unlike Abury, and Stanton Drew, which are in decidedly out-of-the-way places, Stonehenge has had the advantage of being within a short distance of a cathedral-and-county-town, and it has thus acquired an amount of notoriety,¹ which, by comparison with its seniors, is not altogether deserved.

It is easier to describe Stonehenge than Abury; for Stonehenge, although a ruin, is a compact one; whereas Abury is not only of much greater area and circumference, but it was approached by a long stone avenue of more than a mile in length. Although Stonehenge has been much despoiled, it has not been, to anything like the same extent as Abury, regarded as the convenient quarry for the materials of neighbouring buildings. "There is as much of it undemolished," says Stukeley, "as enables us sufficiently to recover its form, when it was in its most perfect state; there is enough of every part to preserve the idea of the whole." At Abury, on the other hand, the stones comprising the circles and avenue have been continually broken up, even when not wanted for building-purposes, because they encumbered the pastures, or obstructed the plough. Fortunately the village Vandals omitted to fill up the holes in which the stones had stood, so that we are still able to assure ourselves that there were circles within the large outer one, as described by Aubrey and Stukeley. It is also certain from Aubrey's plan; from the stones which remain; and from the stones of whose removal we have reliable mention; that there was a continuous avenue from the large circle to the top of Kennet Hill. There must always, however, be uncertainty about the (so-called) Beckhampton avenue. Good Dr. Stukeley, to whom we owe so much, became unfortunately possessed with the ophite theory, and there is too much

¹Stukeley (p. 10, reprint) speaks of the "infinite number of coaches and horses, that thro' so many centuries have been visiting the place every day."

reason to believe that but a few stones on that side of Abury were available for the vertebræ of his serpent's tail.¹

Before proceeding to describe the plan of Stonehenge (for which, as Sir Richard Hoare says, the pen must call in the assistance of the pencil, for without a reference to plans and views, no perfect knowledge can be gained respecting this "Wonder of the West"), it will be best to give a somewhat detailed account of the different notices of Stonehenge in mediæval and later times.

Some persons are of opinion that Hecatæus of Abdera, a contemporary of Alexander the Great, and of Ptolemy, made allusion

¹From a letter of Lord Winchelsea's, printed in "Nichols' Illustrations of the Literary History of the 18th century," ii., p. 771, and dated July 12th, 1723, it is evident that Stukeley had, at that early period, made up his mind about this Beckampton avenue. In his common-place book, folio 1717—48, lately in the possession of Sir William Tite, at page 73, is "a rude general sketch of the wonderful relique of Aubury, Wiltshire, as it appeared to us May 19, 1719," and then follow Stukeley's *first* impressions of it, containing nothing noteworthy except the conclusion, viz: "I believe there was originally but one entrance to it." There is the plan of the Kennet avenue, but no indication of any other. It is perfectly clear that Stukeley was conversant with all that Aubrey had written before him, although, like many other archæologists, he would not acknowledge the obligations he was under to his predecessor. Thomas Hearne, who must have been a crusty man, speaks very disparagingly of Stukeley as an antiquary. At page 485 of the "Reliquiæ Hearnianæ," (Bliss' edition,) is the following entry: "1722. Oct. 9. Dr. Stukley, fellow of the Royal Society, is making searches about the Roman ways. He is a very fancifull man, and the things he hath published are built upon fancy. He is looked upon as a man of no great authority, and his reputation dwindles every day as I have learnt from very good hands." And again, "1724. Sep. 10, Yesterday in the afternoon called upon me, William Stukeley, doctor of physick, whom I had never seen before. He told me he is about printing a little folio about curiosities. It is to be entitled 'Itinerarium Curiosum' . . . This Dr. Stukeley is a mighty conceited man, and 'tis observed by all that I have talked with that what he does hath no manner of likeness to the original. He does all by fancy." Hearne mentions Aubrey twice, but says nothing against him. Bishop Warburton considered Stukeley to have in him "a mixture of simplicity, drollery, absurdity, ingenuity, superstition, and antiquarianism." Malone says of Aubrey, that "his character for veracity has never been impeached, and as a very diligent antiquarian his testimony is worthy of attention." Toland says "that he was a very honest man, and most accurate in his accounts of matters of fact." That he was very credulous we shall find from the ready hearing which he gave to Mrs. Trotman's gossip at Stonehenge.

to Stonehenge in his "History of the Hyperboreans." In this work he described them as inhabiting an island as large as Sicily, lying towards the north, over against the country of the Celts, fertile and varied in its productions, possessed of a beautiful climate and enjoying two harvests a year. In this island was a round temple which was dedicated to Apollo. If Stonehenge were erected within the three hundred years which preceded the Christian era, it would not have been in existence when Hecatæus wrote. At all events, we shall never, from this vague statement, be able to emerge from the region of cloudland, and to take our stand upon "terra-firma." Mr. Herbert, in his "Cyclops Christianus" has devoted a large portion of Section I. to the proof that by this island Britain could not possibly have been meant.

No Roman historian makes mention of Stonehenge.

Neither Gildas, Nennius,¹ nor Bede, make mention of Stonehenge.

The Saxon Chronicle makes no mention of Stonehenge.

Nearly 1200 years of the Christian era roll away before the curtain is raised at all, and we get a peep at Stonehenge under the following brief notice of it by Henry of Huntingdon, who died after 1154. He is enumerating the four wonders of England, and he makes Stonehenge the second of them—"Secundum est apud Stanenges; ubi lapides miræ magnitudinis in modum portarum, elevati sunt, ita ut portæ portis superpositæ videantur: nec potest aliquis excogitare qua arte tanti lapides adeo in altum elevati sunt

¹ Bishop Gibson, in his edition of Camden's *Britannia*, published in the year 1695, says that Stonehenge is mentioned in some manuscript of Nennius. This appears to be an error, as no mention is made of Stonehenge in his "De mirabilibus Britanniae Insulæ," or in any other part of his "Historia Britonum." Some gloss in some edition must have misled the Bishop. Nennius does however give an account in the 48th and 49th chapters of his history of the slaughter of the Britons. It ends as follows: "Et conventum adduxerunt, et in unum convenerunt. Saxones autem amicabiliter locuti sunt, et mente interim vulpino more agebant, et vir juxta virum socialiter sederunt. Et Hengistus, sicut dixerat vociferatus est. Et omnes seniores, ccc., Guortigerni regis sunt jugulati, ipseque solus captus et catenatus est; ac regiones plurimas pro redemptione animæ suæ tribuit illis, id est Eastsexe, Suthsexe, Midelsexe, ut ab illicita conjunctione se separaret."

vel quare ibi constructi sunt.”¹ “The second is at Stanenges (Stonehenge), where stones of a wonderful size have been erected after the manner of doorways, so that doorway appears to have been raised upon doorway, nor can any one conceive by what art such great stones have been so raised aloft, or why they were there constructed.” At a later period, when the Archdeacon of Huntingdon was on his way to Rome with Theobald, the newly-consecrated Archbishop of Canterbury, he met with the work of Geoffrey of Monmouth at the Abbey of Bec in Normandy, and abridged it. He appears to have adopted Geoffrey’s story about Stonehenge, as in a letter to Warinus Brito he says, “Uterpendragon, id est Caput Draconis, juvenis præstantissimus filius [*sic*] scilicet Aurelii Ambrosii, choream gigantum attulit ab Hiberniâ, quæ nunc vocatur Stanhenges.”²

Before the year 1139, the work of the great British-Mythologist, Geoffrey of Monmouth, had been given to the world. His “*Historia Britonum*” is the fountain-head of legendary British history, and poetry, and the source of—

‘ what resounds
In fable or romance of Uther’s son,
Begirt with British and Armoric Knights,’

as well as the original to which we are indebted for the writings of Wace, Layamon, Robert of Gloucester (the rhyming historian), Robert of Brunne, and many more,—not to mention its influence on the historical literature of England up to the seventeenth century.”³

¹ The other three things, “quæ mira videntur in Anglia,” are “primum quidem est quod ventus egreditur de cavernis terræ in monte qui vocatur Pec, tanto vigore ut vestes injectas repellat, et in altum elevatas procul ejiciat. Tertium est apud Chederhole; ubi cavitas est sub terrâ quam cum multi sæpe ingressi sint, et ibi magna spatia terræ et flumina pertransierint, nunquam tamen ad finem evenire potuerunt. Quartum est, quod in quibusdam partibus pluvia videtur elevari de montibus, et sine morâ per campos diffundi.”

² Ep. H. Hunt: ad calcem Guiberti Novigent. ed. Dacherii p. 739, cited by Herbert, C.C., p. 161.

³ Sir Frederick Madden, on “The *Historia Britonum* of Geoffrey of Monmouth.” *Arch. Journ.*, vol. xv., p. 299. Geoffrey died in 1154, having been made Bishop of St. Asaph, 1152.

Dr. Guest speaks of it as "Jeffrey's romance, that unhappy work which is everywhere found darkening the pure light of our early history;"¹ and elsewhere² he says of it, "The history of Jeffrey of Monmouth appeared in the middle of the twelfth century, and was denounced by the ablest men of the day as an impudent imposture. But it was patronized by the Earl of Gloucester, whose vanity it ministered to, and the influence of this powerful noble gave it a popularity which soon spread throughout Europe. Few of our later historians dare to question the truth of Jeffrey's statements; but his history is only a larger collection of the legends to which Nennius introduced us,³ added to and 'embellished' without scruple, partly from his own imagination, and partly, no doubt, from foreign sources, and impudently obtruded upon the reader as a translation of a Breton original."⁴

The following is Geoffrey's account, which is given in the words of Thompson's translation, printed by Sir R. Hoare: "Aurelius, wishing to commemorate those who had fallen in battle,⁵ and who

¹ "Welsh and English Rule in Somersetshire after the capture of Bath, A.D. 577." *Arch. Journal*, vol. xvi., p. 123.

² "Early English settlements in South Britain." *Salisbury Vol. of Arch. Institute*, 1849, p. 37.

³ Mr. Ellis, in the introduction to his "Specimens of Early English Metrical Romances" discusses the question of Geoffrey of Monmouth's work, and comes to the conclusion, that upon the whole there seems to be no good reason for supposing that this strange chronicle was a sudden fabrication, or the work of any one man's invention. It rather resembles a superstructure gradually and progressively raised on the foundation of the history attributed to Nennius.

With reference to the story of Merlin and the removal of the stones to England, "if," Mr. Ellis says, (p. 56 of the *Intro.*) "as Llwd and some other learned men have conjectured, a Gaelic colony preceded the Cymri in the possession of Britain, it is not impossible that Stonehenge, and other similar monuments, may have been erected by these early settlers, and that the foolish story in the text may have been grafted on some mutilated tradition of that event."

⁴ To the great popularity of Geoffrey's History, Alfred of Beverley, whose work was compiled about 1150, bears testimony: "*Ferebantur tunc temporis per ora multorum narrationes de Historia Britonum, notamque rusticitatis incurrebat, qui talium narrationum scientiam non habebat.*"

⁵ The British nobles whom Hengist the Saxon is alleged to have treacherously murdered at or near Ambresbury.

were buried in the convent at Ambresbury,¹ thought fit to send for Merlin, the prophet, a man of the brightest genius, either in predicting future events, or in mechanical contrivances, to consult him on the proper monument to be erected to the memory of the slain. On being interrogated, the prophet replied, 'If you are desirous to honour the burying-place of these men with an everlasting monument, send for the Giant's Dance, which is in Killaraus [Kildare], a mountain in Ireland. For there is a structure of stones there, which none of this age could raise without a profound knowledge of the mechanical arts. They are stones of a vast magnitude, and wonderful quality; and if they can be placed here, as they are there, quite round this spot of ground, they will stand for ever.' At these words Aurelius burst out into laughter, and said, 'How is it possible to remove such large stones from so distant a country, as if Britain was not furnished with stones fit for the work?' Merlin having replied, that they were mystical stones, and of a medicinal virtue, the Britons resolved to send for the stones, and to make war upon the people of Ireland, if they should offer to detain them. Uther Pendragon, attended by 15,000 men, was made choice of as the leader, and the direction of the whole affair was to be managed by Merlin. On their landing in Ireland, the removal of the stones was violently opposed by one Gillomanus, a youth of wonderful valour, who, at the head of a vast army exclaimed, 'To arms, soldiers, and defend your country; while I have life, they shall not take from us the least stone of the Giant's Dance.' A battle ensued, and victory having decided in favour of the Britons, they proceeded to the mountain of Killaraus, and arrived at the structure of stones, the sight of which filled them with both joy and admiration. And while they were all standing round them, Merlin came up to them and said, 'Now try your forces, young men, and see whether strength or art

¹ Sir R. C. Hoare notices that Geoffrey of Monmouth "contradicts himself as to the placing of these stones; for he first says that Aurelius intended them as a memorial to those of his subjects who had been slain in the battle with Hengist, and who had been buried in the convent at Amesbury; and afterwards tells us, they were set up round the sepulchre on the mount of Ambrius, which place (where Stonehenge now stands) is two miles distant from the supposed site of the convent."

can do more towards the taking down these stones.' At this word they all set to their engines with one accord, and attempted the removal of the Giant's Dance. Some prepared cables, others small ropes, others ladders for the work; but all to no purpose. Merlin laughed at their vain efforts, and then began his own contrivances. At last, when he had placed in order the engines that were necessary, he took down the stones with an incredible facility, and withal gave directions for carrying them to the ships, and placing them therein.

"This done, they with joy set sail again to return to Britain, where they arrived with a fair gale, and repaired to the burial-place with the stones. When Aurelius had notice of it, he sent out messengers to all the parts of Britain, to summon the clergy and people together to the mount of Ambrius, in order to celebrate with joy and honour the erecting of the monument. A great solemnity was held for three successive days; after which Aurelius ordered Merlin to set up the stones brought over from Ireland, about the sepulchre, which he accordingly did, and placed them in the same manner as they had been in the Mount of Killaraus, and thereby gave a manifest proof of the prevalence of art above strength."

On the death of Aurelius, his body was, according to Geoffrey (British History, book viii.), buried by the bishops of the country, near the convent of Ambrius, within the Giant's Dance, which in his lifetime he had commanded to be made. Uther Pendragon also, on his death, was carried by the bishops and clergy of the kingdom, to the convent of Ambrius, where they buried him with regal solemnity, close by Aurelius Ambrosius, within the Giant's Dance.

This story held its ground for 500 years.

Dr. Guest writes about it¹ as follows, in the paper before alluded to, "Amesbury signified the burgh of Ambres or Ambrosius. According to the Welsh triads, it was once the seat of a great monastery. The three chief perpetual choirs of the isle of Britain: the choir of

¹ Stillingfleet, and Hume after him, considered this story of the massacre of the British as an invention of the Welsh to palliate their own weak resistance and the rapid progress of the Saxons. Sir F. Palgrave and Lappenberg regarded the entire history of Hengest as a fable.

Llan Iltud Vawr, in Glamorganshire; the choir of Ambrosius, in Ambresbury; and the choir of Glastonbury. In each of these three choirs there were 2400 saints; that is, there were 100 for every hour of the day and night in rotation, perpetuating the praise of God without rest or intermission." (Probert Triad, 84.) He continues, "In the older Welsh poems we sometimes find allusions to a conflict which appears to have taken place about some *nawt*, or sanctuary. It has been keenly contested that these allusions refer to the massacre of the British nobles by Hengest, and that the *nawt* was the heathen sanctuary of Stonehenge. One of the poems which are supposed to allude to this subject is attributed to Cukelyn the Bald, who according to Owen Pugh, flourished in the sixth, and according to the compilers of the Archæology, in the eighth century. It represents Eitol 'excelling in wisdom,' as the chief of this mysterious locality; and the structure itself is described as

' mur Ior
Maus Pedir pedror
Mawr cor cyvoeth.'

' the wall of the Eternal,
The quadrangular delight of Peter,
The great Choir of the dominion.'

I would venture to suggest that this celebrated *nawt* may have been the Christian monastery instead of the heathen temple, and that the legend which makes Stonehenge the work of Ambrosius (Gwaith Emrys) may have arisen from his having built or re-edified one of the 'Choirs of Britain' in its immediate neighbourhood. An attempt on the part of the invaders to surprise this monastery—probably during one of its great festivals—may have given rise to the charge of a treacherous massacre; and Hengest would naturally figure in the tale, as being the Saxon chief best known to Welsh fable. The story seems to have been a favorite fiction in the sixth and seventh centuries, for it is also told of the Saxons who invaded Thuringia. . . . There is reason to believe that the choir of Glastonbury arose after that of Amesbury was destroyed. The choir of Ambrosius was probably *the* monastery of Britain—the centre from which flowed the blessings of Christianity and civilization.

Around Amesbury the Briton was fighting for all that was dearest to him; and thus may we account for the desperate resistance which enabled him to maintain a weak frontier for nearly sixty years within little more than twenty miles of Winchester."

If the massacre at Amesbury was a massacre of Christians, Stonehenge was hardly the kind of monument which would have been erected to commemorate their dead by Christian survivors and successors.¹

Giraldus Cambrensis (born 1146—died 1223), in his "Topographia Hiberniæ," which was completed in 1187, speaking of some large stones in the plain of Kildare of a similar character to those now to be seen at Stonehenge, relates how the latter had been originally brought by giants from the remotest parts of Africa, and set up in Ireland, where they were called "Chorea Gigantum," but that according to British history they had been at the instigation of Ambrosius brought over by Merlin, to Britain, and set up where the flower of Britain had been treacherously slain by the Saxons.

The writer thinks that we may fairly say, with Leland, "Fabulosa fere omnia de lapidibus ex Hiberniâ adductis."

Wace, who died after 1171, in his Anglo-Norman translation of the history of Geoffrey of Monmouth, under the title of *Li Romans de Brut*, thus speaks of Merlin and Stonehenge (line 8381, Rouen ed., 1836):—

	" Et Merlins les pieres dreça Encor ordre et les aloa. Breton les solent en Bretans Apeler Karole as gaians ; Senhange ont non en englois, Pieres pendules en françois."
Cercle des geans Stonehenge	

In "Analyse du Roman de Brut" by Le Roux de Lincy, the

¹ On the British Church during the Roman period (A.D. 200—450), and on the British Church during the period of Saxon Conquest (A.D. 450—681), see Haddan and Stubbs' "Councils and Ecclesiastical Documents relating to Great Britain and Ireland, vol. i., 1869." The Appendix C. to the first portion, entitled "Monumental Remains of the British Church during the Roman Period," and Appendix F. to the second, entitled "Sepulchral Inscriptions in (Celtic) Britain, A.D. 450—700," are particularly interesting.

editor of Wace, at page 78, he says "Elles furent conduites dans la plaine de Salisbury où, on les voit encore. Elles sont appelées Stonehenge en Anglais, et Pierres levées en Français."

The lines 17154—17513 in Layamon's¹ Brut or Chronicle of England (Madden's edition, vol. ii., p. 295—310, 1847), contain an amplified version of the part of Geoffrey of Monmouth's history which relates to Hengist, Ambrosius, Merlin and Stonehenge.

Neckham,² in his "De Laudibus Divinæ Sapientiæ," lines 723—746, ed. 1863, p. 457, thus describes Stonehenge. The two previous lines are descriptive of the baths of Bath:—

"Admiranda tibi præbet spectacula tellus
Bruti; summatim tangere pauca libet.

Balnea Bathoniæ ferventia tempore quovis
Ægris festina sæpe medentur ope.

Nobilis est lapidum structura chorea Gigantum,
Ars experta suum posse peregit opus,
Quod ne prodiret in lucem segnius artem
Se viresque suas consuluisse reor.
Hoc opus ascribit Merlino garrula fama,
Filia figmenti fabula vana refert.
Dieta congerie fertur decorata fuisse
Tellus quæ nutrit tot Palamedis aves.

¹ Layamon was a priest, and lived at Ernley (Lower Arley otherwise Arley Regis), three-and-a-half miles south-east from Bewdley in Worcestershire. The sources from which he compiled his work are stated by himself to be three in number, viz., a book in English, made by St. Bede, another in Latin, made by St. Albin and Austin, and a third made by a French Clerk named Wace, who presented it to Queen Eleanor (consort of Henry the Second). To the third, viz., the Anglo-Norman metrical Chronicle of the Brut, translated from the well-known *Historia Britonum* of Geoffrey of Monmouth by Wace, and completed in the year 1155, which embraces the History of Britain, fabulous or true, from the destruction of Troy, and subsequent arrival of Brutus, to the death of King Cadwallader, in A.D. 689. Wace's Brut is comprised in 15,300 lines, whilst the poem of the English versifier extends to nearly 32,250. Sir F. Madden (the editor of "Layamon's Brut," published by the Society of Antiquaries, 1847), thinks it most probable that it was written or completed at the beginning of the thirteenth century. His language belongs to that transition period in which the ground-work of Anglo-Saxon phraseology and grammar still existed, although gradually yielding to the influence of the popular forms of speech.

² Neckham, born 1157, was elected Abbot of Cirencester in 1213, and he died at Kempsey, near Worcester, in 1217, and it is said that by direction of his friend the bishop, he was buried in Worcester Cathedral.

Dehinc tantum munus suscepit Hibernia gaudens,
Nam virtus lapidum ouilibet ampla subest.
Nam respersus aquis magnam transfudit in illas
Vim, qua curari sæpius æger eget.
Uter pendragon hanc molem transvexit ad Ambri
Fines, devicto victor ab hoste means.
O quot nobilium, quot corpora sancta virorum,
Illic Hengistæ proditione jacent !
Intercepta fuit gens inclita, gens generosa,
Intercepta, nimis credula, cauta minus.
Sed tunc enituit præclari consulis Eldol
Virtus, qui leto septuaginta dedit."

The history of Geoffrey of Monmouth was versified by Robert of Gloucester, who wrote after 1278. These are the last four lines of his account of the transfer of the stones from Ireland.—

"Uter the Kynges brother, that Ambrose hette also
In another maner name ychose was therto
And fiteene thousand men, this dede for to do,
And Merlyn, for his quoyntise, thider went also."

In vol. ii. of the *Polychronicon Ranulphi Higden*,¹ *Monachi Cestrensis*, p. 23, ed. 1869, is the following, "The secunde (meruaille) is at Stanhenges, nye to Salisbury, where stones of a grete magnitude be exaltede in to the maner of gates, that thei seme as gates putte on gates, where hit can not be clerely perceyvede how and wherefore the stones were sette there."

In the *Eulogium (Historiarum sive Temporis)*, *Chronicon ab Orbe Condito usque ad annum Domini MCCCLXVI.*, a monacho quodam *Malmesburiensi exaratum*,² ed. 1860, vol. ii., p. 141, we find the following account of Stonehenge, "Sunt in Britannia fontes calidi morbis mortalium medicinales. Sunt in ea plura mirabilia; sunt enim apud le Stonhenge lapides miræ magnitudinis in modum portarum elevati, nec liquide perpenditur qualiter aut quomodo sunt ibi constructi." Then we have the old story (p. 280) "how the

¹ Higden was born in the latter part of the thirteenth century, somewhere in the west of England. He took monastic vows about 1299, and died in March, 1363, and was buried in the Abbey of Chester.

² Written in the year 1372.

Britones nullum falsum cogitantes, constituerunt diem amoris in civitate Ambri, ubi nunc est le Stonehenge ;” how they were treacherously slain, and how Aurelius Ambrosius (pp. 302, 303) volens honorare sepulturæ locum ubi proceres Britonum Engystus¹ dolo ceciderat, misit propter choream Gigantum in Hiberniam qui eam per artem Merlini attulit, et circa sepulchrum nobilium occisorum statuit choream predictam, quæ nunc vocatur Lapis pendens

¹ Dr. Rolleston, in a paper on “The modes of sepulture observable in late Romano-British and early Anglo-Saxon times in this country,” points out, from the fact that Anglo-Saxon urns, indicating cremation, had been found in as many as fifteen counties in England, and that this practice could only have been prevalent during the 150 years intervening between the comings of Hengist and of St. Augustine, that we have here a clear proof that the Anglo-Saxons came over in great numbers. He says, “It is the fashion to consider Hengist a mythical person, and to disregard alike the story of his landing in Kent, and of his being executed at Conisborough, in South Yorkshire. But these urns show that men, such as Hengist was, did spread themselves over the very area which he is said to have overrun; possibly not in so short a period as the forty years assigned for his exploits, but, what is of greater consequence, without giving up the manners and customs and creed of the country whence they came, and in which at the present day (see Kemble’s *Horæ Ferales*, pl. xxx. et passim) we find similar relics to those of which we have been here speaking.” Dr. Rolleston also argues from this prevalence of Anglo-Saxon urn burial over such an area and for such a period that the influence of the clergy, and of the Christian religion, which has always resolutely fought against cremation, must have been destroyed. As there is a disposition in some quarters to look favorably upon the revival of cremation, it may be as well to give the following references quoted by Dr. Rolleston, “Tertullian, A.D. 197, cit. Grimm, Berlin, *Abhand.*, 1849, p. 207, ‘Christianus cui cremare not licuit’; see also *History of Esthoni-ans*, as lately as 1210, A.D.; Grimm, *ibid.*, p. 247; Pusey, *Minor Prophets*, Amos, vi., 10, *ibique citata*; Kemble ‘*Horæ Ferales*,’ p. 95, ‘Wherever Christianity set foot, cremation was to cease.’” The results of the Teutonic invasion of Britain upon its Christianity are forcibly set forth by Dean Milman, in his “*Latin Christianity*” Book, iv., c. 3, “Britain was the only country in which the conquest by the Northern barbarians had been followed by the extinction of Christianity.” . . . “The Saxons and the Anglians, in their religion unreclaimed idolaters, knew nothing of Christianity but as the religion of that abject people whom they were driving before them into their mountains and fastnesses. Their conquest was not the settlement of armed conquerors amidst a subject people, but the gradual expulsion—it might almost seem, at length, the total extirpation—of the British and Roman-British inhabitants. Christianity receded with the conquered Britons into the mountains of Wales, or towards the borders of Scotland, or took refuge among the peaceful and flourishing monasteries of Ireland.’

et Anglice Stonehenges. Post hæc periit rex veneno apud Wintoniam, anno xliiii regni sui. Sepultus est in cæmeterio quod ipse præparaverat, scilicet, infra choream Gigantum.

Mortuo Aurelio coronatus est Uther frater ejus. Tempore tamen Aurelii regis per artem Merlini de Hibernia ducti sunt lapides illæ (sic) magnæ quæ nunc apud le Stonhenge sitæ sunt. In Hiberniâ vocatæ fuerunt Gigantum Choreæ. Merlinus autem cum primo regi de lapidibus tetigerat rex solutus est in risum, dicens an lapides Britannicæ tanti valoris essent et tanti pulchritudinis sicut Hiberniæ? Cui respondit Merlinus: Ne moveas rex vanum risum, quia hæc absque vanitate profero. Mysticæ sunt lapides illæ et ad diversa medicamina salubres; nam olim gigantes illos asportaverunt ex ultimis finibus Africæ, et posuerunt in Hiberniam dum ibi habitarent; erat autem hæc causa: cum aliquis illorum infirmabatur vel vulnerabatur, statim infra lapides confecerunt balneum de herbis et de lotionem lapidum quia tanti fuerunt medicaminis quod, lapidibus lotis et aqua potata vel in balneum missa, ægroti vel vulnerati statim sanitatem reficiunt. Non enim est ibi lapis qui medicamento careat, steterunt autem in monte Killarno. De lapidibus satis est.

Andrew Borde, of Phisicke Doctor, who called himself *Andreas Perforatus*, and whom others called Merry Andrew, "in his fyrst Boke of the Introduction of knowledge" (1542), reckons among the wonders of England, "the hot waters of Bath," and tells us that "in winter the poore people doth go into the water to kepe themself warm, and to get them a heate;" the salt-springs "of the whych waters salt is made;"—the "Stonege" on Salisbury Plain, "certayne great stones so placed that no gemetricion can set them as they do hang;" "fossil wood, there is wood which doth turne into stone;" and the royal touch, which "doth make men whole of a syckness called the Kynge's evyll." See *Retrospective Review*, vol. i., 1853, N.S.

John Hardyng was an investigator of our national antiquities and history, and at length clothed his researches in rhyme, which he dedicated under that form to King Edward the Fourth, and with the title of "The Chronicle of England unto the reigne of King

Edward the Fourth in verse" (London, 1543). He thus sings of the obsequies of Aurelius Ambrosius:—

" Within the Giances Carole, that so then hight,
The Stone Hengles, that nowe so named bene,
Where prelates and dukes, erles and lords of might,
His sepulture to worship there were sene.
Thus this worthy Kyng was buried by dene,
That reigned had that tyme but thirten yere
When he was dedde and laide so on bere."

And Constantine was:—

" Buryed at Caroll ne lesse,
Besyde Uterpendragon full expresse
Arthures fader, of great worthynesse;
Which called is the Stone Hengles certayne,
Besyde Salysbury upon the playne."

He had previously thus written of the erection of Stonehenge, as a monument to the Britons:—

" The Kyng then made a worthy sepulture,
With y^e Stone hengles, by Merlins' whole aduise,
For all the lordes Brytons hye nature,
That there were slain in false and cruell wise,
By false Engest, and his feloes vnwise;
In remembraunce of his forcasten treason,
Without cause, or any els encheson."

Leland died in 1552, leaving behind him, amongst other writings, "*Commentarii de Scriptoribus Britannicis.*" In this work (vol. i., p. 42—48) is an account of Ambrosius Merlin. The following is an extract from a translation of it, made by Canon Jackson for Dr. Thurnam: "After the death of Vortigern, the Britons plucked up fresh courage under a new leader; so much so, that in a short time they slaughtered and despatched to the regions below the greater part of the Saxons with their chieftain, Hengist; the rest were dismissed to slavery and a precarious existence. Then it was that Ambrosius began to study the glory of Britain, to restore cities and castles, and once more to elevate religion also to its former dignity. Amongst other things he was seized with the most generous desire of perpetuating the illustrious memory of the British nobles, who, whether through the fraud or the valor of Hengist and his party, I cannot say—fell on Salisbury Plain." Merlin was sent for, and "began by searching for a bed of stone in large masses, such as

abound in Salisbury Plain, and having found one which was both near the site fixed upon and was also remarkable for the enormous size of its blocks, he immediately collected a number of 'navvies,' giving them orders to set to work hard and lay the ground open, wide and deep. The men got their tools together, and set to work. But when they came to raise to the surface the largest of the blocks out of its native bed, the 'navvies' were utterly at a *non-plus* what to do. Then Merlin by his art and skill lent that aid which the men's strength could not supply. By wonderful ingenuity that seemed almost inspired, he constructed machines similar to, and certainly not less cleverly contrived than those which in his Tenth Book on Architecture, Vitruvius attributes to Ctesiphon and Metagenes. So superior in difficult undertakings is the mind to the body. And now the engines were set up, the work glowed, every one being intent upon his own special business. To be brief, at least 56 slabs [*tabulae*], of immense size and weight were brought to the spot where a large number of the British nobility had been put to death. Recourse was again had to genius and machinery, for Merlin, having marked out a round place, ordered the stone-quarriers to set up those enormous blocks, which were much greater in height than in breadth, and to place them in circular form at equal intervening distances. His next order was to unite the summits of these stones by placing enormous blocks over the vacant intervals, so as to form a crown. Besides these, other stones also were set up in the same, or very similar manner, only within the area of the outer circle, of which some have fallen through the injury of time. The same has also happened to some of the coronary stones of the first circle."¹

¹ "About the fetching of them from Ireland, it is all fabulous. For every person even of common information must know that these stones, so large as not even to be moved by any mechanism in our unscientific days, were brought by Merlin with marvellous skill and the help of ingenious machinery from some neighbouring quarry to the place where they are now the admiration of travellers. It would, indeed, have puzzled him to bring them by sea to Amesbury, for there is no sea coast within 20 miles of it." From the Latin in *Collectanea*, ii, by Canon Jackson (*Wilts Mag.* i., 176), who says, "It is remarkable that though so close to Stonehenge (which, no doubt, he saw), Leland has left no description of that place or Avebury."

In Polydore Vergil's ¹ *English History* (edited by Sir Henry Ellis for the Camden Society, 1846), is the following: "The Englishmenne after this [defeat of the Saxons and death of Ambrosius, King of the Britons] hadd quietnes, nothinge againste their wills, within vj. monethes having vj. hundred discommoditees; the Britons, nevertheless, intentive to nothinge, and the lesse readie to annoye them throwghe there death of there kinge, for whome, in the meane time, in that hee hadde well deserved of the common wealthe, thei erected a rioll sepulcher in the fashion of a crowne of great square stones, even in that place wheare in skirmished hee received his fatall stroke. The tumbre is as yet extante in the diocesse of Sarisburie, neare to the village, called Aumsburie."

"Polydori Vergilii Anglicæ historiæ libri xxvii. fol. Basileæ, 1557. Angli secundum hæc, non inviti quievire, sexcentis intra paucos menses affecti incommodis, Britanno presertim nihil moliente, et ob mortem sui ducis, minus in malis parato, qui interea duci suo Ambrosio de Republica bene merito magnificum posuit sepulchrum, factum ad formam coronæ, ex magnis quadratis lapidibus, eo loci, ubi pugnando ceciderat, ut tanti ducis virtus ne oblivione eorum, qui tunc erant, aut reticentia posterorum insepulta esset. Extat etiam nunc id monumentum in dicecesi Sarisberiensis prope pagum, quam Amisberiam vocant."

In the first edition of Camden's ² "*Britannia*" (1586), is the following account of Stonehenge: "Septentriones versus ad vi. plus

¹ Polydore Vergil, described by H. Wharton, in his "*Anglia Sacra*," as "vir undequaque doctissimus, et Anglicanæ Historiæ peritissimus," was born at Urbino in Italy, in the latter half of the fifteenth century, and died 1555. He was Archdeacon of Wells in 1508, and was employed by Henry VII. to write a history of England. "His attainments went far beyond the common learning of his age. The earlier part of his history interfered with the prejudices of the English. He discarded Brute as an unreal personage; and considered Geoffrey of Monmouth's history an heterogeneous mixture of fact and fable, furnishing comparatively little which could be safely relied upon as history" (Sir H. Ellis). Hence the abuse of Vergil by Leland, Sir H. Savile, Paulus Jovius, Humphrey Lluyd, Caius, and others, as a disparager of the British Antiquities, a destroyer of manuscripts, &c.

² Camden was born in London in 1551, and died in 1623. He was buried in Westminster Abbey.

minus a Sarisburiâ milliari, in illâ planitie, insana (ut Ciceronis verbo utar) conspicitur constructio.¹ Intra fossam enim ingentia et rudia saxa, quorum nonnulla xxviii. pedes altitudinis, vii. latitudine, colligunt, coronæ in modo triplici serie eriguntur, quibus alia quasi transversaria sic innituntur, ut pensile videatur opus; unde Stonehenge nobis nuncupatur, uti antiquis historicis Chorea Gigantum à magnitudine. Hoc in miraculorum numero referunt nostrates, unde verò ejusmodi saxa allata fuerint, cum totâ regione finitimâ vix structiles lapides inveniantur, et quânam ratione subrecta, demirantur. De his non mihi subtilius disputandum, sed dolentius deplorandum obliteratos esse tanti monumenti auctores. Attamen sunt qui existimant saxa illa non viva esse, id est, naturalia et excissa sed facticia ex arenâ purâ, et unctuoso aliquo coagmentata. Fama obtinet Ambrosium Aurelianum, sive Utherum ejus fratrem, in Britonum memoriam, qui ibi Saxonum dolo, in colloquio ceciderunt, illa Merlini mathematici operâ posuisse. Alii produunt Britannos hoc quasi magnificentum sepulchrum eidem Ambrosio substruxisse eo loci, ubi hostili gladio ille periit, ut publicis operibus contactus esset, eâque extractione, quæ sit ad æternitatis memoriam, quasi virtutis ara."

In "The Theatre of the Empire of Great Britaine," by John Speed,² 1627, is a map of Wiltshire, with an engraving of Stonehenge in one corner. Ten transom stones are represented in it as in their places. The following description is engraved beneath it: "This ancient monument was erected by Aurelius surnamed Ambrosius, King of the Brittaines, whose nobility in raigne of Vortiger (his countryes scourge) about ye yere of Christ 475 by treachery of ye Saxons, on a daye of parley were there slaughtered and their bodyes

¹ Cicero pro Milone, 20. "Ante fundum Clodii, quo in fundo, propter insanas illas substructiones, facile mille hominum versabatur valentium. Edito adversarii atque excelso loco superiorem se fore putabat Milo, et ob eam rem eum locum ad pugnam potissimum elegerat?"

² John Speed, born at Farrington, in Cheshire, about 1555, brought up to the business of a tailor, was enabled by the liberality of Sir Fulk Greville to devote himself to the study of English history and antiquities. "According to Tyrrel and Bishop Nicholson, he was the first who, slighting Geoffrey of Monmouth and other legendaries, commenced at once with solid and rational matter." He died in 1629. His history of Great Britain was published in 1614.

there interred. In memory whereof this king Aurel caused this Trophye to be set up. Admirable to posterityes both in forme and quantitye. The matter thereof are stones of great bignes, conteynng twenty eghte foot and more in length and tenn in breadth, these are set in ye ground by towe and a thrid laide gatewise over thwart fastned with tenons and mortaises wrought in the same wch. seeme very dangerous to all that passe thereunder. The forme is rounde, and as it semeth hath been circulated with three rankes of these stones, many whereof are now fallen downe and the uttermost standing contayneth in compass three hundred foot by measure of assize. They all are roughe and of a graye colour, standing within a trench that hath bene much deeper. In this place this forsayd King Aurelius with 2 more of ye Britishe Kings his successours have bene buryed with many more of their nobilitye and in this place under little bankes to this daye are founde by digging bones of mighty men and armoure of large and ancient fashion. Not farr hence is sene the ruines of an ould fortresse thought by some to be built there by the Romaines when this kingdom was possessed by the Emperours."

Speed's "History of Britain," second edition, 1672, p. 267, says, "Unto this Aurelius Ambrosius is ascribed the erection of that rare and admirable monument, now called Stonehenge, in the same place where the Britaines had been treacherously slaughtered and interred, whose manner and forme in our draught of Wiltshire wee have inserted. The matter being stones of a great and huge bignesse, so that some of them containe twelve tonne in waight and twenty eight foote or more in length, their breadth seven and compasse sixteene. These are set in the ground of a good depth, and standing a round circle by two and two, having a third stone somewhat of lesse quantity laid gate-wise over thwarte on their toppes fastened with temons and mortaises, the one into the other, which to some seeme so dangerous as they may not safely be passed under, the rather for that many of them are fallen downe and the rest suspected of no sure foundation. Notwithstanding at my being there, I neither saw cause of such feare, nor uncertaintie in accounting of their numbers, as it is said to be. The stones are gray, but not

marbled, wherein great holes are beaten even by force of weather, that serve for ravens and other birds to build in and bring forth their young. The ground plot containeth about three hundred foot in compasse, in plan almost round, or rather like unto a horse-shoe, with an entrance in the east side. Three rowes of stones seeme formerly to have been pitched, the largest outwards and the least inwards, many whereof are now fallen downe, but those that stande shew so faire an aspect, and that so farre off, that they seeme to the beholders to be some fortresse or strong castle. A trench also is about them, which hath beene much deeper, and upon the plaines adjoining many round topped hilles without any . . . trench (as it were cast up out of the earth) stand like great Hay Cockes in a plaine meadow. In these and thereabouts by digging have been found pieces of ancient fashioned armour with the bones of men, whose bodies were thus covered with earth that was brought thither by their well-willers and friends even in their head-peeeces; a token of love that then was used, as some imagine. This trophy Aurelius Ambrosius (in memorial of the Bs. massacre) created and is worthily accounted one of the wonders of this island, and one in the verses of Alexr. Necham called the Giant's Dance, wherein this Ambrōsius, &c., &c., as in Geoffrey."

According to Antony a Wood (*Athenæ Oxonienses*, vol. i., p. 631; Bliss' ed. ii., p. 659), John Speed, M.A., M.D., born c. 1595, son of the above, an eminent physician, wrote "Stonehenge," a pastoral which was acted before Dr. Richard Bailie, the President, and Fellows, of St. John's College, Oxford, in their common refectory, at what time the said Doctor was returned from Salisbury after he was installed Dean thereof, 1635. "The said pastoral is not printed but goes about in MS. from hand to hand."

Among Dr. Thurnam's memoranda for his intended paper on Stonehenge is the following: "Nero Cæsar, 1624, by the translator of Lucius-Florus (Bolton MS. on title) dedicated with leave to the Duke of Buckingham, Lord Admiral. [Stukeley and Aubrey had their Twining, Inigo Jones his Bolton.—*J.T.*] Page 181, § 32: "Of the place of Boadicea's buriall . . . Admirable monument of the stones upon Salisburie plaine . . . the dumbness of it

speakes that it was not the work of the Romans, for they were wont to make stones vocall by inscriptions . . . That Stonage was a work of the Britaines the rudeness itself persuades . . . plate of metal, etc. appertaine to Stonehenge, or as it is more commonly named Stonage . . . quotes Geoffrey of Monmouth to criticise . . . Ambrosius' story alluded to. The ruine of the old fortress, which survives not far from Stonage also thought by some whomsoever to have been a Roman Work, afford no cypher for spelling out the founders of this stonie marvell . . . The bones of men digged up at times neere this place under little bankes, convince it to have been sepulchral, but armours of a large and antique fashion, upon which the spade and pickaxe are sometimes said to hit doe clear the owners of having been in the number of those Britains whom pagan Hengist wickedly slew, for they came weaponless. . . . My jealousy touching the cause of Stonage, concludes not others freedom to censure what they please."

In "Annales, or, a generall Chronicle of England," begun by John Stow,¹ continued by Edmond Howes (folio, London, 1631), we find the following: "Of this Ambrosius, William Malmesbury writeth thus: Surely, even then (saith he) the Brytaines had gone to wracke, if Ambrosius, who onely and alone of all the Romanes, remained in Brytaine, and was Monarch of the Realme after Vortiger, had not kept vnder the proud Barbarians, with the notable travaile of the warrior Arthur. Now it followeth in Geffrey, that this Ambrosius caused Churches to be repaired, which had been spoiled by the Saxons: he caused also the great stones to bee set on the Plaine of Salisbury, which is called Stonehenge, in remembrance of

¹ John Stow, born in London, about 1525, was brought up by his father as a tailor, but took to antiquarian researches. His "Summarie of the Englyshe Chronicle" was compiled at the instance of Dudley, Earl of Leicester, and was published in 1565, and afterwards continued by Edmond Howes. His "Survey of London" appeared in 1598. "From his papers Edmond Howes published a folio volume, entitled 'Stow's Chronicle,' which does not however contain the whole of that 'far larger work,' which he had left in his study, transcribed for the press, and which is said to have fallen into the possession of Sir Symonds D'Ewes. He died, afflicted by poverty and disease, in 1605, at the age of eighty. He was a correct and zealous antiquary, and a sincere lover of truth, who never would be satisfied without a recourse to original documents."

the Brytaines that were slaine and buried there, in the raigne of Vortiger, at the banquet and communication of Hengist with the Saxons. This ancient Monument is yet to be seen, and is a number of stones, rough, and of a gray colour, 25 foote in length, and about 10 foot in breadth, they are ioyned by two and two together, and every couple sustaineth a third stone lying overthwart, gatewise, which is fastened by the meanes of tenons that enter into mortaises of those stones not closed with any cement. It appeareth that there hath beene 3 ranks going round as circles one within another: whereof the vttermost and largest containeth in compasse 300 foote, but the other ranks are decayed, and therefore hard to reckon how many stones there be.

“The Chronicles of the Britaines doe testifie, that whereas the Saxons, about the yeere of our Lord 450, had slaine 480 of the Britaines Nobility by treason, and vnder colour of a treaty, Aurelius Ambrose now King of the Britaines desirous to continue their memory with some worthy monument, caused these stones to be set vp in a place of their murther and buriall, the which stones had beene first brought from Affrik into Ireland, and placed on mount Killare, and from thence by the industrious meanes of Merlin, were conuayed to this place to the aforesaid end. There are about this place certaine little hils, or banks, vnder the which are found sometimes bones of big men, and pieces of armour: also not far from thence, remaine old ruines of the manner of a fortresse, which the Romanes (as it is not vnlike) did build there in times past. . . . Aurelius Ambrose being poysoned, dyed, when hee had raigned 35 yeeres, and was buried at Stonehenge, then called Chorea Gigantum.”

Thomas Fuller,¹ in chapter 26 of the first book of the “Church History of Britain” (1656), gives the following account of Stonehenge: “It is contrived in form of a crown, consisting of three circles of stones set up gate-wise; some called ‘corse-stones,’ of 12 tons, others called ‘cronets,’ of 7 tons’ weight (those haply for

¹ Dr. Thomas Fuller, the eminent historian and divine, died in 1661. He was the author of “the Worthies,” “the Church History of England,” “History of the Holy War,” etc. He was a man of “quaint conceit,” and had such a memory that he could recite a sermon verbatim after he had heard it once.

greater, and these for inferior officers); and one stone at a distance seems to stand sentinel for the rest. It seems equally impossible, that they were bred here, or brought hither; seeing (no navigable water near) such voluminous bulks are unmanageable in cart or waggon. As for the the tale of Merlin's conjuring them by magic out of Ireland, and bringing them aloft in the skies (what, in Charles's Wain?) it is too ridiculous to be confuted. This hath put learned men on necessity to conceive them artificial stones, consolidated of sand. Stand they there, in defiance of wind and weather (which hath discomposed the method of them), which, if made of any precious matter (a bait to tempt avarice), no doubt long since had been indicted of superstition; whereas, now they are protected by their own weight and worthlessness."

King James I. visited Stonehenge in 1620, and was so much interested in it that he desired Inigo Jones, the celebrated architect, "to produce out of his own practice in architecture, and experience in antiquities abroad, what he could discover concerning this of Stonehenge."

The enquiring and somewhat sceptical spirit of the seventeenth century would not be satisfied with the British myths¹ about

¹ Lady Verney well says in her paper on the "Old Welsh Legends and Poetry" in the "Contemporary Review," for February, 1876: "The chief drawback to the study of Welsh legend has been that, as a German author observes, 'most old Cambrian writers have been utterly destitute of all capacity for historical criticism.' In the pre-scientific ages of literature they went even beyond the limits of decent self-glorification in which all nations thought it patriotic to indulge. 'Welsh was the language in which Adam made love to Eve.' 'If two children were shut up so that they never heard any language spoken whatever, they would be found to speak Welsh.' Their early histories are not satisfied with Brut, who confronts us in all our early English accounts, but go back to Annon of Troy, 'a second son,' 'a hero,' who 'was the first king of Cambria,' 'his identity with Eneas cannot be doubted.' . . . Although the Welsh pedigree is probably fabulous which mentions casually some time after its opening, that 'about this time the creation of the world took place,' yet Noah was only one of the long line of ancestry which headed the trees of families, with any respect for themselves or their descent, while Arthur, Vortigern, and Madoo were showered in *ad libitum*." . . . "The antiquity of Welsh poetry and legend has been, no doubt, greatly exaggerated, and if the time and trouble spent in absurd speculations concerning the Druids, attempts to evolve all the

Stonehenge, and we accordingly find Inigo Jones breaking away from them in the direction of the Romans, Charlton in that of the Danes, and Aubrey in that of the Druids;¹ and Samuel Daniel, the poet, (1579—1619) writing thus impa-

gods and goddesses of Greece out of rude hints concerning Hu and Ceridwen, or in trying to prove the affinity between Hebrew and Welsh, had been used in sifting the historical evidence, and the allusions contained in the poems, some order would by this time have been worked out of the chaos of words. These have often been put together, says Zeuss, from older poems, without understanding them, or they have been written down from oral recitation without connection or meaning. It has already been seen what light can be thrown upon them by Mr. Nash, though in rather a merciless spirit for the feeling of legendary lore. Their interest is often great, as traces of extremely early manners and customs are to be found in the stories, triads, and the histories of saints. Their present form dates from MSS. of the twelfth and thirteenth centuries, but many of the materials from which they have been compiled, even if the exact words have not survived, have clearly come down from very rude ages."

¹ As many persons still talk glibly about Druids, and others, (like the Director General of the Ordnance Survey), write about their connection with Stonehenge, as if it were "a matter of course," the writer would venture to commend to consideration the following words of one of the most distinguished modern writers on race and language: "Druids are never mentioned before Cæsar. Few writers, if any, before him were able to distinguish between Celts and Germans, but spoke of the barbarians of Gaul and Germany as the Greeks spoke of Scythians, or as we ourselves speak of the negroes of Africa, without distinguishing between races so different from each other as Hottentots and Kafirs. Cæsar was one of the first writers who knew of an ethnological distinction between Celtic and Teutonic barbarians, and we may therefore trust him when he says that the Celts had Druids, and the Germans had none. But his further statements about these Celtic priests and sages are hardly more trustworthy than the account which an ordinary Indian officer at the present day might give us of the Buddhist priests and the Buddhist religion of Ceylon. Cæsar's statement that the Druids worshipped Mercury, Apollo, Mars, Jupiter, and Minerva, is of the same base metal as the statements of more modern writers,—that the Buddhists worship the Trinity, and that they take Buddha for the Son of God. Cæsar most likely never conversed with a Druid, nor was he able to control, if he was able to understand, the statements made to him about the ancient priesthood, the religion and literature of Gaul. Besides, Cæsar himself tells us very little about the priests of Gaul and Britain; and the thrilling accounts of the white robes and the golden sickles belong to Pliny's 'Natural History' (xvi., c. 44), by no means a safe authority in such matters. We must be satisfied, indeed, to know very little about the mode of life, the forms of worship, or the mysterious wisdom of the Druids and their flocks."—Max Müller's "Chips from a German Workshop," vol. iii., p. 250.

tiently about the legendary tales which had till then prevailed:—

“ And whereto serves that wondrous trophy now,
That on the goodly plain near Wilton stands ?
That huge dumb heap, that cannot tell us how,
Nor what, nor whence it is, nor with whose hands,
Nor for whose glory it was set to show,
How much our pride mocks that of other lands.

Whereon when as the gazing passenger
Hath greedy look'd with admiration,
And fain would know its birth, and what it were,
How there erected, and how long ago ;
Inquires and asks his fellow-traveller,
What he hath heard, and his opinion !

Then ignorance, with fabulous discourse,
Robbing fair art and cunning of their right,
Tells how those stones were by the devil's force,
From Africk brought, to Ireland in a night :
And thence to Britannie, by magick course,
From giant's hands redeem'd by Merlin's sleight :

And then near Ambry plac'd in memory
Of all those noble Britons murder'd there,
By Hengist and his Saxon treachery,
Coming to parle in peace at unaware.
With this old legend then, credulity
Holds her content, and closes up her care.”

Before further mention of Inigo Jones' work, which was published from his “ few indigested notes,” by his friend John Webb, in 1655, it may be as well to give the slight notices of Stonehenge given by John Evelyn, and Samuel Pepys, in their diaries.

The former gives the following account of his visit on the 22nd July, 1654: “ We departed [from Salisbury] and dined at a farm of my uncle Hungerford's, called Darneford Magna, situate in a valley under the plain, most sweetly watered, abounding in trouts caught by spear in the night, when they come attracted by a light set in the stern of a boat. After dinner, continuing our return, we passed over the goodly plain, or rather sea of carpet, which I think for evenness, extent, verdure, and innumerable flocks, to be one of the most delightful prospects in nature, and reminded me of the pleasant lives of shepherds we read of in romances. Now we were arrived at Stonehenge, indeed a stupendous monument, appearing at a distance like a castle ; how so many and huge pillars of stone

should have been brought together, some erect, others transverse on the tops of them, in a circular area as rudely representing a cloister or heathen and more natural temple, is wonderful. The stone is so exceedingly hard, that all my strength with a hammer could not break a fragment, which hardness I impute to their so long exposure. To number them exactly is very difficult, they lie in such variety of postures and confusion, though they seemed not to exceed 100; we counted only 95. As to their being brought thither, there being no navigable river near, is by some admired; but for the stone, there seems to be the same kind about 20 miles distant, some of which appear above ground. About the same hills, are divers mounts raised, conceived to be ancient intrenchments, or places of burial, after bloody fights. We now went by the Devizes, a reasonable large town, and came late to Cadenham."

Pepys was there on the 11th June, 1668: "Thence [that is from the Cathedral] to the inne; and there not being able to hire coach-horses, and not willing to use our own, we got saddle horses, very dear. Boy that went to look for them, 6*d.* So the three women behind W. Hewer, Murford, and our guide, and I single to Stonehenge, over the Plain and some great hills, even to fright us. Come thither, and find them as prodigious as any tales I ever heard of them, and worth this journey to see. God knows what their use was! they are hard to tell, but yet may be told. Gave the shepherd-women, for leading our horses, 4*d.*"

To "the Most Notable Antiquity of Great Britain, vulgarly called Stone-heng, on Salisbury Plain, restored, by Inigo Jones, Esq., Architect-General to the late King," (1655,) is prefixed the following preface, signed "J. W." (John Webb.) "This discourse of Stone-Heng is moulded off and cast into a rude form, from some few indigested notes of the late judicious architect, the Virtruivius of his age, Inigo Jones. That so venerable an antiquity might not perish, but the world made beholding to him for restoring it to light, the desires of several of his learned friends have encouraged me to compose this Treatise. Had he survived to have done it with his own hand, there had needed no apology. Such as it is, I make now yours. Accept it in his name

from J. W." The portion of the work for which Jones was responsible was very small. The peculiarities of his plan are that he gives three entrances, and that he makes the two inner portions of the structure of an hexagonal form. The results of his enquiry are as follows: "I suppose I have now proved from authentic authors, and the rules of art, Stonehenge anciently a Temple dedicated to Cælus [by some authors called Cælum, by others Uranus, from whom the ancients imagined all things took their beginning,] built by the Romans; either in, or not long after those times [by all likelihood] when the Roman eagles spreading their commanding wings over this island, the more to civilize the natives, introduc'd the art of building amongst them, discovering their ambitious desire, by stupendous and prodigious works, to eternize the memory of their high minds to succeeding ages."

Dr. Charleton,¹ in a fulsome dedication to King Charles II., of his "Chorea Gigantum," or the most famous antiquity of Great Britain, vulgarly called Stonehenge, standing on Salisbury Plain restored to the Danes," (1663,) has the following paragraph, which will sufficiently explain his views: "Having diligently compared Stone-henge with other antiquities of the same kind, at this day standing in Denmark, and finding a perfect resemblance in most, if not in all particulars, observable on both sides; and acquainting myself moreover with the uses of those rudely-magnificent structures, for many hundreds of years together; I now at length conceive it to have been erected by the Danes, when they had this nation in subjection; and principally, if not wholly, design'd to be a Court Royal, or Place for the Election and Inauguration of their Kings; according to a certain strange custom, yet of eldest date, most

¹ Dr. Charleton (1619—1707) was the son of a clergyman of Shepton Mallet, and physician in ordinary to King Charles I. and afterwards to King Charles II. "He was very eminent in his profession, and lived to an advanced age; but by reason of some imprudent management was obliged to retire from his family to one of those islands, which are the remains of our French conquests; and there he passed the residue of his days in obscurity and want." It appears to have been under the influence of Olaus Wormius that the Doctor wrote his work, ascribing the construction of Stonehenge to the Danes.

sacred esteem, and but late discontinuance, among that martial people." He is very rough in his criticism of Webb's book, and Webb rejoined in "a Vindication of Stone-heng restored" (1664). The three works were printed together in one volume in 1725, and, apart from their theories, are not without a considerable amount of interest to the antiquarian reader.

Bishop Gibson published an edition of "Camden's Britannia," in 1695 in English. He does not agree with Inigo Jones, in thinking that the Romans, nor with Dr. Charleton, in thinking that the Danes, were the builders of Stonehenge; but says; "I should think one need make no scruple to affirm that it is a British monument: since it does not appear, that any other nation had so much footing in this kingdom, as to be authors of such a rude and yet magnificent pile." He appears to have adopted Inigo Jones' description of Stonehenge, with its errors.

In Aubrey's ¹ "Hypomnemata A." is the following extract from England described, by Edward Leigh, Esq., 8vo., folio 205, 1659: "About six miles from Salisbury in the plaines before named (they are but rarely inhabited, and had in late time a bad name for Robberies there committed) is to be seen a huge and monstrous piece of worke Stonehenge.* Within the circuit of a Ditch there are erected in manner of a crown in three ranks or courses one within another certain mighty and unwrought stones, whereof some are eight and twenty foot high, and seven foot broad; upon the heads of which others like overthwart peeces doe bear and rest cross-wise, with small tenants and mortises, so as the whole frame seemeth to hang."

* Our old historians termed it for its greatnesse Chores Gigantum, the Giant's Dance. Our countymen reckon this for one of our miracles.

¹ It is quite unnecessary to say anything more in a note about John Aubrey, than that his name has, by means of Mr. Britton's memoir, and Canon Jackson's life (*Wiltshire Magazine*, vol. iv.), together with the valuable and interesting volume entitled "Wiltshire Collections," become a household word with Wiltshiremen.

It is much to be regretted that nothing has yet been heard of "Hypomnemata Antiquaria B." It is exceedingly unlikely that this MS. should have been destroyed.

The following is Aubrey's account of Stonehenge from his "Monumenta Britannica," vol. i.: "Templa Druidum.

Of Stoneheng.

Mdm. The Indiginæ doe call it Stonedge (1) Stones set on edge which I believe is the truer name. Quære of Mr. . . . that hath now bought the inheritance of it how it is writt in his ancient evidences?

I am now come to Stoneheng, one of our English wonders, that hath been the subject of so much Discourse, the Prospect whereof I give in Plate VI., and the Ichnographic double, in Plate the VIIth., scilicet, one being that of Mr. Inigo Jones in Mr. Web's Stoneheng restored, being an handsome harmonically figure: but the cell is absolutely false: the other (fig. 2) being that which I tooke myselfe from the place, and according to y^e truth.

"A. A. A. is the circular trench, which should have been distant from the Center an hundred foot by the scale, had there been space enough and is made by *him* perfectly circular, whereas in trueth it is rude.

"The three entrances here are supposed by *him* to be in y^e angles of an equilaterall Triangle, whereas indeed they are in the angles of a Scælenum.

"C. the Worke itselfe. *b. b. b. b. b.* what Mr. Jones calls the celle: which he hath here protracted in the forme of an Hexagon: whereas it should be as fig. 3^d.

"Fig. the 2^d is the Remains of it as it is now.

"Had this been a Worke of the Romans, certainly they would have made this celle of some harmonically figure; the Ruines of it doe cleerly enough shew (without further demonstration) that it could neither be a Hexagon, or heptagon: nor can all the angles be forced to touch a circle.

"From ϕ to ϕ in fig. 2^d is forty five foot. The intervall ϕ is three yards + the intervall of y^e coupled stones δ one foote.

"The distance between the celle and the greater outer circle of stones is twenty one foote.

"■ ■ ■ : these marks signify the picked stones about five foot high, and whereas in this Diagram they are sett in the middle between the greater circle and the hexagon: they are distant from the great circle but six foot and $\frac{1}{2}$. These picked stones ■ ■ within fig 2^d, are not a yard distant from the coupled stones.

“ From the circular Trench to the great circle of stones is thirty five yards.

“ The Diameter of the great circle of stones is thirty two yards $\frac{1}{2}$.

“ δ he supposes an altar-stone; here are stones fall'n down, this supposed Altar being one of them. Perhaps they used no Altar, for I find the middle of these monuments voyed.

“ The heighth of the outer circular stones in fig 1 four yards. The breadth of them two yards, the thicknese of them one yard.

“ The heighth of the upright stones (of the Celle, as he calles it) eighteen foot \mp halfe a yard. The breadth of them two yards, thicknesse one yard.

“ The transome stones (or stones that lye over) fig 2 thick one yard, and about a spanne more.

“ In Plate VIIth the two great stones marked \bar{a} , \bar{w} , one whereof (sc: \bar{w} .) lieth a good way off, north eastward from the circularish bank, of which there hath not been any notice taken: but I doe guesse it to be materiall, and to be the remaines of the avenue, or entrance to this Temple, which will appeare very probable, by comparing it with the Temples of Aubury, Kynet, and ye Wedding at Stanton-Drew, one of the stones hath a mark or scratch how deep it should be sett in the earth.

“ b b b &c. little cavities in the ground, from whence one may well conjecture the stones c. c. were taken, and that they did stand round within the Trench (ornamentally) as at Aubury.

“ a a a signifie pathes worne by Carts.

“ o the Bank.

“ q the Ditch or Graffe.

“ The pricked lines from the stones \bar{a} to \bar{w} signifie the imaginarie Walke of stones which was there heretofore.

“ In Plate VIII fig 2^d, π is a Pitt which the Duke of Buckingham From Mrs. Trotman. ordered to be digged, when King James the first was at Wilton: at which time, and by w^{ch} meanes, the stone twenty one foote long (now out of the earth) reclined by being under-digged. [x in fig. 2 and z in the Prospect, plate the VIth.]”

This description of Stonehenge is supplemented by an Appendix.¹

A Review of Stoneheng, by J. A.

"This ancient monument of Stoneheng Caxton² reckons the second Wonder of England. It stands within the Farme of West Amesbury, being part of the Inheritance of the wife of . . . Lord Ferrars, of Chartley, who was daughter and heir of Lawrence Washington, Esq. Upon what ground the writers call it Stoneheng, I cannot tell. I have not seen the old Decds³ of this Estate: but by the neighbourhood it is called Stonedge (*i*) stones set edgewise.

"In the first part of this Discourse I have sett downe only the schemes of this Antiquity, because I would not perplex and confound it with story. But having gone through that part which is comparative, I now come to the Historical, and Traditional part. It hath been toucht at by severell Pennes, Historians and Poets.

 sir Philip Syd- ' Neer Wilton sweet, huge heapes of stones are found,
 ney in his Sonnets. But so confus'd, that neither any eie
 Can count them just, nor reason reason try
 What force them brought to so unlikely ground.'

"But this is a Poeticall excursion.

See Drayton's Polyolbion with Mr. J. Selden's notes which insert here.

[Here follows a long extract from Caxton's Chron., cap. lix., with the history of Ambrosius, Hengist's massacre of the Britons, and the transportation of the stones from Ireland.]

"The Tradition amongst the common people is that these stones were brought from Ireland as aforesayd by the conjuration of Merlin (brother of Uter Pendragon) whereas indeed they are of the very same kind of stones with the Grey Weathers about fourteen

¹ Aubrey has here inserted an extract—*ex libris antiquis abbatiae Bathoniensis* "which Mr. Leland perused and quoted." It is very similar in substance to the extract given above from the "*Encomium Historiarum*."

² Note by Aubrey.—W. Caxton, part ii., cap. iiii. "Of Mervailles and Wonders." The second is at Stonehenge besides Salisbury. Ther ben grete stones and wonder huge and ben rered on heygh as it were gates so that ther semen gates sette upon othir gates. Netheles it is not knowen clerly nor apperceyued how and wherfore they ben so arered and so wonderfully honged." W. Caxton was a printer, temp. Hen. VI., in Westminster Abbey Church.

³ Note by Aubrey—November 7th, 1689. Mr. Baynham, of Cold Ashton, (Gloc.) was steward to Lawrence Washington, Esq.; he tells me that he has seen the original grant of Little Amesbury and Bulford, from William the Conqueror, a little deed.

miles off: that tract of ground towards Marleborough (from hence) being scattered over with them greater and lesse (as by a Vulcano) for about twenty miles in compasse. They are so hard that that no toole can touch, and take a good polish: some are of a dirty red, some dusky white, some perfect white, and I have seen some few blew, of the colour of deep blew marle; but generally they are whitish, they lye above the surface of the earth; they say that Porphyry is not drawn out of Quarries, but lies above ground after this manner.

“ But the stones of this monument (as likewise the Greyweathers) time and the weather have turnd of a gray colour, as it doeth also the Flints that have been broken by the plough. Severall of the high stones of Stonehenge are honycumbed so deep that the Stares doe make their nests in the holes; whether these holes are naturall or artificial I cannot say. The holes are towards the tops of the jambe-stones. This did put me in mind, that in Wales, they do call Stares Adar y Drudwy, sc: Aves Druidum, and in the singular number ADerin y Drudwy, sc: Avis Druidum. The Druids might make these holes purposely for their birds to nest in. They are loquacious Birds, and Pliny lib: Hist. Nat. tells us of a stare that could speake Greeke.

“ The inhabitants about the Amesburies have defaced this
piece of antiquity
 monument since my remembrance sc, one large stone
 + Mrs. Trotman carried
 of Bishopstone. was taken away to make a Bridge.†

“ It is generally averred hereabouts that pieces (or powder) of these stones putt into their Wells, doe drive away the Toades, with which their wells are much infested, and this course they use still. It is also averred that no Magpye, Toade, or Snake was ever seen here: but this is easy to be believed; for birds of weake flight will not be beyond their power of reaching some Couvert for fear of their enemies Hawkes and Ravens; whereas no Couvert is neer a mile and a halfe of this place. As for the Toades they will not goe beyond a certain distance from the water by reason of spawning, and Snakes and Adders doe love couvert.

“ The inscription in lead found at Stoneheng, which Mr. Lilly

the Schoolmaster and Sir Thos. Eliot could not read, might be made by the Druides, who though they used the Greeke character, it might be as much disguised and different from what is now in use as it is in the Slavonique by the Russians, which a critick in Greeke is not able to read.

“Mr. Inigo Jones saith that he found a Thuribulum or some such like vase lyeing three foot within the ground. I think it was in the Pitt. Plate viii., fig. 2^d.

“George Duke of Buckingham, when King James the first was at Wilton did cause the middle of Stoneheng to be digged, and there remains a kind of pitt or cavity still; it is about the bignesse of two sawe pitts. But there is no signe of an Altar stone, as is mentioned in *Stoneheng Restored*. ’Tis true near to the pitt doe lie three rude roundish stones, which are frustums. [In plate vijii., π , is this pitt.

“The Stone that fell downe 21 foot long is \times in fig. 2^d, and in the prospect it is γ Plate the VIth.] And this under-digging was the cause of the falling downe or recumbency of the great stone there, twenty one foot long. He also caused then a Barrowe (or more than one) to be digged, where something was found, but

•The wife of Mr. Anthony Trotman. what it was Mrs. Mary Trotman,* who lived then at the Farme of West Amesbury to which this monument belongs, (to whom I am obliged for her very good information of this place) hath forgot. She told me that the Duke of Buckingham would have given to Mr. Newdich, (then Owner of this place) any rate for it, but he would not accept it.

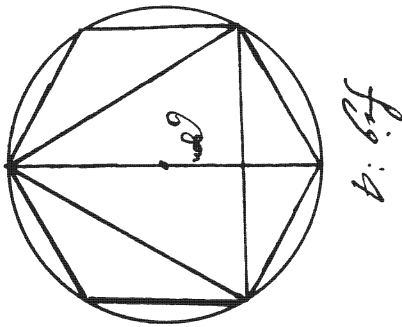
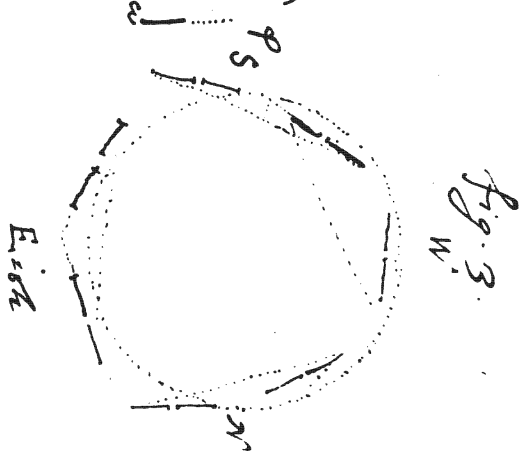
“Here is a good account of Mrs. Trotman’s lost by wett & time . . . Here were also then found Stagges-hornes a great many, Batter-dashers,¹ heads of arrowes, some pieces of armour eaten out with rust, bones rotten, but whether of Stagges or men they could not tell.

“Philip Earle of Pembroke (Ld. Chamberlayne to King Charles

¹ For the meaning of this curious word, which puzzled Sir R. Hoare, see Canon Jackson’s note on p. 9 of “Wiltshire Collections.” The Canon thinks that they were a kind of war club, like the crest of the Bathurst family. A copy of Aubrey’s drawing of a “Batter-dasher” is given on the second plate of Illustrations of Stonehenge from the “Monumenta Britannica.”




A party
from 20 to 23.





FROM AUBREY'S "MONUMENTA BRITANNICA."

HARRY SANDARS, OXFORD, LITHO., 1876.

Copied from a sketch in the margin

 by John Aubrey of a "batter-dasher."

the First) did say, that an Altar Stone was found in the middle of the Area here: and that it was carried away to St. James' (Westminster), and he also said, that upon the digging of the Duke of Buckingham, were found heads here Stagges-hornes and Bull's hornes and Charcoales.

“One of the great stones that lies downe, on the west side, hath a cavity something resembling the print of a man's foot: concerning which the Shepherds and Countrey people have a Tradition (wth. many of them doe stedfastly believe) that when Merlin conveyed these Stones from Ireland by Art Magick, the Devill hitt him in the heele with that stone, and so left the print there.

“I am now of the opinion that the east vacuity in Plate VIII fig. 2^d did containe only one  and no more; it may well enough agree with the paces and interstices, viz., intervall four paces and  five: as also with the distance of the Pilasters ■ ■ ■.

“The three stones which Mr. Inigo Jones would have to be angles of an equilateral triangle, are the angles of a Scalenum. The great one (fig. 6) answereth to fig 7th in the Walke or Avenue. The other two are but about six foot high and went round (within) the circular Banke, as they doe at Aubury; witnesse yet three pittes or signes of them, where the stones were heretofore pitcht and equidistant: which is a good Remarque.

“Tis strange to see how Mr. Camden, Dr. Hakewell in his Apologie with severall others (even Dr. Robt. Plot) should imagine that these stones are artificiall.: ^{'tis apparent} they are ^{certainly} the stones of the Grayweathers, distant from hence not above fourteen miles, where there are thousands of such stones to be drawn out of the earth. They were brought hither upon Rowlers, and, on the Downes, one may plainly enough yet discern, where these vast stones of Aubury and Stoneheng were drawn-out: and some, not being big enough for their ^{use} purpose, doe lie on the brink of the pitts still. Perhaps the holes where the stares doe nest might induce Dr. Hakewell to believe them to be factitious; but had he tried them with a toole, he would quickly have been undeceived, and would have found them to have been of the same colour (*i*—reddish generally) grain and hardnesse as are the Gray-weathers.

“As I remember there is a great stone that lies in the water at Fighelden as left by the way to Stonehenge: another is somewhere on the Downes which rests on three low stones as a Suffulciment as in order to be carried away, w^{ch} Dr. Charleton shewed his Majestie and R. Highnesse as we wayted on them from Aubury: ’twas on the Downes between Rockley and Marleborough.

“Mr. Conyers Apothecary at the White Lyon in Fleet Street hath an old manuscript Roll of the time of Henry VI., which confirms that Aurelius Ambrosius was buried at Stoneheng, w^{ch}. see.

“These times were troublesome, and by that meanes there might not be erected for him any magnificent Regal monument: but had there been one of marble or free-stone, the country people would have converted it to their use: and had not this Antiquity of Stonehenge consisted of such an extreme hard and ill coloured stone, that it is hardly fit for any use, without much trouble, this venerable Temple had long since been erased and forgotten. Though this Work might probably be built long before the Romans were masters of Britaine, yet they being delighted with the stateliness and grandure of it, and considering the drie situation of it (which they affected for Urne-buriall) ’tis not unlikely but that they might bury here and hereabout, *e.g.*, the Seaven Barrows.¹ So when the Christian religion was settled, the temples dedicated to the heathen gods (were converted) to their owne use and worship.²

“At Stonehenge one may count, round about it fourty five Barrowes. I am not of the opinion, that all these were made for burying the dead that were slayne herabout in Battels: it would require a great deale of time and leisure to collect so many thousand loades of earth: and soldiers have something els to doe flagrante bello: to pursue their victorie, or preserve themselves pursued: the cadavera remained a feast for the Kites and Foxes. So that I presume they were the Mausolea or Burying places for the great Persons and Rulers of those times.

“Lawrence Washington, Esq., owner of this place, told me (1666)

¹ Note by Aubrey.—’Tis most likely that they might have Ceremonies, Prayers, and Sacrifices, at these Burial places: so we, the Christians, have Masses.

² Note by Aubrey.—See a passage in St. Hierome’s epistle to this purpose.

that in one of the Seaven Barrowes, was lately digged up Coales and pieces of Goates hornes or Stagges-hornes.

“ In one of these barrows was found (by the Duke of Buckingham’s digging) a Bugle-horne tip’t with silver at both ends, w^{ch} Mrs. Trotman told me his grace kept in his closet as a great Relique.

“ Neer to the farme-house of West-Amesbury is a great Ditch where have been found Rowells of Spurres and other thinges: and, Mrs. Trotman. neer to the Penning is Normanton-ditch, but why so called no tradition. In the field thereby, about 1635 was found by ploughing as much Pewter as was sold for five pounds: it was, they sayd, very pure Pewter, which the Shephards had pitched through in many places when they pitched for their Folds. She told me, no Coines were found there.

“ Within this Farme is a place called Pitt-pole, wherein a King upon his escape riding hastily downe the steep Shoot, was drowned.¹ She told me his name was mentioned in the Chronicle, but I doubt it.

“ Dr. Walter Charlton, Physitian to King Charles II. wrote a Booke entitled *Stoneheng restored to the Danes*, wherein he hath shewed a greet deale of Learning in very good Stile.: but as to his Hypothesis, that it was a work of the Danes, it is a gross mistake for Matthew Paris pag: expressly affirmes, that Stoneheng was the place where the Saxons treacherously massacred the Britons which was hundred years before the Conquest of the Danes. (I think Symon of Durham and Hen: Huntingdon say the same. vide.)

Broad Chalk

~~Easton Piers~~

1665.

Finis.”

¹Sir R. C. Hoare (*Ancient Wilts*, i., p. 198), says: “ In vain I searched for all these matters, for the remembrance of them exists not even by tradition. I was enabled, however, to ascertain the position of West Amesbury Penning, which lies in a little vale between tumuli 134 and 137. The King’s grave was a large solitary barrow on the hill above the river, on which a clump of trees has been planted, and is called King Barrow by Dr. Stukeley. Though all traces of the name of Pitt Poole are lost, its situation is clearly pointed out by the *steeps shoot* above the river. I could find no vestiges whatever of any ditch answering Mr. Aubrey’s description, on Normanton Farm.”

At the back of the last page of the "Templa Druidum" is the following note: "Mr. Paschal's Letter to
 "The Author of the Bolt soon shott, was one Mr. Jay of Nettlecomb lyeing in the Western parts of Somersetshire, deceased (I thinke) 14 or 16 years since. Wells, April 7, 1690. Your &c., A. P."

Mr. Herbert ascribes the "Fools Bolt" to Mr. John Gibbons who *flourished*, according to Mr. Herbert, "circa 1670." This curious paper, which is printed in Langtoft's Chronicle, vol. ii., is amusing enough and worth reading, but space does not admit of much being said about it. It begins thus: "A wander witt of Wiltshire, rambling to Rome to gaze at antiquities, and there skrewing himself into the company of Antiquaries, they entreated him to illustrate unto them, that famous monument in his country, called *Stonage*. His answer was that he had never seen, scarce ever heard of it. Whereupon they kicked him out of doors, and bad him goe home, and see *Stonage*; and I wish all such Æsopicall cocks, as slight these admired stones, and other our domestick monuments (by which they might be admonished to eschew some evil, or doe some good), and scrape for barley cornes of vanity out forreigne dunghills might be handled, or rather footed, as he was." He considers "*Stonage* to be a 'British Monument' of a bloody battel foughten there and won by the Giant Cangi under the command of the famous Stanenges of Honnicott over King Divitiacus and the Belgæ; that this Temple, made of factitious stones, was consecrated to the Goddess of Victorie and that in it the Victors sacrificed their Captives and spoiles to their said Idoll of Victorie."

Richard Burton, in his "Wonderful [or admirable] Curiosities, Rarities, and Wonders in England, Scotland, and Ireland" (1682—1684), thus alludes to Stonehenge (edition 1811, p. 137): "About six miles from Salisbury, upon the plain, is to be seen a huge and monstrous piece of work, for within the circuit of a pit or ditch there are erected in the manner of a crown, certain mighty and unwrought stones, some whereof are 20 feet high, and seven feet broad, upon the heads whereof others like overthwart pieces do bear and rest

crossways with tenons and mortises, so that the whole frame seemeth to hang, whereof it is called Stone Henge."

In Plot's *Staffordshire*, 1686, chap. x., § 11, p. 398, is the following account of Stonehenge: "The Britons usually erecting such monuments as these upon a civil as well as religious account. Witness Kit's Coty House in Kent, Rollwright in Oxfordshire, and Stonehenge in Wiltshire. The latter was most probably [set up] as some British Forum or Temple and not of any Roman Pagan Deity, as Inigo Jones would have it, the Romans of the time being skilfull in architecture and most other arts, and therefore no question had they built it, would have made a much more artificial structure than this appears to have been; nor should it have wanted an inscription, or being someway or other transmitted in their writings down to posterity. Nor is it less unlikely, that it should ever be erected for a Danish forum for inauguration of their kings, as Dr. Charleton would persuade us; for then certainly all the Kings of the Danish race had been crowned either there, or else at Rollwright or some other such cirque of stones elsewhere. Whereas we find Canutus crowned at London, Harold Harefoot at Oxford, and Hardi-Canute likewise at London. Not to mention the Danish transactions in England are of so late a date that our historians have given us a tolerable account of them [the Danes] from their very first entrance, and would not certainly have been silent of so considerable structure, had they been the authors of it, either as a Forum or upon any other account."

Keysler, in his "*Antiquitates selectæ Septentrionales et Celticæ*," (1720) adopts Inigo Jones' ground-plan, and ascribes the erection of Stonehenge to the Danes or Anglo-Saxons.

Stukeley, in his account of Stonehenge (published 1740, page 66), says that Stonehenge was a work of the Druids, who founded it, B.C. 460. "About 100 years before our Saviour's birth, Divitiacus made the Wansdike north of Stonehenge, and drove the possessors of this fine country of the Wiltshire Downs, northwards. So that the Druids enjoyed their magnificent work of Stonehenge, but about 360 years. And the very great number of barrows about it, requires that we should not much shorten the time. Sir Issac Newton, in his

chronology, reckons 19 years for a medium of a King's reign. So that in that space there were about 19 Kings in this country. And there seems to be about that number of royal barrows (in my way of conjecturing) about the place. I observe this time we have assign'd for the building of Stonehenge, is not long after Cambyses' invasion of Egypt. When he committed such horrid outrages there, and made such dismal havock, with the priests and inhabitants in general, they fled the country to all parts of the world. Some went as far as the East Indies, and there taught many of the ancient Egyptian customs; as is taken notice of by the learned. It is not to be doubted that some of them fled as far westward, into the island of Britain, and introduced some of their learning, arts and religion, among the Druids; and perhaps had a hand in this very work of Stonehenge: the only one that I know of, where the stones are chizel'd. All other works of theirs are of rude stones, untouch'd of tool, exactly after the patriarchal and Jewish mode; therefore older. This was at a time when the Phœnician trade was at height, the readier a conveyance to Britain: it was before the second temple at Jerusalem was built: before the Grecians had any history."

The celebrated engraver, George Vertue, (1684—1756,) appears to have paid considerable attention to Stonehenge, and says in his Diary: "After having seen these stones, and taken draughts of them, and more than once reviewed them, read mostly all that has been published concerning them, and if I may venture to advance my conjecture in an affair so distant to my understanding and profession.—In my opinion I think they were erected by the first heathen Saxons, whom our historians generally allow to have come into England soon, or immediately after, the Roman legions were called away. The people conquered and overcame the Britons, and made the kingdom subject to their power. As Salisbury plain is so extensive, large, and likely then the seat of war between those Saxons and Britons, and this place so nearly the great central part of England, they, the Saxons, might therefore choose to erect a monument of such strength and power, by the hands of an army, that could not easily be moved nor defaced. Such a monument

without inscription or image that would surprise all succeeding generations, and be, in all likelihood, permanent for ages to come."

In 1730, Mr. Sampford Wallis published a little book (printed at Sarum) entitled "Dissertation in Vindication of the Antiquity of Stonehenge in answer to the Treatises of Mr. Inigo Jones, Dr. Charleton and all that have written upon that subject, by a Clergyman in the neighbourhood of that famous monument of Antiquity."

In Hearne's copy of the work now in the Bodleian Library, is the following splenetic notice of it written in his small but clear handwriting: "Tis' nothing but an extract from Webb, abating some abusive expressions of the thief, who sufficiently exposeth himself by endeavouring to detract from the reputation of those great men Olaus Wormius and Dr. Walter Charleton, tho' I differ from Dr. Charleton, yet I think that Dr. hath supported his opinion very well, and deserved thanks rather than obloquy. At least it is very unbecoming for such mean writers as the publisher of this extract to attack such a worthy man as the Dr. certainly was, in so rude a manner." The following spiteful note is appended: "One Stafford Wallis was incorporated M.A. of Oxford from St. Andrew's, July 11, 1671."

In the year 1747, John Wood, the Bath architect, described and illustrated Stonehenge. He "differs materially in his lines of the third and fourth circle" from any of his predecessors. He gives it as his opinion "that it was a temple erected by the British Druids, about a hundred years before the commencement of the Christian æra."

The Rev. William Cooke, Vicar of Enford, published in 1754 "An Enquiry into the Patriarchal and Druidical Religion, Temples, etc.," and concluded "that Stonehenge had been a place held sacred by the Druids, and appropriated to civil or religious assemblies."

In the year 1771 Dr. John Smith (who calls himself inoculator of the small pox), published a little work in which he endeavoured to prove that Stonehenge had been a tropical temple, erected by the ancient Druids for observing the motions of the heavenly bodies. He

says : " From many and repeated visits I conceived it to be an Astronomical Temple : and from what I could recollect to have read of it, no author had as yet investigated its uses. Without an instrument or any assistance whatever, but White's Ephemeris, I began my survey. I suspected the stone called *The Friar's Heel* to be the index that would disclose the uses of this structure ; nor was I deceived. This stone stands in a right line with the centre of the Temple, pointing to the North East. I first drew a circle round the vallum of the ditch and divided it into 360 equal parts ; and then a right line through the body of the Temple to the Friar's Heel ; at the intersection of these lines, I reckoned the sun's greatest amplitude at the summer solstice, in this latitude, to be about 60 degrees, and fixed the Eastern points accordingly. Pursuing this plan, I soon discovered the uses of all the detached stones, as well as those that formed the body of the Temple." His book is entitled "Choir Gawr, the Grand Orrery of the ancient Druids, commonly called Stonehenge, astronomically explained, and proved to be a Temple for observing the motions of the heavenly bodies."

It is interesting to read Dr. Johnson's notions about Stonehenge, as we find them in a letter to Mrs. Thrale, written October 9, 1783, vol. x., p. 269 of 1835 ed. "Two nights ago Mr. Burke sat with me a long time. He seems much pleased with his journey. We had both seen Stonehenge this summer for the first time. I told him that the view had enabled me to confute two opinions which had been advanced about it. One, that the materials are not natural stones, but an artificial composition hardened by time. This notion is as old as Camden's time ; and has this strong argument to support it, that stone of that species is nowhere to be found. The other opinion, advanced by Dr. Charleton, is that it was erected by the Danes.

"Mr. Bowles made me observe, that the transverse stones were fixed on the perpendicular supporters by a knob formed on the top of the upright stone, which entered into a hollow cut in the crossing stone. This is a proof that the enormous edifice was raised by a people who had not yet the knowledge of mortar ; which cannot be supposed of the Danes, who came hither in ships,



This sheweth the order & manner of a most ancient monument in England called Stonehenge
 situated in a plain of Salisbury being first brought out of Ireland by the pendragon brother
 to Aurelius Ambrose then king of the Britons through the help and counsell of
 Merlin. So these erected for a memory of certaine noble Britons in y^e place now
 by Hengist and his Saxons; Anno Dⁿⁱ 400. A stonewall graue called every day
 Weyght. Supposed 22 tonnes in length the 28 foote in breadth 7 foote in compass 36
 foote, B. stonewall & lesser called crone of 207 tonne stonewall where great bones of men or found

COPIED FROM THE ENGRAVING IN GOUGH'S "CAMDEN", 1789.

1789. Copy 5000. 1876.

and were not ignorant certainly of the arts of life. This proves also the stones not to be factitious; for they that could mould such durable masses could do much more than make mortar, and could have continued the transverse from the upright part with the same paste.

“You have doubtless seen Stonehenge; and if you have not, I should think it a hard task to make an adequate description. It is in my opinion, to be referred to the earliest habitation of the island, as a druidical monument of, at least, two thousand years; probably the most ancient work of man upon the island. Salisbury Cathedral and its neighbour Stonehenge are two eminent monuments of art and rudeness, and may show the first essay and the last perfection in architecture.”

The additions made by Richard Gough, F.A. & R.S.S., to Camden’s “Britannia” for the edition published in 1789, are of sufficient importance to deserve reproduction “*in extenso*,” although this will entail a certain amount of repetition hereafter: “About six miles from Salisbury to the north on the plain is what Cicero¹ would call *insana substructio*, a wild structure, a number of monstrous rude stones, some of them twenty-eight feet high, and seven broad, placed in three concentric circles surrounded by a ditch: some of them lie across as architraves on the tops of the others; so that it seems like a hanging work, whence we call it *Stonehenge*, and our ancient historians *Choir Gawr*, the Dance of Giants, from its size. But as no description can do it justice, I have here annexed a print of it.²

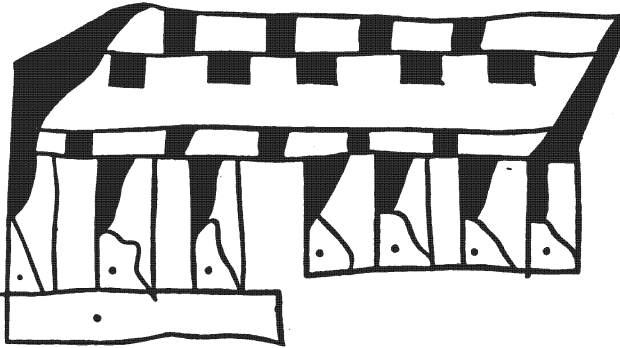
“Our countrymen reckon this among their wonders: not being able to discover whence and how such kind of stones were brought, none such being found in the whole neighbourhood. It is not my

¹ Orat. pro Milone.

² “Mr. Camden’s print being probably copied from an older, dated 1575, with the initials R.F., which may be presumed the oldest engraving of this monument, we have thought it advisable to give the older print a place here. The reader will make all due allowance for the errors in the drawing, among which the making the top stones appear round is not one of the least.” This older print has been re-engraved for the present paper by Mr. Bidgood, curator of the Museum of the Somersetshire Archæological Society, at Taunton, who is as clever an artist as he is an earnest archæologist.

business to enter into any critical discussions on this subject, though I cannot but lament that so little is known of the authors of such a monument. Some, however, think these stones not natural and hewn from a quarry, but made of fine sand and some unctuous cement, like those trophies I have seen in Yorkshire.

“Stonehenge has exercised the conjectures of no less than eight writers since Camden, who, if we except Henry of Huntingdon, first noticed it. There is indeed a rude draught of it in a MS. of the ‘Scala Mundi,’ written about 1340, and continued to 1450, in Benet College Library, which for the singularity is here copied.¹



“It is not mentioned in the Itinerary of Leland, who travelling among towns and along rivers, did not go out of his way to examine monstrous stones and barrows on wild and widespread downs, though in his note on the extract about it from Geoffrey of Monmouth (Coll. 2., 31,) he confutes the idle story of Merlin. Mr. Camden could see nothing but confusion and rudeness in this stately pile; and it must be confessed the print he has given of it in his folio edition (to which we have substituted one dated 1575, signed R. F.) does not help to make it distinct.¹ Camden’s print was copied and modernized by J. Kip, for Bishop Gibson. Inigo Jones, full of ideas of architecture, conceited it to be a *Tuscan* temple of *Cælum* or *Terminus*, built by the Romans (Stonehenge

¹ Re-engraved for the writer by Mr. Bidgood, of Taunton.

restored, Lon. 1655, fol.); as if the rudest monuments of this people were not more regular than this; and as Aubrey well observes 'while he pleases himself with retrieving a piece of architecture out of Vitruvius, he abuses the reader with a false scheme of the whole work.' His son-in-law, [?] Charlton, ('Chorea Gigantum, Lond., 1663,' 4to.) contended for its being Danish, and came nearer the probability of its being the work of some *Northern* people. The attentive though credulous Aubrey first hit on the notion of its being a *Druid* temple. With this notion Mr. Toland concurred, and Dr. Stukeley by accurate admeasurements confirmed it ('Stonehenge, 1740,' fol.). Mr. Wood, of Bath, supported this opinion, with this additional idea, that it had an astronomical as well as theological use, and was, like that at Stanton Dru, in Somersetshire, a temple of the moon. ('Choir Gawr, 1747,' 8vo.) This has been illustrated in a brief and comprehensive manner by Dr. Smith ('Choir Gawr, the grand Orrery of the Druids. Salisb. 1770,' 4to.), who shews that the outer circle of 30 stones multiplied by twelve within for the twelve signs of the Zodiac, represents the ancient solar year of 360 days; its inner circle is the lunar month of 29 days, 12 hours represented by 30 more stones, of which six at the upper end of this circle exhibit the hunter's and harvest moon rising six nights together with little variation. Next to this circle is a great ellipse composed of seven pair of pillars with an impost on each pair for the seven planets whose influence may be alluded to by these compages of stones. Within these forming a concentric ellipse are 12 smaller single stones for the 12 signs of the Zodiac with a 13th at the upper end for the arch-druid's seat before the altar. The centre of this temple Dr. Smith finds to be $51^{\circ} 11''$, and that it could not be erected in this form in any other parallel of latitude. A great stone 210 feet from the body of the structure called the *Friar's heel*, from a vulgar tradition that the Devil threw it at a friar whose heel brushed by it made an impression in it, is the index that discloses these astronomical uses. Three others and probably a fourth lie on the bank that surrounds the whole with some variations from the cardinal points, and directly north and south just within the bank is an appearance of circular holes sur-

rounded with a bank of earth which may have been a meridian line.

“Stonehenge stands in the middle of a fine flat area, near the summit of a hill, and is inclosed with a circular double bank (Wood, p. 42,) and ditch near 30 feet broad, the vallum inwards, after crossing which we ascend 30 yards before we reach the work. The whole forms a circle of about 108 feet diameter from out to out, consisting, when intire, of 60 stones, 30 uprights and 30 imposts, of which remain only 24 uprights, 17 standing and 7 down, three feet and a half asunder, and 8 imposts. Eleven uprights have their 5 imposts on them by the grand entrance. These stones are from 13 to 20 feet high. The lesser circle is somewhat more than eight feet from the inside of the outer one, and consisted of 40 lesser stones (the highest six feet) of which only 19 remain, and only 11 standing; the walk between these two circles is 300 feet in circumference. The Adytum or Cell is an oval formed of 10 stones (from 16 to 22 feet high, Wood, p. 57,) in pairs with imposts which Dr. Stukeley calls Trilithons and above 30 feet high, the imposts of these and the others Camden’s print calls *Coronets*. A MS. in Benet College Library ascribed to Bede and marked N. xxx says, ‘Apud Stanhenges lapides mire magnitudinis in modum portarum elevate sunt ut porte arcis subposite videantur’ rising in height as they go round and each pair separate, and not connected as the outer pair, the highest eight feet (Wood, p. 57. Stukeley).¹ Within these are 19 more smaller single stones; of which only six are standing. At the upper end of the Adytum is the altar, a large slab of blue coarse marble, 20 inches thick, 16 feet long, and 4 broad; (Hales. Stukeley more) pressed down by the weight of the vast stones that have fallen upon it. ‘George duke of Buckingham

¹ The different ground plans of Wood, Jones, Smith, and Stukeley are given by Gough. The numbers of stones, as laid down by each of them, are as follows:

	Wood	Jones.	Smith.	Stukeley.
Uprights of outer Circle	30	30	30	30
“ inner “	29	30	30	40
Uprights of outer Ellipse	10	12	10	10
“ inner “	19	18	and 4 small ones. 13	19

And each has the so-called altar-stone.

in the reign of James I. caused the middle of Stonehenge to be dug, where remains a cavity as big as two saw-pits. This occasioned the falling down or inclination of a stone 21 feet long. There were found heads and horns of stags and oxen, charcoal, arrowheads, rusty armour and rotten bones, but whether of men or beasts uncertain. (Aubrey, Mon. Brit.) The whole number of stones, uprights, imposts, and altar is exactly 140. The stones are far from being artificial, but were most probably brought from those called the *Grey Weathers* on Marlborough Downs, 15 or 16 miles off, and if tried with a tool they appear of the same hardness, grain, and colour, generally reddish. (Mr. Aubrey says, 'on the downs one may discern whence the great stones both of Abury and Stonehenge were brought. Some not big enough for the purpose lie still at the brink of the pit. Some were left by the way. One lies in the water at Fighelden. Another on the downs resting on three low stones in order to be carried away. This was between Rockley and Marlborough.') The heads of oxen, deer, and other beasts have been found on digging in and about Stonehenge: but the human bones our author speaks of only in the circumjacent barrows. Dr. Stukeley, 1723, dug on the inside of the altar to a bed of solid chalk mixed with flints. In the reign of Henry VIII. was found here a plate of tin, inscribed with many letters, but in so strange a character that neither Sir Thomas Elliot, a learned antiquary, nor Mr. Lilly, Master of St. Paul's School, could make them out. This plate to the great loss of the learned world was soon after lost. (Holland, Stukeley.) Two stone pillars appear at the foot of the bank next the area in which the building stands, and these are answered by two spherical pits at foot of the said bank, one with a single bank of earth about it, and the other with a double bank separated by a ditch (Wood, p. 43). There are three entrances from the plain to this structure, the most considerable of which is from the north-east, and at each of them were raised on the outside of the trench two huge stones with two smaller within parallel to them. The avenue to Stonehenge was first observed by Mr. Aubrey. Dr. Stukeley found that it extended more than 1700 feet down to the bottom of the valley, and was raised a little above the downs between two

ditches. At the bottom it turns off to the right or east with a circular sweep, and then in a straight line goes up the hill between two groups of seven barrows each, called the King's Graves (Stuk. Stoneh., 35, 36). The other branch points north-west and enters the Cursus. This is half a mile north from Stonehenge, 10,000 feet or two miles long, included by two ditches 350 feet asunder, a bank or long-barrow for the judges seat at the east end: the west end curved and two or three obscure barrows as if to run round (Stuk., 41). In the road from Amesbury to *Radfin* (which last place the Doctor supposes the seat of an Archdruid) are seven barrows together, one great and six little ones, probably a family burial place (Stuk. p. 38). The disposition and form of the barrows on these downs prove them the single sepulchres of kings and great personages buried during a considerable space of time and in peace, and not the tumultuary burials of the slain. The Doctor after wading through an ocean of conjectures with his usual ingenuity, fixes the date of the erection of Stonehenge 460 years before Christ, and the enjoyment of it by the original inhabitants of these parts to about 360 years, in which time, reckoning with Sir Isaac Newton 19 years to a reign, there will have been 19 kings in this country, and so many royal barrows the Doctor fancied about this place (Stuk. 65, 66).

“ A very large one called *King Barrow* near Lord Pembroke's park wall at Wilton he supposes the tomb of Carvilius one of the four Kings of Kent, who fought with Julius Cæsar. On opening some of these barrows they are found to consist of a coat of turf, a layer of chalk two feet thick, then another of fine mould, and under it three feet from the surface a layer of flints two feet thick, and last of all a second layer of mould a foot thick, inclosing human skeletons or rude unbaked urns containing burnt human bones: sometimes spear-heads, glass and amber beads, wood ashes, bones of horses and other beasts, a large poleaxe, a sword, a celt, and even fragments of such stones as compose Stonehenge; which last particulars Dr. Stukeley supposed characterised one of its builders. The other barrows he assigns to Druids, chiefs, and private persons of all ages and both sexes.

“ The name of Stonehenge is evidently Saxon, q. d. the hanging

stones, and the authority of the Abingdon Chronicle cited by Dugdale Mon. Aug. i., p. 97, calling it Stanhengest from Hengist is of no weight.

“Leland’s opinion that Choir Gawr should not be translated Chorea Gigantum, but Chorea nobilis or magna, putting *gawr* for *vawr* is probable enough.”

King, in his “Munimenta Antiqua,” i., p. 189, 1799, says of Stonehenge: “Such as were Balaam’s altars, such in some degree were the altars at Stonehenge, only more vast and magnificent: being constructed by a people who were at the time more at leisure: and who erected the altars with more additional appendages for the purposes of more gross superstitious rite introduced in the later, and still more corrupted ages of the world. . . . It ought just to be added: that it has been observed (Gent. Mag., lxi., p. 108) that its very British name Cor Gawr points out an Asiatic origin; and leads us to conclude, that it was some kind of resemblance of something derived from the East.”

To our old Wiltshire antiquary, John Britton (see “Beauties of Wiltshire, vol. ii., 129—180, 1801), it clearly appeared, “that Stonehenge was the work of the Romanized Britons, about the latter end of the fifth century.”

The Rev. Edward Davies, in his “Celtic Researches,” (1804) says: “When the Romans acquired a footing in Britain, they found the country possessed by two nations, the Belgæ, originally Celtæ, but somewhat intermixed with strangers, and an indigenous race, who declared they were born in the island. Amongst these pure descendants of the Celtæ, the Druidism of Britain was in his highest repute. The principal seat of the order was found in Mona, an interior recess of that ancient race, which was born in the island. Into that sequestered scene, the Druids, who detested warfare, had gradually retired, after the irruption of the Belgæ, and the further encroachments of the Romans. They had retired from their ancient magnificent seat at Abury, and from their *circular uncovered* temple on Salisbury Plain, in which the Hyperborean sages had once chaunted their hymns to Apollo or Plenyž.”

The Rev. James Ingram, Professor of Anglo-Saxon in the

University of Oxford (afterwards President of Trinity College), in his inaugural lecture on the utility of Anglo-Saxon Literature (Oxford, 1807), speaks of Stonehenge as "*the Heathen burial-place, with its Hippodrome, &c.. on Salisbury plain, vulgarly called Stonehenge, a corruption of Stone-ridge*" (p. 13). He afterwards says (p. 87) : "As I have ventured to give a new interpretation of that Wonder of the World, Stonehenge, though whole volumes might be written with the pompous title of Stonehenge restored, and with fairer claims to public attention than those of Inigo Jones and others, yet at present I shall content myself with reprinting the following document, extracted from Dugdale's *Monasticon*, vol. iii., p. 857. It is a grant of lands from King Athelstan to Wilton Abbey, extending from the banks of the Nadder along the Pile of Stones to Burbage, Savernak Forest, Oare, and Wansdike to the North, and beyond Westbury along the Old Bath Road to the West. The whole deserves the attention of the future Historian of Wiltshire." In a disquisition on a passage in Athelstan's grant to the Abbey of Wilton communicated by William Hamper Esq., F.S.A., in a letter to Henry Ellis, F.R.S., Secretary (*Archæologia*, xxii., 398), it is shown that, topographically regarded, the "Stone-ridge" of the Chartulary of the Abbey of Wilton, could not, by any possibility, be Stonehenge.

Sir Richard Colt Hoare published his magnificent volumes on *Ancient Wiltshire* in 1812 and 1819. In the first he has treated fully of Stonehenge, and has illustrated his description by beautifully executed engravings from the plans and drawings of Crocker. For the ready and courteous loan of three of the copper-plates of these plans for the illustration of this paper, the writer begs to express his grateful thanks to Mr. Bruce Nichols. His father, Mr. Gough Nichols, had, in the same kind manner, allowed the writer to have some of the plates of *Abury* copied in lithography in 1857. Sir Richard Hoare attributed the erection of Stonehenge to the "Celts (from Celtic Gaul) our earliest inhabitants, who naturally introduced with them their own buildings, customs, rites and religious ceremonies." The plates in his splendid volumes are invaluable to the student of Wiltshire archæology.

The more important notices of Stonehenge having now been given, at great length, and the history of opinion respecting it having been brought down to the time of the publication of Sir R. C. Hoare's great work, it will be desirable to defer the notice of more recent theories until after the description of the present state of Stonehenge, and the discussion of the problems to which this remarkable structure has given rise.



Part III.

Description of Stonehenge.

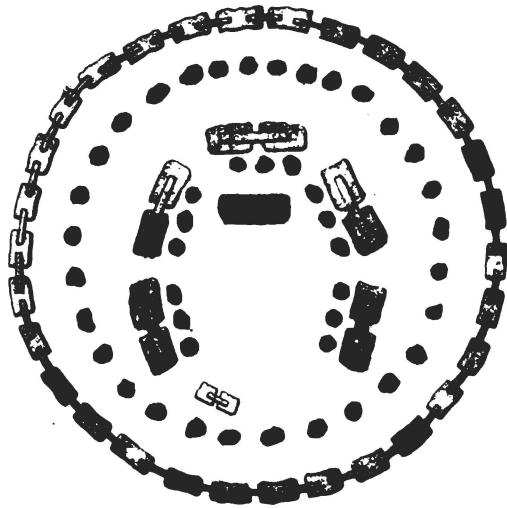
HE who would make clear to another the relative positions of the circles and ellipses, and of the stones which compose them, should bear in mind the Horatian maxim :—

“*Segnius irritant animos demissa per aurem
Quam quæ sunt oculis subjecta fidelibus.*”

and should call to his aid plans of Stonehenge as it was supposed to have been set up, and of Stonehenge as it is. Those with which Canon Jackson kindly supplied the writer, with the stones coloured according to the portions of the structure to which they belonged, have been reproduced in chromolithography, and will do more to make the details of Stonehenge intelligible than any verbal explanation or written description, however lucid and accurate.

It will be seen that this stone structure stands in the centre of a circular boundary, which is 300 feet in diameter, and which has been formed by the throwing up of a slight vallum from a slight ditch on the outside. This vallum is about 100 feet from the outer circle of stones. The vallum cuts through the boundary ring of a low barrow on the N.W. side (in which Sir Richard Hoare found merely burnt bones), and it embraces another low barrow on the opposite side. From this treatment of the former tumulus, it is clear that it was in existence before the ditch was dug. In the other tumulus on the south-east side nothing was found. Two stones are to be seen on the edge of the embankment, and within it; that on the south-east side is nearly nine feet high, that on the north-west side is not quite four feet high. There are no indications of other stones having been similarly placed on the margin of this earthen ring. The circumference of the ditch is 369 yards.

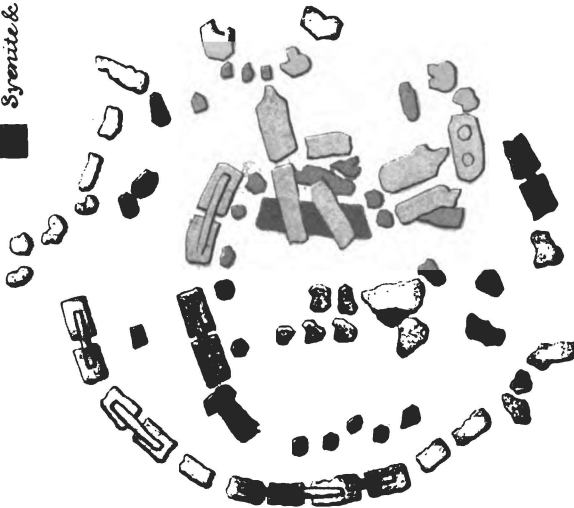
The entrance faces the north-east, and is marked by a bank and



Stonehenge as it appears to have been.

Wiltshire Sarsen stone.
 Syenite.
 Syenite & other primitive rock.

Wiltshire Sarsen.
 Fine micaceous sandstone.



*Stonehenge in its present state,
A. D. 1875.*

W. Wood & Co. Lith.

ditch forming an avenue which leads directly into it. Immediately within the entrance a large stone lies prostrate. It is 21 feet long, and 6 feet 10 inches wide. People of the Stukeleian turn of mind, who see Druids and Archdruids everywhere, and would fain believe that within Stonehenge the wicker basket¹ with its burning victims

¹ "It is the sacrificial altar, fed
With living men,—how deep the groans! the view
Of those that crowd the giant wicker thrills
The monumental hillocks."

Wordsworth's "Prelude," Book xiii.

And

"File of Stonehenge! so proud to hint yet keep
Thy secrets, thou that lov'st to stand and hear
The Plain resounding to the whirlwind's sweep,
Inmate of lonesome Nature's endless year;
Even if thou saw'st the giant wicker rear
For sacrifice its throngs of living men,
Before thy face did ever wretch appear,
Who in his heart had groaned with deadlier pain
Than he who now at nightfall treads thy bare domain!"

Wordsworth's "Guilt and Sorrow."

Of the Druids, Dr. Thurnam writes as follows in one of the notes to his valuable paper on British Barrows in the *Archæologia*, vol. xliii., p. 306; "It has become a fashion to question our knowledge of the Druids; but surely what contemporary writers of the first rank, such as Cæsar, Diodorus, and Tacitus, concur in telling us cannot lightly be set aside. Professor Max Müller (*Chips from a German Workshop*, iii., 250), says: 'Cæsar most likely never conversed with a Druid,' forgetting that Divitiacus the Druid was for long his camp companion, held by him in great esteem, and likewise was the guest of Cicero at Rome. *B. G.*, i., 16, 19, 20, et passim. Cicero, *De Divin.*, i., 41." Whatever importance ought to be attached to the mention made of the Druids by Cæsar and other Latin writers, it is clear to Mr. Nash, the author of "Taliesin, or the Bards and Druids of Britain," 1858, who has carefully studied the remains of the earliest Welsh Bards, that "we have no allusion in the old Welsh compositions to any of the celebrated symbols of the Druidic priesthood, nor the slightest testimony in support of the fables promulgated as to the character, institutions, rites, and ceremonies of this famous hierarchy." (p. 335.) "Whoever may have been the authors of the documents from which Geoffrey of Monmouth drew up his *British History* (and it is clear that they were derived from British sources, even if through a Bretonic channel) they knew nothing, at least have related nothing, of the Druids or Druidic worship in Britain. In the passage where Cassibelaunus, elated by his victory over Julius Cæsar, assembles all the nobility of Britain with their wives at London, 'in order to perform solemn sacrifices to their tutelary Gods,' at which solemnity they sacrificed 40,000 cows, 100,000 sheep, and 30,000 wild beasts, besides fowls without number, we hear nothing of the celebrated Druids. In the time of Lucius, the first convert to Christianity, Geoffrey of Monmouth knows only of Flamens and Arch-Flamens as the priests of idolaters; and neither he nor

was set up, call this the "slaughtering stone:" but there is reason to believe that it was originally erect.

Mr. Cunnington, F.S.A., writing to Mr. Britton from Heytesbury, April 12, 1803, says "I will pledge myself to prove that Mr. King's 'slaughtering stone' stood erect . . . To ascertain whether the 'slaughtering stone' stood erect, I dug round it, and also *into the*

the compilers of the *Brut Tyssilio* has anything to say about the Druids, whose privileges were transferred to the Christian Church. Mr. Herbert, struck with this silence of the chronicler on the subject of the Druid hierarchy, thought there was a systematic concealment of the truth; but the inference is plain, that the Druid extinguished by Paulinus, in A.D. 58, had not been resuscitated in the tenth century," (p. 332.) "If we find in the oldest compositions in the Welsh language no traces of the Druids, or of a pagan mythology, still less do we find evidence of the existence of any peculiar philosophical or theological doctrines, such as it has been the fashion to represent as lying concealed in these compositions under the somewhat vague title of Bardic mysteries. The whole tenor of the result of an investigation into the supposed evidences of this mystery leads to the conclusion that the Welsh Bards neither of the sixth nor twelfth century had any mysteries to conceal, beyond the secrets, such as they were, of their profession," (p. 339.) With one more extract upon this important fact of the non-existence of any traces of the Druids in the oldest British writings, the subject shall be dismissed: "The Welsh minstrelsy, instead of dating from a time beyond the limits of history, or deriving its materials from a source hidden in the obscurity of a pre-historic age, enters the circle of the romantic literature of Europe during the tenth and succeeding centuries, and will probably be found to have received more from, than it communicated to its continental neighbours. It is, however, no small merit which must be conceded to the Welsh romance-writers, that what they borrowed from others they stamped with the impress of their own genius, and gave currency, under their own peculiar form, to the treasures derived from the mines of the stranger. In the hands of the Welsh, every tradition, every legend, no matter from what source became Welsh,—the events localized in Wales, and the heroes admitted into the cycle of the Welsh heroic genealogies; and it is probably to this process of naturalization that we owe the preservation of the Welsh romances. The Welsh poems, such as we find them in the Myvyrian collection, we have shown to be replete with reference to the extant tales, and to others of a similar nature not known to exist; but of any other mysteries than such as can be explained by reference to the current religious philosophy of the age, or to these romantic tales, not a particle of evidence can be discovered. Wherever such evidence has hitherto been supposed to have been discovered, investigation has demonstrated it to be a fallacy, originating in an erroneous conception of the meaning of the passages produced, or derived from documents tainted with the suspicion of modern forgery or fraud." (p. 340—1.)

excavation where it originally stood when erect. This stone is in form like the annexed figure. By digging I found the excavation in which the end A was placed. At B., on the east side, you may see similar irregularities as you must have noticed on the butt ends of the upright stones of the fallen trilithon. Let any persons who have doubt, examine the stone, and they will be convinced." [See the copy of Mr. Cunnington's sketch of this stone].

Mr. William Cunnington, F.G.S., informs the writer that if this stone *stood erect*, it must have entirely concealed the "gnomon" from persons standing in front of the "altar." "It would have been impossible," he says, "to see the sun rise over the "gnomon" from "the exact centre of the building. It is nevertheless a fact that the gnomon *does* occupy this critical position, as to the sunrise at the solstice."

Before we go inside to view the remains of the circles and ellipses we will walk down the avenue for 98 feet, until we come to the large stone, 16 feet high, which is somewhat on the incline. This is a stone of much importance in connection with Stonehenge, since it has been found that, viewed from the exact centre of the building, at the summer solstice, the sun rises immediately over the top of it.¹ On Midsummer Day of the year 1858, Dr. Thurnam found this to be the case; and in 1868, four members of the Bath Field Club left Amesbury between 2 and 3 a.m., on the 25th of June to see if it were so: "As the long-looked-for moment arrived, one stationed himself at the outer circle, the others on the 'altar-stone,' and awaited the first indication of the rising of the sun. Just as hopes were beginning to fail, and the minutes dragged wearily along, an exclamation of surprise burst from all as the sun gradually rose, a globe of fire, immediately behind the 'Friar's Heel,' and no sooner had its first beams touched the top of the gnomon than they fell right athwart the 'altar-stone'—a glorious and long-to-be-re-

¹ On the importance which Dr. Smith attached to this stone in this point of view, see page 43, 47. He, a hundred years ago, had come to the conclusion that the sun, at the summer solstice, would be seen to rise over the summit of the "Friar's Heel."

membered sight!"¹ Mr. Cunnington states that Mr. Purser, of Dublin, verified the same fact some years before (about 1844).

This stone acquired the name of the "Friar's Heel" from the following circumstance, which must, of course, be received with implicit belief: "The stones of which Stonehenge was composed were standing on the premises of an old woman in Ireland; and Merlin sent the Devil to buy them of her. He bought them for as much money as she could count during the time of their removal; which in effect was none at all, for their removal was instantaneous. They were then erected in due order upon Mount Ambre; and the Devil boasted, that nobody would ever be able to tell how the fabric, or any of the parts of which it is composed, came there. But a friar, who had been concealed near the building, overheard the Devil, and replied, 'That is more than thee can tell;' which so enraged the evil spirit, that he snatched up a pillar and hurled it at the friar, but it only reached his heel and struck him on it. Therefore a mark, visible on the stone, is to this day called the Friar's Heel."

Returning to the great structure we observe the group of upright stones with their imposts, over the entrance. It is, with reason, supposed that thirty upright stones and thirty imposts, similarly arranged, constituted the outer circle of Stonehenge. It was, doubtless, intended that, in so far as possible, the uprights should be so shaped and hewn as to be of the same height and size, the transoms of the same dimensions, and the intervening spaces of the same extent. This, however, could not be rigidly carried out, and accordingly we find that neither the heights, nor breadths, nor interstices, are always the same. The average height of the external uprights is 12 feet 6 inches, with an average interval of 4 feet. The imposts were secured to the uprights not only by their own weight, but by mortices, which, when filled by the tenons at the top of the uprights, ought to have been able to defy wind or weather, and to a certain extent, the destructive hand of man. The diameter of this outer circle is 106 feet. Of this outer circle seventeen uprights and six imposts retain their original position.

¹ Proceedings of the Bath Natural History and Antiquarian Field Club, No. 2, p. 73.—See "Notes and Queries," Fifth Series, vol., xiv., p. 83.

Within this outer circle, and at an average distance of 9 feet from it was an inner circle, composed of thirty or forty pillars of syenite and other primitive rocks, each about 4 feet in height, and one foot in breadth. These stones, of which more will be said presently, were of a different geological character from that of the stones composing the outer circle, and those composing the five trilithons (or groups of three stones) which formed the "adytum," or more important portion of the entire structure. Of this circle there remain but few stones standing upright, and they are rude and irregular in shape, and apparently unwrought.

Within this circle again was a group of grand trilithons, five in number, arranged in horse-shoe form; one, the highest, immediately behind what is called the "altar-stone," and two on either side, those more distant from the central trilithon being of a lesser height. The standing stone of the lower trilithon of this group, on the right-hand side of the entrance, is 16 feet 8 inches high, 7 feet 6 inches wide, and 3 feet 10 inches thick. This stone seems to have been much honeycombed at its base by the weather. The Duke of Buckingham, *temp.* James I., appears to have wrought the downfall of the most important group, of which the parts are now either reclining, or prostrate upon the "altar-stone," which they have broken in their fall. The reclining stone is 22 feet 6 inches in height; the once associated upright, now broken and recumbent, was 21 feet high above ground, and had 4 feet in addition, which formed its basement and kept it upright. The impost is 14½ feet long and 4 feet 8 inches thick. The uprights of the trilithon which the gipsies helped to overthrow, are each about 21 feet 6 inches long, and about 7 feet 6 inches wide, and 3 feet 6 inches in depth. The transom is 15 feet 9 inches long, and 5 feet in width.

Allowing 2½ feet for the part imbedded in the ground, the average height of these grand trilithons must have been, without the imposts, about 18 feet, and with the imposts, about 22 feet.

The innermost ellipse of stones consisted of about 15 or 19 stones of an average height of 8 feet, and of syenites similar to some of those of the inner circle. They are, as Sir R. C. Hoare says, much smoother and taller than those of the inner circle of small stones, and incline to

the pyramidal form. One of them, No 26 in Sir R. Hoare's plan, has a groove cut down its side, but for what reason is not apparent.

The so-called "altar-stone,"¹ is, or rather, was, when entire, 15 feet long by 3 wide.

Of this innermost group of stones a few only remain.

On the left hand as one enters the circle of stones from the avenue, is a recumbent syenite stone of 7 feet 6 inches in length with two mortises on its lower side. It appears to have been an impost, but its original situation does not clearly appear.

The writer gladly supplements his own account of Stonehenge with that of Sir Henry James, the Director-General of the Ordnance Survey, as the measurements made under his direction would be taken, probably, with greater accuracy than his own: "The structure, when complete, consisted of an outer circle of thirty large stones, upon which other large stones were laid horizontally so as to form a perfect continuous circle. This circle is 100 feet in diameter within the stones.

"The stones in the uprights have each two tenons on their upper surface, which fit into mortises cut into the under surface of the horizontal stones; by this mode of construction, the whole circle was braced together. The average dimensions of the uprights in this circle are 12 feet 7 inches out of the ground, 6 feet broad, and 3 feet 6 inches in thickness. Those in the circle resting on the uprights are about 10 feet long, 3 feet 6 inches wide, and 2 feet 8 inches deep.

"Within this circle are five stupendously large trilithons, each consisting of two uprights with tenons on them, supporting a large horizontal lintel, in which two mortices are cut to receive the tenons.

"These trilithons, are arranged in the form of a horse-shoe, so that one of them is central as regards the other four. The horizontal stone called the altar stone, lies in front of the central trilithon, and we see that the axial line of the structure is from N.E. to S.W., or on the line of the two stones G.H. The five trilithons

¹ On altars in connexion with Druidical worship, see "Herbert's Cyclops Christianus," p. 23.

are arranged very symmetrically within the outer circle, and nearly at the distance of half the radius from the centre.

“The dimensions of the trilithons are nearly as follows :—

	ft.	in.	breadth	ft.	in.	thickness	ft.	in.
A. Height of upright out of ground	22	5		7	6		4	0
Central trilithon. Lintel, length	15	0	„	4	6	„	3	6
B. Height of upright out of ground	17	2	„	7	0	„	4	0
Lintel, length	15	9	„	4	0	„	3	7
C. Height of upright out of ground	16	6	„	7	9	„	4	0
Lintel, length	17	0	„	4	0	„	2	8
D. Height of upright out of ground	22	0	„	8	3	„	4	3
Lintel, length	16	0	„	4	0	„	3	6
E. Height of upright above ground	16	6	„	7	0	„	4	0

The Altar stone F. is 17 feet long and 3 feet 6 inches wide.

“In addition to these there was formerly a complete circle of thirty smaller upright stones about 6 feet high, which was intermediate in position between the outer circle and the five trilithons. Within the trilithons there was a row of smaller stones about 7 feet 6 inches high, parallel to the trilithons.

“Only seventeen of the thirty upright stones of the outer circle are now standing, and only six of the thirty lintels are now in their places. Of the trilithons only two (B. and C.) are perfect; the lintel and one of the uprights of A. has fallen and lies broken upon the altar stone F., whilst the other upright is in an inclined position, and supported only by one of the smaller stones which stood in front of it; this fell in 1620. D. lies prostrate, having fallen outward with its capstone on the 3rd of January, 1797. One of the uprights of E. has fallen inwards and is broken into three parts, and its lintel also is broken into three parts.

“Of the circle of smaller stones very few remain standing; the small lintel on the left of the central entrance is all that remains to indicate that there were probably some lintels on this circle, as there may also have been on the inner row of stones.

“The structure is surrounded by a circular enclosure of earth, about 300 feet in diameter, with a shallow ditch outside it.”

Sir Philip Sidney gave utterance to the popular notion when he

wrote "that neither any eye can count them just." Such an idea still prevails. King Charles the Second, however, when he rode up from Heale House with Colonel Robert Philips,¹ after the battle of Worcester, appears to have overcome the difficulty.

It was upon the top of the trilithon, immediately to the left of the altar stone, to one entering from the avenue, that "my Lord Winchilsea and Dr. Stukeley took a considerable walk," but, the latter adds, "it was a frightful situation." Two young men, however, who with their bicycles, paid a moonlight visit to Stonehenge in 1870, seem to have found it otherwise. With the aid of a rope-ladder they got to the top, and "found the situation anything but frightful, for the lintel itself measures 15 feet 3 inches in length, and is 5 feet wide, so that one has really space enough, if not to take a 'considerable walk,' yet to move about freely, with no fear of toppling over. From this eminence we obtained what we had long desired, viz: a view of the original design of Stonehenge, such as cannot be gained in wandering amongst the ruins below." Other young men might not, however, find this "situation" so pleasant; and broken necks or collar-bones might be the consequence of their little adventure.

Mr. Ferguson, Q.C., of Dublin, perplexed by Henry of Huntingdon's expression "*ita ut portæ portis superpositæ videantur*," and Stowe's words, "every couple sustaineth a third stone lying overthwart, gatewise," after seeing that the impost of the great trilithon had cavities on its upper surface corresponding to the mortices on its under surface, and which suggested to him the idea that they had served as sockets for the reception of uprights supporting a second impost, read a paper on the subject before the Royal Irish Academy, January 9th, 1865. Bearing this in mind, Dr. Thurnam, on the occasion of the visit of the Wilts Archæological and Natural History Society, to Stonehenge, in September, 1865, "obtained a ladder at Lake and took it to Stonehenge on the summit of the omnibus, and had it placed against the large trilithons. Several of

¹ Colonel Philips said that "the King's arithmetic gave the lie to the fabulous tale that these stones cannot be told alike twice together."

those present mounted it, including Mr. Alexander, J. P., and Mr. Stallard, the son of the incumbent of West Grafton. I was assured by all that the surface was quite plain and had no hollows." Dr. Thurnam adds, "it is curious that on the upper surface of the impost of the largest trilithon there are two superficial round holes as if incipient mortices. I take this to have been commenced as the under surface, and the mortices afterwards formed in the present lower surface or at least that finally adopted, as being the most level and suitable for the purpose." Any one who would understand the meaning of Henry of Huntingdon's expression, should walk for a little distance outside the vallum in a south-easterly direction, and he would see the inner trilithons towering over the outer circle and giving the idea of "*portæ portis superpositæ*."

As the inner circle and ellipse are of a different kind of stone to the large external and internal trilithons, questions have arisen respecting the periods at which these several groups of stones have been erected; some supposing that the smaller groups were the first set up, and that the larger stones were arranged around them at a subsequent period; while others have maintained that the larger groups of stone were placed in their positions before the smaller ones had been brought from Wales or Cornwall. Mr. Cunnington, (of Heytesbury,) was led to suppose that the *original* work consisted of the *outward* circle, and its imposts, and the inner oval or large trilithons; and that the smaller circle, and oval of inferior stones, were raised at a *later period*, for they add nothing to the grandeur of the temple, but rather give a littleness to the whole. The Rev. W. Lisle Bowles considered that the very reverse of Mr. Cunnington's conclusions would be the most natural, namely, that the *inner* circles were the *first* work, and the outward, more elaborate, the *last* work, and this opinion was also that of the Rev. Mr. Leman, Sir Richard Hoare's friend. But Mr. Bowles would not give up the idea that the monument was Druidical although he held that it was in part the work of the Belgæ; "No! I consider it originally Druidical, Druidical in its early state;" and that "the last, more lofty and more elaborate circle, accords, not only with a later period, but with the idea that this part, and this part only, was the work of

the Belgians, as if they had said 'you have a monument to Teut, he is your great God; you have also, on the ground, which *your own God*, the Deity, *next* in name and power to Teutates, could not preserve to yourselves and children, a temple to the Sun. The Sun is our own God; the Fire is our God; we will show you how to build a temple to the Sun, through whom we have conquered your country; and we will surround your rude altars with a work worthy the great deity of light.'"¹

It might be thought to have been almost impossible to set up the large stones of the outer circle and inner ellipse without utterly crushing and destroying the stones of the smaller circle and smaller ellipse. Mr. Herbert says, "If this structure were built at different epochs, the grey stones were surely erected the first, since the hoisting of the triliths over the green stones would be a strange supposition."²

The fact that chippings from the stones of both kinds have been found intermingled in two of the adjoining barrows should be borne in mind in discussing this question. Sir R. C. Hoare says: "No. 16 is a mutilated flat barrow, 76 feet in diameter and only 3 feet in elevation. This appears to have been one of those opened by Dr. Stukeley, and is thus spoken of by him in his account of Stonehenge: 'and in a very great and old-fashioned barrow, west from Stonehenge, among such matters, I found bits of red and blue marble chippings of the stones of the temple; so that probably, the interred was one of the builders.' During our researches in this *tumulus*, we perceived that a long section had been made, and found the bones of two skeletons which had been interred on the floor, also several pieces of stag's horns, animal bones, &c., as well as some fragments of sarsen stones, similar to those which form the great trilithons of Stonehenge. On clearing out the earth from this section, we observed a small heap of whiter soil, which, having removed, we came to the primary interment of burned bones within a fine circular cist, and found a spear head of brass in fine preservation, and a pin of the same metal. It is somewhat singular, that these burned bones (a more

¹ *Hermes Britannicus*, p. 125.

² *Cyclops Christianus*, p. 120.

than usual quantity) should have laid unmolested in a barrow where there were a hundred rabbit holes. On removing the earth from over the cist, we found a large piece of one of the blue stones of Stonehenge, which Sowerby the naturalist calls a horn stone, which, with the sarsen stone, is a very singular occurrence, and decidedly proves that the adjoining temple was erected previous to the *tumulus*. Some persons acquainted with the soil in this part of Wiltshire, might think the finding of sarsen stones no uncommon event, and I should perhaps have thought the same, had these specimens been rounded by attrition; but the stones found within this barrow are pieces chipped off, (I am sorry to say) like those now daily knocked off from the great fallen trilithon. With regard to the blue stone, we are certain this species is not to be found in the southern district of Wiltshire. In opening the fine bell-shaped barrow N.E. of Stonehenge, we also found one or two pieces of the chippings of these stones, as well as in the waggon tracks round the area of the temple. These circumstances tend to give a much higher era of antiquity to our celebrated building, than some antiquaries would be willing to allow, and evidently prove that at the period when the *tumuli* adjoining Stonehenge were raised, the plain was covered with the chippings of the stones that had been employed in the formation of the stone circle.”¹

Mr. Cunnington, F.G.S., has kindly furnished the writer with the following remarks upon these findings of chippings in the neighbouring barrows: “No doubt the stones were worked at or near the spot where they now stand, and the surface of the downs around must have been strewn with the chippings.”² These in course of time would sink through the turf and soil, till they reached the chalk below; owing mainly to the action of the earth-worms, which are continually throwing up the earth to the surface, and in a less degree, to the growth of the ordinary vegetation.

¹ Ancient Wilts, i., p. 127.

² Note by Mr. Cunnington.—Mr. H. L. Long in his “Survey of the Early Geography of Western Europe,” (1859,) p. 109, mentions the fact that at a newly-erected farm a little westward of Stonehenge, cultivation has levelled two barrow-like mounds, which were in a great measure formed of the chippings and fragments of the stones of Stonehenge.

“Men who are employed in digging for flints on the downs, always find the coins and various objects of antiquity at the bottom of the soil. An interesting example of this occurred when the late Mr. Waite invited me (now many years ago) to a Roman coin-hunt on Broad Hinton down. We found eighteen good Roman coins in the course of the morning. The process was a very simple one—the men turned over the turf and adhering soil (in this case about nine inches in depth), and we found the coins on the under side, or on the chalk rubble below.

“Chippings of the ‘blue stones,’ *i.e.*, of the stones of the inner circle, have been found in three of the barrows near Stonehenge, viz., in No. 16, No. ...,¹ and in No. 42.² They have also been found, as stated by Sir R. C. Hoare, in the waggon-tracks round the area of the temple.³

“Could it be clearly proved that these were associated in a barrow with the original interment, no doubt would remain that Stonehenge was older than the barrow.⁴ Sir R. C. Hoare evidently considered this to have been the case with regard to barrow No. 16, and Mr. Cunnington, of Heytesbury, was of the same opinion, as is shewn by the quotation from one of his letters, of which you have a copy. [‘I showed you,’ writes Mr. Cunnington, F.S.A., in 1802, ‘a great variety of stones found in a large oblong barrow near Stonehenge, that are of the same kind as several of those in the building.’] It is much to be regretted that the details as to the finding of these fragments were not more explicitly stated. It should have been distinctly noted whether they were found with the primary interment, as it is *possible* they may have reached the spot where they

¹Note by Mr. Cunnington.—“The fine bell-shaped barrow N.E. of Stonehenge.”—Hoare’s *Ancient Wilts*, p. 127. [? No. 30.—*W.L.*]

²Note by Mr. Cunnington.—Barrow No. 42 is nearly a mile in a straight line from Stonehenge. [The discovery of blue stone chippings in No. 42 was made by Mr. H. Cunnington.—*W.L.*]

³*Ancient Wilts*, vol. i., p. 127.

⁴Note by Mr. Cunnington.—The barrow itself would be classified by Dr. Thurnam with the round barrows—the “bronze period.” Stukeley, who describes it as “a very great and old-fashioned barrow,” found in it, he says, “fragments of the red and blue stones.”

were found, accidentally, or by natural causes, such as are mentioned above. 'A little more accuracy of observation might have settled the question for ever.'

The finding of these different kinds of chips *together* makes it appear *probable* that these different kinds of stones were worked on the ground at or about the same time; but it does not *settle* the question. There may have been an interval of time, greater or less, and the chips may yet have become mixed, and have been carried away, together, with the earth or chalk of which some of the barrows were composed. The chips found in these three barrows would go far to prove the superior antiquity of Stonehenge to that of these particular tumuli.¹

One more theory in connection with the construction of Stonehenge must yet be mentioned. Four or five years ago the writer was astonished at hearing his friend Dr. Thurnam give utterance to what he then considered, and still considers to be, a rank archæological heresy; viz., that Stonehenge was at one time covered with a roof. He said nothing in proof or support of this opinion, and the writer thought it might have been a passing fancy, and that it was not based on any serious considerations. As however the writer finds the following in Lieut. Oliver's paper on the Prehistoric Remains in Brittany, read to the Ethnological Society, January 10th, 1871, he cannot but suppose that the Doctor really attached importance to this view, and had propounded it to others: "Dr. Thurnam has given up the ophite or dracontium theory as untenable, but considers that some of the circles, Stonehenge, for instance, may have been covered in with a roof, as the Scandinavian temples are represented as covered and enclosed structures. A similar idea occurred to a gentleman, who, on looking at Mr. Lukis' plans of the circles and lines, suggested that the avenue might have been covered in with timber and earth, and formed long chambers for the tribe to live in, the chieftains occupying the western circular chamber."

¹ Dr. Thurnam mentions in a note to p. 425 of "Archæologia," vol. 43, that a stone "of fine micaceous sandstone, precisely agreeing with the stone of the large flat slab in the centre of Stonehenge" was obtained by him from barrow (No. 170), about a mile from "the stones."

That one so cautious, so careful, and so painstaking in the examination of the theories of others, should have committed himself to such an opinion as this, is, to the writer, strange indeed.

THE GEOLOGICAL CHARACTER OF THE STONEHENGE STONES.

Dr. Stukeley appears to have been the first to notice the difference between the character of the stones composing the inner and outer circles and ellipses at Stonehenge. He says of the stones of the smaller oval that they are of a much harder sort than those of the lesser circle; and were brought somewhere from the West; and of the (so-called) altar-stone, that "'tis a kind of blue coarse marble such as comes from Derbyshire, and laid upon tombs in our churches and churchyards."

Before Aubrey's time there appears to have been a prevalent opinion that the stones were "factitious."¹ To those who were not acquainted with the valleys in the neighbourhood of Marlborough, these stones would be unlike any with which they were familiar; and the "composition" of them, where they stand, would get over any difficulty about their transport thither from a distance. The appearance, too, of some of the stones, such as of that which forms an impost of the outer circle towards the north-west, and which in its upper portion was found to consist, for the depth of a few inches, of a conglomerate of flints and sand,² may have given strength to this opinion. There appear to have been, even recently, according to a paper of Mr. Cunnington's in 1865, some very curious notions about the sarsen portion of the Stonehenge stones. In 1836, the President of the Architectural Society had discovered, "from recent inspection,

¹ The author of a "Fool's Bolt" strongly asserts their being *saxa factitia*, as "it was impossible to work them into their several forms. Free-stones may be wrought to any, but these oburlish stones to no form in cause of hardness and brittleness."

² See *Wilts Magazine*, vol. xi., p. 348. Mr. Cunnington adds to this account, the following statement: "Masses of sarsen made up entirely of a similar conglomerate of chalk-flints frequently occur in the neighbourhood of Standen, near Hungerford, but they are not found in the middle or southern districts of Wilts."

that the large stones of Stonehenge were in their granular character, closely allied to the marble of Carrara," and another careful visitor of Stonehenge was of opinion that the stones were artificial.

Mr. Sowerby, in 1812, describes the stones thus :

"The outer circle and the great trilithons, with their imposts, are of sarsen¹ stone, a fine-grained silicious sandstone.

¹ In the Addenda and Notes to "Abury Illustrated," the following is given as an explanation of the word "Sarsen:" "The term Sarsen, or Saresyn, was applied by the Anglo-Saxons, simply in the sense of *Pagan*, to the stones which they found scattered about the Wiltshire Downs. As all the principal specimens of these mysterious blocks were perceived to be congregated into temples popularly attributed to heathen worship, it naturally came to pass that the entire formation acquired the distinctive appellation of Sarsen or Pagan stones. The same epithet of 'Saresyn' the Saxons also applied to their invaders the Danes or Northmen, who, on their coming into this country, were universally pagan. Thus Robert Ricart (quoted in Roberts' History of Lyme) says, 'Duke Rollo Le Fort was a Saresyn come out of Denmark into France;' and a spot in Guernsey is still designated by the same term from having constituted the temporary stronghold of certain Norman freebooters."—Waylen's History of Marlborough, p. 529.

The following is from Mr. Henry Lawes Long's "Survey of the Early Geography of Western Europe:" "In addition to the suggestion advanced that our word *Sarsen*, as applied to the Druid sandstone, is, in fact, a corruption of *Saracen*, I may add that *Sarrasin* is the name commonly given on the Continent to ancient objects whether of Celtic or Roman construction, thereby inferring a period anterior to any remains of Christian origin. Roman denarii, which in the north of France still occasionally are current as sous, bear the name of *Sarrasins*. The Roman bridge near Aosta is called the *Pont de Sarrasins*." And I may add the following extract from the "Journal de l'Architecture," (of Brussels,) 4^{me}. année, p. 84: "Les traditions locales attribuent la construction des chaussées romaines aux Sarrasins. Les ruines, les tuiles antiques, les poteries, les médailles, etc., que l'on trouve chaque jour, ne sont connus, comme on sait, que sous les noms de *Masures*, de *Vases*, de *Monnaies*, ou de puits des *Sarrasins*. Cette dénomination remonte évidemment aux temps des Croisades, lorsque les esprits étaient remplis du nom des infidèles. Du reste, les armées et les populations qui revenaient de Terre-Sainte, en suivant les chaussées romaines, n'auront pas peu contribué à répandre aux environs l'épithète injurieuse de *Sarrasin* et de *payen*, dans laquelle ils auront confondu les Romaines si, comme il est probable, un faible souvenir de ce grand peuple vivait encore à cette époque dans le souvenir de nos pères." Mr. Long quotes the following from Col. Symonds's Diary, which his cousin, Mr. C. E. Long, edited for the Camden Society: "12th Nov. 1644, Tuesday, though a miserable wett windy day, the army moved over the playnes to Marlingsborough, where the King lay at the Lord Seymour's howse, the troopes to Fyfield, two myles distant, a place

"The stones of the smaller circle (except Nos. 9, 11, 17, 19, in Sir. R. Hoare's plan) are an aggregate of quartz, felspar, chlorite and horn-blende.

"No. 9 is silicious schist.

"Nos. 11, 17 19 are hornstone, with small specks of felspar and pyrites.

"The altar-stone is a fine-grained micaceous sandstone."

The Rev. W. D. Conybeare, in the Gentleman's Magazine, vol. ciii., part. 2, p. 452, thus speaks of the small circles: "Each stone a variety of greenstone rock which occurs nowhere nearer than the environs of Dartmoor in the West, or Charnwood Forest in Leicestershire on the North;—either being a distance of full a hundred miles in a direct line."

Professor Andrew Ramsay, writing to Dr. Thurnam (1859), says: "The greenstone may possibly come from Devonshire, but such rocks are also plentiful in Montgomeryshire, in Caernarvonshire, and in Merionethshire, and around Snowdon. In fact from Cader Idris to Moel Hebog, near Bedgellert and Snowdon, and from thence by Carnedd Llewelyn to Conway. They also occur in North Pembrokeshire. My friend, Mr. Perkins, the Vicar of Wootton-under-Edge, considers that these blocks which are quite foreign to the district may have been more easily brought from Brittany, where, I believe, such rocks occur, and I think this is possibly the case."

Mr. Charles Moore, F.G.S., of Bath, in 1865, expressed his belief "that the nearest point at which they could find similar material was Wales, or possibly Shropshire, although he found stones of precisely similar character while exploring the Mendips a few months ago, but the stones could not have been obtained from that spot, for the rock had never been worked."

Professor Phillips' letter to Dr. Thurnam, giving an account of

so full of a grey pibble stone of great bigness as is not usually seene; they breake them, and build their howses of them and walls, laying mosse betweene, the inhabitants calling them Saracen's stones, and in this parish a myle and halfe in length, they lye so thicke as you may goe upon them all the way. They call that place the Grey-weather, because a far-off they looke like a flock of sheepe."

his examination of the specimens sent to him of Stonehenge stones is as follows:—

“ Oxford, 22nd December, 1858.

MY DEAR SIR,

“ The stones, four in number, are thus to be described:—

“ 1. Marked *Stonehenge altar*. This is a gray sandstone, composed of quartz sand, silvery mica, and some small dark grains (possibly hornblende). Such a stone might be obtained in the gray *Devonian* or gray *Cambrian* rocks—and in other situations (‘*Cos.*’ antiq).

“ 2. Greenstone (*Anglicè*). Composed of slightly quartzose Felspar—hornblende—a little chlorite? &c., &c. This is an ordinary greenstone of such large grain and such a constitution as to make approach to the green syenite of some writers. If I had better specimens I could perhaps determine the presence of other minerals. Such a rock may be found in dykes in Devonshire, in dykes and seaming beds in Wales, &c.

“ 3. Smaller specimen, like the last, but with finer grain.

“ 4. Compact felspar of Mac Culloch: shows no internal crystallization; base of many dark porphyries—such occur in North Wales, Cumberland, &c. If on the spot, we were to study more carefully the several stones, it might, I think, be possible to identify the greenstones; but by such little atoms as these only guesses and those very vague can be justified.

“ There is nothing like granite in the specimens. This rather points to Wales than to Cornwall—nor is there any ordinary (felspathic) elvan as in Cornwall, but ‘*Elvan*’ is a name applied to greenstone dykes not unlike this stone near Dartmoor. But as, no doubt, Merlin brought the stones he might choose a rock now buried in the great depression of Caernarvonshire, where Sarn Badrig alone remains to mark his tram-road!

φ.”

But upon this subject, there is no one who deserves a hearing, and a more attentive hearing, too, than Mr. Cunnington, F.G.S., who has devoted so much time and thought to the study of the geological character of the Wiltshire megalithic structures. He says, in a paper “on the geology of Stonehenge,” read at the Salisbury meeting of the Wilts Archæological Society, 1865: “We are indebted to Mr. Prestwich, the treasurer of the Geological Society, for the exact determination of the stratum from which the ‘*Sarsens*’ are derived (*Vide Journal of the Geological Society*).

“ At the close of the *secondary* period of geologists, when the Chalk stratum, now forming the downs over which we shall walk to-morrow, was at the bottom of the sea, beds of sands, clays, and

gravels, were deposited upon it. These constitute what are now called the *tertiary strata*. When they were subsequently raised above the bed of the ocean, they were exposed to the powerful denuding action of seas, *glaciers*, and rivers, by which the main portion of them, in the western district (Wiltshire included), was carried away; a few cappings on some of the hills only remaining through the greater part of our county. Such cappings are not uncommon on some of the high hills on the borders of Salisbury Plain, especially to the northward and eastward of Amesbury, and between that town, Bedwyn, and Kingsclere; whilst hills, where no *masses* of tertaries remain, shew by the presence of numerous tertiary flint pebbles on their summit, the wreck of strata once spread over this area. Among the *lower tertaries* (the Eocene of Sir Charles Lyell), are certain sands and mottled clays, named by Mr. Prestwich the Woolwich and Reading beds, from their being largely developed at these places, and from these he proves the sarsens to have been derived; although they are seldom found *in situ*, owing to the destruction of the stratum to which they belonged. They are large *masses of sand concreted together* by a silicious cement, and when the looser portions of the stratum were washed away, the blocks of sandy rock were left scattered over the surface of the ground.

“At Standen, near Hungerford, large masses of sarsen are found, consisting almost *entirely* of flints, formed into conglomerate with the sand. Flints are also common in some of the large stones forming the ancient temple of Avebury.

“At the cliffs of St. Marguerite, near Dieppe, is a bed of fine white sand, reposing unevenly upon the chalk, and extending for one or two miles in length. It contains blocks of concretionary silicious sandstone, frequently measuring many feet in length. A good example of sarsen stone *in situ*.

“The abundance of these remains, especially in some of the valleys of North Wilts, is very remarkable. Few persons who have not seen them can form an adequate idea of the extraordinary scene presented to the eye of the spectator, who standing on the brow of one of the hills near Clatford, sees stretching for miles before him, countless numbers of these enormous stones, occupying the middle

of the valley, and winding like a mighty stream towards the south.

“Three or four small lateral valleys, containing a similar deposit, and converging to the main valley, add to the impression that almost involuntarily forces itself upon the mind, that it must be a stream of rocks, e’en now flowing onward.¹

“In some places, they strew the ground so thickly, that across miles of country, a person might almost leap from stone to stone, without touching the ground on which they lie, and some of them are four or five yards across. Sometimes the masses are formed of *unusually fine* sand, and the result is a very dense hard rock. In this variety are commonly found the remains of what appear to be fucoids or sea weeds. They do not exhibit any very marked structure, but are certainly vegetable. With regard to the origin of the stones composing the *small circle* and *inner oval* of Stonehenge our information is less definite. They differ entirely from the sarsens, being all *primary* or *igneous rocks*. Professor Tennant, of King’s College, has favored me by making a fresh examination of the specimens. With four exceptions, they are of syenite, composed of quartz, felspar, and hornblende. One of the exceptions is silicious schist, and the other three greenstone, containing small crystals of hornblende and iron pyrites, the latter partly decomposed, and passing into oxide of iron. The altar-stone is a fine-grained micaceous sandstone. Professor Ramsay, of the Geological Survey, says: ‘They are certainly not drifted boulders, and do not resemble the igneous rocks of Charnwood Forest; and without asserting that they came from Wales or Shropshire, I may state that they are of the same nature as the igneous rocks of part of the Lower Silurian region of North Pembrokehire and of Caernarvonshire.

“Professor Tennant says that Charnwood Forest contains *several* kinds of greenstones and syenite, but that he never saw any of them like the stones of Stonehenge. They bear, however, he thinks, a strong resemblance to those of the *Channel Islands*, and it has always appeared to him that they were obtained from that source.

¹ These stones are now rapidly disappearing; they are used for building purposes.

“ But the most important consideration connected with the smaller stones, and one which in its archæological bearing has been too much overlooked, is the fact of their having been brought from a great distance. I expressed an opinion on this subject in a lecture delivered at Devizes more than eighteen years ago, and I have been increasingly impressed with it since. I believe that these stones would not have been brought from such a distance to a spot where an abundance of building stones equally suitable in every respect already existed, unless some special or religious value had been attached to them. This goes far to prove that Stonehenge was *originally a temple*, and neither a *monument* raised to the memory of the dead, nor an astronomical calendar or almanac. In either of these latter cases there would have been no motive for seeking the materials elsewhere. The sarsens would have answered every purpose, with less labour, and with better effect. But, *if* these were the sacred stones of some early colonists, a *superstitious* value would have been attached to them, and great care and labour bestowed on their preservation. Thus the ancient so-called ‘Stone of Destiny,’ on which our sovereigns are crowned, was preserved with pious care for centuries in the Abbey of Scone, and has, to this day, its place in the Coronation Chair at Westminster Abbey.

“ It has been suggested that they were Danams, or the offerings of successive votaries. Would there in such case have been such uniformity of design or would they have been all alike of foreign materials? I would make one remark about the small impost of a trilithon of syenite, now lying prostrate within the circle. One writer has followed another in taking it for granted that there must have been a second, corresponding with it, on the opposite side. Of this there is neither proof nor record, not a trace of one having been seen by *any* person who has written on the subject. This small impost, not being of sarsen, but syenite, must have belonged to the original old circle, and it may even have suggested to the builders of the present Stonehenge the idea of the large imposts and trilithons, with their tenons and mortices.

“ It is important to mention that no iron implements have been found in the numerous barrows around Stonehenge.”

DESTRUCTION OF THE STONES OF STONEHENGE.

The measurement of many stones, large and small, recently made by the writer, convinced him that the stones composing the different portions of the structure were intended to be, as far as possible, of the same height and size. The small recumbent stones of sarsen, therefore, must be considered as being only frusta of the originals, the remaining portions having been broken up and carried away. We find Inigo Jones complaining of the destruction of these stones, which came under his notice. He says, in 1620: "Those of the inner circle and lesser hexagon, not only exposed to the fury of all-devouring ages, but to the rage of men likewise, have been more subject to ruine. For being of no extraordinary proportions, they might easily be beaten down or digged up, and at pleasure made use of for other occasions, which I am the rather enduced to believe, because, *since my measuring the work, not one fragment of some then standing are now to be found.*"—Jones' "Notable Antiquity," p. 63. (1655.) Stukeley speaks of the chipping of stones which was common in his day,¹ but in many cases large portions of stones which had fallen must have been carried away. He mentions that he had seen a stone, as big as any at Stonehenge, in Durrington fields, another at Milford, another at Fighelden. "They seem to have been carried back to make bridges, mill-dams, or the like, in the river. There is another in the London road, east from Amesbury, about a mile from the town. Another in the water at Bulford,² and yet another stands leaning at Preshute farm near the church, as big as those of Stonehenge." Stukeley seems to have thought that these stones had formed part of a sacellum or little temple upon what he calls Haradon Hill, and where the avenue began. Aubrey

¹ pp. 5, 23, 26 of reprint.

²The common tradition respecting this stone at Bulford is, that as the Devil, who had been employed by Merlin to buy of an old woman in Ireland the stones for Stonehenge, was bringing them over, bound up in a wyth, the wyth slackened as he was crossing the river Avon at Bulford, and one of them dropped down into the water, where it lies to this very hour.

A farmer, with his team of oxen, made an unsuccessful attempt to move this stone some years since.

had previously recorded, in the "Monumenta Britannica," that "the inhabitants about the Amesburies had defaced this monument since his remembrance, *sc.* one large stone was carried away to make a bridge."

Mr. Kemm, in answer to enquiries made by the Secretaries of the Wiltshire Society, in the *Magazine*, says (vol. xi., p. 249): "My father resided for twenty-five years in West Amesbury House, and I have often heard him express his conviction, that a considerable quantity of fragments of the stones of Stonehenge were built into its walls. I could myself point out pieces of stone in the garden wall, which appear to be precisely similar in quality to the stones of the outer circle . . . Stonehenge stands on the estate, so that the builder of the house was the owner of the monument."

Mr. Cunnington says (vol. xi., p. 348): "Depredations are still perpetrated on Stonehenge by excursionists and other visitors. About two years ago, a mass, which must have weighed nearly 56 pounds, was broken, apparently by means of a sledge hammer, from the hard schist, marked No. 9 in Hoare's plan. The soft stones are frequently much chipped. On the 17th of July last (1868), a party of Goths lighted a fire against one of the stones on the south-east side of the outer circle, by which it was much damaged and disfigured, and several fragments were broken off by the heat."

In Mr. Henry L. Long's book previously alluded to, is the following suggestion respecting the pre-historic injury done to Stonehenge: "There now remain at Stonehenge, upright and prostrate, about ninety-one stones; originally there must have been about one hundred and thirty. It is to be hoped that the work of destruction is now at an end; and that this unique monument of antiquity may experience no further demolitions. It has suffered most on the southern side—certainly the quarter of the most violent winds; but we can hardly suppose that winds would have any appreciable effect upon such mighty and such deeply-fixed masses. Something may have been done by excavators in search of imagined treasures, but I am more inclined to attribute their overthrow to the same cause that inspired their construction, namely, to religious fervour; for we know that, upon the conversion from paganism to Christianity,

a regular onslaught upon buildings of this description took place, equal to the frenzied assaults of the Scotch Covenanters upon the cathedrals . . . The Saxons remained pagans about one hundred and fifty years, until the arrival of St. Augustine, in 517. What happened to the Druidical worship during that period, we know not; but we cannot suppose it to have revived, even if any Britons had remained to revive it, under the desolation of the Saxon domination, and in defiance of their hostile creed. It seems however likely that the first steps of the British converts to Christianity would have been directed against the symbols of Druidical superstition. We have no record to establish the fact, but what is more likely than that Stonehenge, like similar edifices elsewhere, should have been one of the first objects to experience the wrath of the proselytes against the previous objects of their worship? The partial overthrow of Stonehenge may, perhaps, be referred to some such religious movement, and to about the fourth century of our era."

But for the watchful care of Mr. Henry Browne, who, for so many years, took a loving interest in Stonehenge, and who, "on many occasions, has succeeded in arresting the ravages (worse than those of time) which ruthless hands would have committed," much more injury would probably have been done during a considerable portion of the present century. In his little book on Stonehenge (p. 19), he "exhorts his readers to the respect and veneration justly due to such unparalleled curiosities, and most earnestly entreats them not to contribute to their demolition by taking those chippings of them which the unheeding shepherds of the plain will be ready to provide them with for the consideration of a few half-pence, but rather to become the protectors of them by discouraging every kind of attempt to injure or mutilate them."¹

¹ No paper on Stonehenge could, with justice, omit to make mention of Mr. H. Browne, who, for so many years, was the self-constituted curator of Stonehenge, and, who by his constant watchfulness over this object of his interest and affection, must have preserved it from much injury and mutilation. Sir R. C. Hoare in his "Modern Wilts," (Hundred of Amesbury, p. 52,) says of him that "no one has investigated Stonehenge so minutely as he has, and, by ascending to the summit of the trilithons, he has discovered what was before unnoticed, viz., that each stone was fixed to the other by a groove. He also

THE INCISED STONE.

Since the fact became known that the incision upon the lower side of the impost of the trilithon which the Duke of Buckingham helped to overthrow, was the work of an itinerant mechanic, all

noticed that the small upright stones *behind* the altar were placed closer to each other than in any other parts of the circle, and that a wider interval was left at the entrance." Mr. Browne had his craze, which was that Stonehenge was of the ante-diluvian period, and that the traces of the deluge were to be seen in the direction in which the fallen stones are laid. The following account of him was printed in a Wiltshire newspaper: "Mr. Browne, the author of a work on Stonehenge, was a man of limited means, but of respectable mental attainments, who had been early struck with the magnificence of the remains on Salisbury Plain, and had imbibed a passion for the temple at Stonehenge as absorbing and as powerful as that felt by the young Parisienne for the Belvidere Apollo, or as any one of the Pygmalion-like instances of which so many are recorded. To this, and to its illustrative remains in this neighbourhood, all his thoughts were devoted. He lived under its shadow, he dreamed of it, he endeavoured to trace out the hidden mystery of its existence, he lectured upon its many wonders, and he published a book about it. When engaged on his lectures to the members of the literary institutions that existed some years since in Salisbury, he used to bring his drawings and make his arrangements in the morning, return to Amesbury to dinner, come back with more materials in the afternoon, read his lecture in the evening, and then again walk on his solitary road to Amesbury at night after the conclusion of the meeting, having already walked five-and-twenty miles. But this persevering energy of his character was more particularly exemplified during the construction of his model of Stonehenge. Every stone was modelled on the spot, and the most minute variations in the original carefully noted in his copy. Day after day, and week after week, was he to be found among those memorials of old time—planning, measuring, modelling, painting, in the prosecution of his self-prescribed task, and interrupted only by the necessity of sometimes visiting Salisbury for materials, which he bore home himself, and on foot. The difficulty of making such a copy would not perhaps be great with proper assistance, but this man worked wholly by himself, and we can imagine his self-gratulation on the completion of his labours, when he could exclaim, like the victor of Corioli, 'Alone I did it! I!' From this model he made others on different scales, and the moulds being preserved, these were afterwards sold by his son, together with some of his own drawings equally accurate, to occasional visitors.

"Mr. Browne, though he had completed his work, had not yet found for it a resting-place, and he determined to present it to the British Museum. It was accepted by the trustees, with thanks, and the author chose to have the pleasure of placing it with his own hands in this great repository of the antiquities of the world. Unwilling to trust the model from his sight, and equally unwilling or unable to bear the expenses of the usual modes of travelling, he resolved to walk with it to London; and mounting his model on a wheel-barrow or hand-

interest in the subject has come to an end. In Dr. Thurnam's paper, in the ninth volume of the *Wiltshire Magazine*, will be found a detailed account of the whole affair.

The writer noticed, in October, 1875, that a "broad arrow" had recently been cut on the large stone behind the leaning stone of the largest trilithon. When this shall have lost its fresh appearance, it might, if previously unnoticed, give rise to similar speculations.

THE FALL OF THE TRILITHON IN 1797.

The "Archæologia," vol. xvi., p. 103, contains an account of the fall of some of the stones of Stonehenge, in a letter from William George Maton, M.B., F.A.S., to Aylmer Bourke Lambert, Esq., F.R.S., and F.A.S. It was read June 29th, 1797. The following is the most interesting portion of it: "On the third of the month (January) already mentioned, some people employed at the plough,

truck he set off across the plain with his charge. After a toilsome and almost continuous march of two days and nights (for he only slept for a short time in the day), he arrived on the morning of the third day at the British Museum, showed the letter of the trustees to the porter, wheeled his load into the court-yard, and saw his model safely deposited in the house. He left without staying to be questioned, and was soon on his way home again; but was detained some days on the road by illness brought on by his exertions." He died at Winchester, April 17th, 1839, aged 70 years, while journeying on foot to deliver a course of lectures at Chichester. He wrote, in 1809, a pamphlet entitled "The real State of England;" in 1810, "A brief arrangement of the Apocalypse;" and in 1830, "The critical state of England at the present time." He styles himself "Lecturer on History."

Mr. Browne, in his little book on Stonehenge and Abury, thus describes the conclusion he came to from his observations as to the manner in which the few remaining transverse stones of the outer circle had been connected together: "They were originally connected together throughout the whole circle by thirty stones placed upon the tops of them, which were fitted together at their extremities by corresponding projections and hollows, as shown by Fig. I. in the plate (copied in woodcut): another circumstance, I believe, hitherto unnoticed by the investigators of Stonehenge." The writer regrets having been prevented, hitherto, from verifying, by personal inspection, the foregoing statement, which had approved itself to Sir. R. Hoare.

full half-a-mile distant from Stonehenge, suddenly felt a considerable concussion, or jarring, of the ground, occasioned, as they afterwards perceived, by the fall of two of the largest stones and their impost. This trilithon fell outwards, nearly in a westerly direction, the impost in its fall striking against one of the stones of the outer circle, which, however, has not been thereby driven very considerably out of its perpendicularity. The lower ends of the two uprights, or supporters, being now exposed to view, we are enabled to ascertain the form into which they were hewn. They are not right-angled, but were bevilled off in such a manner that the stone which stood nearest to the upper part of the adytum is 22 feet in length on one side, and not quite 20 on the other; the difference between the corresponding sides of the fellow-supporter is still greater, one having as much as 23, and the other scarcely 19 feet, in length. The breadth of each is (at a medium) 7 feet 9 inches, and the thickness 3 feet. The impost which is a perfect parallelepipedon, measures 16 feet in length, 4 feet 6 inches in breadth, and 2 feet 6 inches in thickness. This impost is considerably more than 11 tons in weight. It was projected about 2 feet beyond the supporters, made an impression in the ground to the depth of 7 inches or more, and was arrested in its tendency to roll by the stone it struck whilst falling . . . One of the supporters fell on a stone belonging to the second circle, which I at first supposed to have been thrown down by it, but which, from recurring to plans of the prior state of the structure, I find to have been long prostrate. The longer of them was not more than 3 feet 6 inches deep (measuring down the middle) in the ground, the other little more than 3 feet. In the cavities left in the ground there were a few fragments of stone of the same nature as that forming the substance of the trilithon, and some masses of chalk. These materials seem to have been placed here with a view to secure the perpendicular position of the supporters. The immediate cause of this memorable change in the state of Stonehenge must have been the sudden and rapid thaw that began the day before the stones fell, succeeding a very deep snow. In all probability the trilithon was originally perfectly upright, but it had acquired some degree of inclination long before the time of its fall. This inclination was

remarked by Dr. Stukeley, though it was not so considerable, I think, as is represented in his north view of Stonehenge."¹

Mr. Henry Browne, in his "Illustrations of Stonehenge and Abury," gives some additional information: "I will here take the opportunity of introducing the account which was given me of the fall of this trilithon, by Dr. Maton, of Spring Gardens, London, when I had the pleasure of meeting that gentleman on the spot, and who, at the time of its fall, resided at Salisbury. About twenty years ago it was the habit of persons, waiting the commencement of fairs in this part of Wiltshire, to take up their abode in Stonehenge for some days, as a defence against the inclemency of the weather. In the autumn preceding the fall of the trilithon, amongst others who availed themselves of this protection were some gipsies, who, not content with a position behind this trilithon on the level ground, made an excavation in the chalk to obtain a lower position. On quitting Stonehenge, the effect produced by this proceeding, was that of causing an extraordinary accumulation of moisture behind this trilithon, in the rainy and snowy season of autumn and winter. The chalk, in this position and under these circumstances, being frozen in the winter, and thawed in the succeeding mild weather, was, in consequence, decomposed. This naturally weakened the foundation of the trilithon on its outward side, towards the west, and it at length, as already stated, fell in that direction, after being observed for two or three days to be out of its perpendicular position."

Mr. Rickman, visiting the place on the fall of the trilithon, noticed that the foundation exhibited nothing remarkable, the two great stones having no artificial support in the ground, and one of them exhibiting an irregular shape of its base, quite unsuitable for stability, as forming the obtuse angle of a rhombus, and that not penetrating more than six feet deep. The accurate juncture of the upper surface of the uprights and the lower side of the transverse stone must have cost much labour, and not less skill than the tenons and mortices: but these surfaces exhibited no mark of tooling.²

¹ In Inigo Jones' North Prospect of Stonehenge this trilithon is represented as inclining outwards considerably.

² See *Archæologia*, vol. xxviii., 411.

FLINT FLAKES FOUND WITHIN THE STONE CIRCLES AT STONEHENGE.

Mr. W. Cunnington, in his "Stonehenge Notes," printed at the end of the eleventh volume of the Magazine of the Wilts A. and N. H. Society, 1869, says: "During a visit to Stonehenge in the summer of last year, Mr. Henry Cunnington found in rabbits' holes round the edge of the altar-stone, and at the edge of the large stone E 2 in Hoare's plan, several flint flakes and a fragment of pottery. The latter is of rude make, slightly burnt, and though evidently very ancient, is not sufficiently distinct to be of much importance. Most of the flakes are decidedly artificial. 'The circular piece,' says Mr. Evans, 'is of a rare form and belongs to the class to which the name of sling stones has been applied.' One flake is undoubtedly ancient, and bears marks of having been well used; but the general appearance of the specimens, with this one exception, is so fresh that suspicions must be entertained as to their authenticity,"¹

Colonel Lane Fox found several worked flints in the rubbish around the trilithons in 1869: "Observing that two or three bare places had been scratched in the soil, apparently by animals, at the foot of the stones, I examined the loose earth carefully, and succeeded in finding the four flints which are exhibited to the meeting [that of the Ethnological Society of London, Nov. 9th, 1869]. Two of these, it will be seen, are perfect flakes, having bulbs of percussion, with ribs and facets at the back" . . . "Besides the flakes, I observed numerous small splinters of flint, such as might well have resulted from the fracture of flint tools, had such been used in the process of dressing the great blocks." Colonel Lane Fox found as many as twenty worked flints in one place close to Stonehenge, "where a small tumulus had been scored by the plough."²

DIGGINGS WITHIN THE PRECINCTS OF STONEHENGE, AND THEIR RESULTS.

Mr. Webb, in "Stoneheng Restored," p. 66, says: "But the sacrifices anciently offered at Stoneheng (already remembered) were

¹ Note by Mr. Cunnington, 1876.—"I believe that all the flakes found in 1869 were purposely placed there. 'Flint Jack' is known to have been at Stonehenge about this time."

² Journal of the Ethnological Society, vol. ii., pp. 2, 3.

Bulls or Oxen, and several sorts of Beasts, as appears by the heads of divers kinds of them, not many years since, there digged up." The same statement is repeated in his "Stoneheng, a Roman Work and Temple," p. 97. Speaking again "of the heads of Bulls or Oxen, of Harts, and other such beasts digged up in or near our Antiquity, which were the relicks of such Beasts as were anciently offered at that Place," he says, in answer to Dr. Charleton, who had spoken of their having been "plowed up in the adjacent fields:" "Those concern immediately our discovery, that have been found in several parts of the Court surrounding Stoneheng itself, and near about it; for besides the abundance of them which were digged up by Dr. Harvey,¹ formerly mentioned, Gilbert North, Esquire, brother to the Right Honorable the Lord North, Mr. Jones, and divers other persons, at several other times; when the Right Noble George, late Duke of Buckingham, out of his real affection to antiquity, was at the charge in King James his days, of searching and digging there, great numbers were found also. And as at all the former time, so in like manner at this same time, were great quantities of burnt coals or charcoals digged up likewise; here lying promiscuously together with the heads, there, in pits by themselves apart, here more, there less." On the next page is an engraving of the cover of the thuribulum (!), which he considers "a notable testimony for what use our Stoneheng was at first erected."

Aubrey, in his "Monumenta Britannica," attributes the partial fall of the leaning stone (marked D 2, in Sir R. C. Hoare's ground plan) to the researches made in the year 1620, by George, Duke of Buckingham, who, when King James the First was at Wilton (the seat of the Earls of Pembroke), "did cause the middle of Stoneheng to be digged, and this under-digging was the cause of the falling downe, or recumbency of the great stone there, twenty one foote long. In the process of this digging they found a great many horns of stags and oxen, charcoal, batterdashers, heads of arrows, some pieces of armour eaten out with rust, bones rotten, but whether of stagg'es or men they could not tell." He further adds, that Philip,

¹ The discoverer of the circulation of the blood.

Earl of Pembroke (Lord Chamberlain to King Charles I.) did say "that an altar-stone was found in the middle of the area here, and that it was carried away to St. James'."¹

Stukeley mentions that "Mr. Thomas Hayward, late owner of Stonehenge, dug about it, as he acquainted Lord Winchelsea and myself. He found heads of oxen and other beasts bones and nothing else." Again he says, "July 5, 1723. By Lord Pembroke's direction, I dug on the inside of the altar about the middle: 4 foot along the edge of the stone, 6 foot forward toward the middle of the adytum. At a foot deep, we came to the solid chalk mix'd with flints, which had never been stir'd. The altar was exactly a cubit thick, 20 inches and $\frac{4}{5}$; but broken in two or three pieces by the ponderous mass of the impost and one upright stone of that trilithon which stood at the upper end of the adytum, being fallen upon it. Hence appears the commodiousness of the foundation for this huge work. They dug holes in the solid chalk, which would of itself keep up the stones, as firm as if a wall was built round them. And no doubt they ramm'd up the interstices with flints. But I had too much regard to the work to dig anywhere near the stones. I took up an ox's tooth, above ground, without the adytum on the right hand of the lowermost trilithon, northward. And this is all the account of what has been found by digging at Stonehenge, which I can give."²

Mr. Cunnington dug so completely under the large prostrate stone

¹ Mr. Cunnington, in the *Wilts Mag.*, vol. xi., p. 349, says "as to the stone said to have been carried away to St. James', in the time of Charles I., we have made some enquiries at St. James' Palace, and are informed on authority of the clerk of the works, that no such stone now exists there." It is very improbable that, if such a stone were removed, it was taken "from the *middle* of the area" of Stonehenge. Inigo Jones would have seen it, and laid it down upon his plan, had it been in that position, when he drew up his account of Stonehenge "by direction of King James, I., in the year 1620."

The "Antiquities of Stoneheng on Salisbury Plain restored" was first published by Mr. John Webb, of Butleigh, Somerset, (who "married Inigo Jones' kinswoman,") in a small folio, in 1655; but few copies were originally printed, and the greater part of the impression was consumed in the fire of London. Inigo Jones died either in 1651 or 1652.

² Stukeley's "Stonehenge," page 32, reprint.

adjoining the agger, within the area, "as to be able to examine the undermost side of the stone, where we found fragments of stag's horns."¹ Further on he says, "In more modern times (since Stukeley's) we have found, on digging, several fragments of Roman, as well as of coarse British pottery; parts of the head and horns of deer, and other animals, and a large barbed arrow head of iron. Dr. Stukeley says that he dug close to the altar, and at the depth of one foot came to the solid chalk. Mr. Cunnington also dug about the same place to the depth of nearly six feet, and found the chalk had been moved to that depth; and at about the depth of three feet he found some Roman pottery, and at the depth of six feet, some pieces of sarsen stones, three fragments of coarse half-baked pottery, and some charred wood. After what Stukeley has said of finding the marl solid at the depth of one foot, the above discoveries would naturally lead us to suppose, that some persons, since his time had dug into the same spot; yet after getting down about two feet, there was less and less vegetable mould, till we reached the solid chalk; some small pieces of bone, a little charred wood, and some fragments of coarse pottery were intermixed with the soil. In digging into the ditch that surrounds the area, Mr. Cunnington found similar remains of antiquity; and in the waggon tracks, near Stonehenge, you frequently meet with chippings of the stones of which the temple was constructed. Soon after the fall of the great trilithon in 1797, Mr. Cunnington dug out some of the earth that had fallen into the excavation, and found a fragment of fine black Roman pottery, and since that, another piece in the same spot; but I have no idea that this pottery ever lay beneath the stones, but probably in the earth adjoining the trilithon, and after the downfall of the latter, fell with the mouldering earth into the excavation. The only conclusion we can draw from this circumstance of finding Roman pottery on this ground is, that this work was in existence at the period when that species of earthenware was made use of by the Britons in our island."²

¹ See page 56.

² *Ancient Wilts*, vol. i., pp. 144, 150, 151. Sir Richard Hoare has spoken in the foregoing paragraph about the finding of Roman pottery. Stukeley has the following about the finding of Roman coins: "In 1724, when I was there,

The following extract is from a letter by Mr. Cunnington, F.S.A., of Heytesbury, dated November, 1802, with which his grandson, Mr. Cunnington, F.G.S., has kindly favoured the writer: "I have during the summer dug in several places in the area¹ and neighbourhood of Stonehenge and particularly at the front of the altar, where I dug to the depth of 5 feet or more, and found charred wood, animal bones and pottery. Of the latter there were several pieces similar to the rude urns found in the barrows, also some pieces of Roman pottery. In several places I found stags' horns. The altar-stone is 16 feet 2 inches long, 3 feet 2 inches wide, and 1 foot 9 inches thick. It was completely broken in two by the fall of the impost of the great trilithon. It was neatly chiseled as you may see by digging the earth from the side."

Mr. Joseph Browne gave to Dr. Thurnam the following account of a digging in front of what is called the altar-stone by Captain Beamish, who undertook the exploration in order to satisfy a society in Sweden that there was no interment in the centre of Stonehenge:

Richard Hayns, an old man of Ambresbury, whom I employed to dig for me in the barrows, found some little worn-out Roman coins at Stonehenge, among the earth rooted up by the rabbits. He sold one of them for half-a-crown to Mr. Merril, of Golden Square, who came thither whilst I was at the place. The year before, Hayns was one of the workmen employ'd by Lord Carlton to dig clay on Harradon hill, east of Ambresbury, where they found many Roman coins, which I saw. I suspect he pretended to find those at Stonehenge, only for the sake of the reward. My friend the late Dr. Harwood of Doctors Commons, told me he was once at Stonehenge with such sort of Roman coins in his pockets, and that one of his companions would have persuaded him to throw some of them into the rabbit-holes: but the Doctor was more ingenuous. Nevertheless were never so many such coins found in Stonehenge, they would prove nothing more, than that the work was in being, when the Romans were here; and which we are assured of already. I have a brass coin given me by John Collins, Esq., collector of the excise at Stanford. The heads of Julius and Augustus avers: the reverse a crocodile, palm branch and garland, COL. NEM., the colony of Nemansus in France. It was found upon Salisbury plain: and might be lost there before the Roman conquest of Britain under Claudius, by people of France coming hither; or in after ages; no matter which" (p. 32). It thus appears that there were *Coin-Jacks* in Stukeley's time, for the distribution in convenient places, if not for the forgery, of these Roman pieces of money.

¹"Taking care not to go too near the stones."

"Some years ago, I do not remember the year, but it was that in which Mr. Antrobus came of age [? 1839], and that there were rejoicings at Amesbury, an officer from Devonport, named Captain Beamish, who was staying at the George Hotel, having obtained the permission of the proprietor, made an excavation somewhere about eight feet square and six feet deep, in front of the altar-stone, digging backward some little distance under it. I remember distinctly the hole being dug through the chalk rubble and rock. Nothing was found excepting some bits of charcoal, and a considerable quantity of the bones of rabbits. Before the hole was filled up, I buried a bottle, containing a record of the excavation."

It thus appears that there have been already many and extensive diggings within the circles and the vallum, and that the result has been inconsiderable, beyond the throwing down of one of the trilithons. It has been recently proposed to examine "the flat surface within the stone circles," and perhaps "the ditch of the earthwork surrounding the structure."¹ It would be well, therefore, to consider carefully the incidental notices of what has been already done in this way, and to calculate whether any future examination of the soil would be likely to be attended with more satisfactory results. The writer ventures to express his belief that the only important result would be the determination of the non-sepulchral character of the work. But even the discovery of human remains within the circles would no more prove that Stonehenge was constructed to be a burial place, than the finding of bishops' and other peoples' bodies in cathedrals would be decisive that these buildings had not been erected with the primary object of promoting the worship and service of Almighty God.

Warton, in his "Parochial History of Kiddington," says of Rollrich, that some years ago, "Its area, which is without a tumulus, was examined to a considerable depth by digging, and no marks of inhumation appeared;" and Stukeley had previously mentioned that

¹ Colonel Lane Fox "on the Proposed Exploration of Stonehenge by a Committee of the British Association."—*Journal of the Ethnological Society of London*, vol. ii., p. 1, 1869.

Ralph Sheldon, Esq., dug in the middle of the circle at Rowlich, but found nothing. Arbor-love, in Derbyshire, contains nothing sepulchral, nor do the Cornish circles of Boscawen-un and Botallack. In 1861 some Edinburgh archæologists made excavations within the great circle known as the "Stones of Stennis," in Orkney, but could not find a trace of human sepulture. The same result would probably attend the examination of the area of Stonehenge.¹

¹ It is to be hoped that the diggings at Silbury Hill, and within the large circle at Abury, will have set at rest, for ever, the questions relating to the connection of the former with the Roman road, and to the sepulchral character of the latter. To the writer, when spending some days at and near Abury in 1856 and 1857, the course of the Roman road through the cultivated fields, was, on sunny afternoons, unmistakeably apparent. From Mr. A. C. Smith's interesting account of these investigations, he extracts the following: "Although we have found no hidden treasures, and made no fresh discoveries, the result of our work was on the whole highly satisfactory to us; for we considered that we had fairly settled the question mooted by Mr. Fergusson, but which neither of us ever entertained for one moment, that Avebury was a vast graveyard, and that human bones would be disinterred, if search were made.

"We had made excavations in fourteen different spots within the area, some of them of no trifling dimensions, but not one single human bone had we found; quantities of bones of the sheep, the horse, the ox, we had disinterred, many of which, not far from the surface, were of comparatively recent date: glass and pottery too, *near the surface* told their tale of modern times; but the fragments of pottery which we brought to light from our deeper cuttings were invariably of the British type. Thus we flatter ourselves that our exertions have not been thrown away: we trust we have once for all disposed of the novel theory as to the great charnel house of the ancient Britons; while on the other hand we have unmistakeably proved the site of several of the most important stones long since broken up and carried away; and we have probed the great surrounding embankment to its very core, laying bare the original surface, and closely examining all the materials of which it is composed. We also found three stones not mentioned by recent writers. Ten yards to the east of the standing stones, nearest on the left hand side of the south entrance to Avebury, is a stone which is not laid down in Hoare's map. The dry summer of 1864, and the heat of some part of 1865, had killed the turf over the stone, and it now shows above the surface. Twenty yards in a north-westerly direction from the next standing stone ('m' in the map) another stone may be found under the turf, and ten yards from this again is yet another."—*Wilts Arch and Nat. Hist. Mag.*, vol. x., p. 214.

There are doubtless many stone circles within which interments have been found, and it may be that in these the sepulchral character was the first and only character attached to them by their builders; but there are very many others in

THE AVENUES AND CURSUS.

Neither Webb nor Aubrey appear to have found out the avenues or cursus, and Stukeley might fairly claim to have been the discoverer of them both. As such, he shall describe them: "The avenue of Stonehenge was never observ'd by any who have wrote of it, tho' a very elegant part of it, and very apparent," and again, "About half a mile north of Stonehenge, across the first valley, is the cursus or

which have been found no traces of any interment, and it may be fairly believed that they were set up for some object of more general importance.

In the very interesting volumes by Mr. E. H. Palmer, entitled the "Desert of the Exodus," he tells us of "huge stone circles in the neighbourhood of Mount Sinai, some of them measuring 100 feet in diameter, having a cist in the centre covered with a heap of larger boulders. These are nearly identical in construction with the 'Druidical Circles' of Britain. In the cists we found human skeletons, the great antiquity of which was proved not only by the decayed state of the bones, but by the fact that the bodies had in every case been doubled up and buried in such a position that the head and knees met. There are also small open enclosures in the circles, in which burnt earth and charcoal were found." (p. 140.) At page 337, we have his account of digging into a stone circle in another part of the desert and finding charcoal and burnt earth "in what I have before alluded to as the sacrificial area, but nothing at all in the central cairn." Some of our archæologists are intent upon maintaining that all cromlechs have been at some time or other covered with earth, and that these, and all stone circles, have been sepulchral; but these exclusive and one-sided views are not in harmony either with reason or experience.

The writer takes this opportunity of saying that a note at page 38 of "Abury Illustrated," respecting "sacrificial" cromlechs, was inserted at the wish of a friend; but that it is not, and was not, in accordance with his own judgment in the matter.

The mention of Silbury Hill suggests that the following poem, by Southey, should have a place in the Wiltshire Archæological and Natural History Magazine:—

"INSCRIPTION FOR A TABLET AT SILBURY HILL.

This mound in some remote and dateless day
Rear'd o'er a Chieftain of the Age of Hills,
May here detain thee, Traveller! from thy road
Not idly lingering. In his narrow house
Some warrior sleeps below, whose gallant deeds
Haply at many a solemn festival
The Scauld hath sung; but perish'd is the song
Of praise, as o'er these bleak and barren downs
The wind that passes and is heard no more.
Go, Traveller, and remember when the pomp
Of Earthly Glory fades, that one good deed,
Unseen, unheard, unnoted by mankind
Lives in the Eternal register of Heaven.

1796."

hippodrom, which I discover'd, August 6, 1723." He quotes Macrobius to the effect that "upon holy days dedicated to the gods, there are sacrifices, feasts, games and festivals. For a sacred solemnity is, when sacrifices are offer'd to the gods, or holy feastings celebrated, or games perform'd to their honour, or when holy days, are observ'd." "This great work" (the cursus), he continues, "is included between two ditches running east and west in a parallel, which are 350 foot asunder. The cursus, which is two miles long, has two entrances (as it were): gaps being left in the two little ditches. And these gaps, which are opposite to each other, in the two ditches, are opposite to the straight part of Stonehenge avenue. . . . The east end of the cursus is compos'd of a huge body of earth, a bank or long barrow² thrown up nearly the whole breadth of the cursus. This seems to be the plain of session, for the judges of the prizes and chief of the spectators. The west end of the cursus 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 obscure barrow or two, round which they return'd, as it were a *meta*. The cursus is directly north from Stonehenge; so exactly, that the meridian line of Stonehenge passes precisely through the middle of it." To return from the cursus to the avenue, we must not neglect Stukeley's description of the latter: "This avenue extends itself, somewhat more than 1700 feet, in a straight line, down to the bottom of the valley, with a delicate descent. I observe the earth of the ditches is thrown inward, and seemingly some turf on both sides, thrown upon the avenue, to raise it a little above the level of the downs. The two ditches continue perfectly parallel to the bottom, 40 cubits asunder. About midway, there is a pretty depression, natural, which diversifies it agreeably When I began my inquiries into this noble work, I thought it terminated here, and Mr. Roger Gale and myself measur'd it so far with a chain. Another year I found it extended itself much farther. For at the

¹ Page 41, ed. 1740.

² This was examined by Dr. Thurnam unsuccessfully as regards primary, but successfully as regarded secondary, interments.

bottom of the valley, it divides into two branches. The eastern branch goes a long way hence, directly east, pointing to an ancient ford of the river Avon. The western branch from this termination at the bottom of the hill 1000 cubits from the work at Stonehenge, goes off with a similar sweep at first, but then it does not throw itself into a strait line immediately, as the former, but continues curving along the bottom of the hill, till it meets, what I call, the *cursus*."

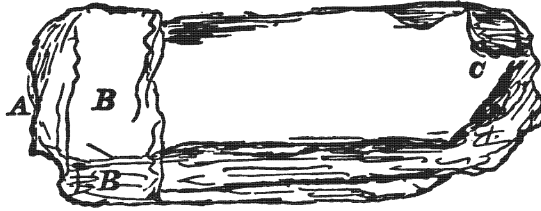
This interesting portion of the Stonehenge system deserves to have the additional light thrown upon it which comes from the careful survey of the Wiltshire baronet, and Mr. Crocker: "The avenue is a narrow strip of land, bounded on each side by a slight agger of earth. On referring to the map of the environs of Stonehenge, where its situation and form will be best seen, you will perceive that it issues from the N.E. entrance of the temple¹; then crossing the turnpike road, proceeds in a straight line towards a valley, where it divides into two branches, the one leading in a gentle curve towards the circus; the other directing its course in a direct line up the hill between the two rows of barrows, planted with fir trees. The most northern group has been called by Stukeley, the old King Barrows; the opposite group, the New King Barrows, and under these titles I have distinguished them in my map. The former are lower and flatter in their construction than the latter, which increase in height with the ground towards the south. In the eye of the antiquary, they are much disfigured by the clumps of Scotch firs planted upon them, though at the same time secured from the researches of his spade. More than an usual regularity is preserved in the disposal of these tumuli; and I must here call attention to the map, where

¹ The writer's valued friend and pastor, the Rev. Prebendary Scarth, in an address made by him to the members of the British Association for the advancement of Science, when they visited Stonehenge, from Bath, in 1864, said that "an avenue of stones had led up to these circles," but there are certainly no indications, as far as the writer can judge, of any stones having flanked the present avenue. Aubrey, referring to the pricked lines on his plan from *a* to *ω*, says that they "signifie the *Imaginarie* Walk of stones which was there heretofore" (p. 33).

they will be seen ranged in a semi-circular line, and a passage decidedly left for the avenue, of which traces are still evident as far as this spot; but it has afterwards been obliterated by tillage in its passage through Amesbury Park.

“Here again we have another proof of Stonehenge and its avenue having been formed prior to the surrounding barrows, and we see a rude attempt at symmetry in the seven barrows arranged in two separate lines, which flank the avenue (like wings) on its ascending the summit of the hill. . . . The length of the avenue from the ditch round Stonehenge to the spot where it branches off is 594 yards; and from thence it is visible about 814 yards up the hill. The northern branch appears undoubtedly to lead towards the cursus, though its traces become very faint soon after it has quitted the eastern line up the hill: it seems to have pursued a bending course towards the cursus, but I could not perceive that it pointed to any decided opening in that work.

“The cursus, according to Mr. Crocker’s measurement, is in length 1 mile, 5 furlongs, and 176 yards: its breadth 110 yards. At the distance of 55 yards from the eastern end, which is terminated (as described by Stukeley), you perceive the termination of the course rounded off, as if the horses or chariots made a turn at this spot. At the distance of 638 yards from this end, are two entrances into the area of the cursus, opposite to each other; and 825 yards further on, the vallum has been much broken down by the continual track of waggons; and to this spot Dr. Stukeley supposes the northern branch of the avenue from Stonehenge pointed.” Sir R. Hoare considered that the slight bank running across the cursus at the west end formed a part of the general plan of these places of amusement, as he found a similar one in the smaller adjoining circus. The barrows he did not think had been “*metæ*,” as Stukeley supposed, but that they had stood on that ground long before the formation of this course, and that, being between the bank and the end, they could not have impeded the races. From the similarity of the plan both of the large and small circus to that of a Roman circus, Sir R. Hoare felt inclined to think that they were not of British origin, but that they had been formed after the settlement of the Romans in our island.



Copy of the sketch made of the "Slaughtering Stone,"
by Mr. Cunnington, F.S.A., 1802.—See page 57.



Enlarged copy of Mr. H. Browne's wood-cut, 'showing
the manner in which the transverse stones at Stonehenge
were connected together.—See page 79, note.

NOTE.—Mr. Cunnington has, since the note at page 67 was printed, examined the specimen found by Dr. Thurnam in barrow No. 170, and which is in the British Museum. He thus describes it:—"It is of fine micaceous sandstone, it is true, and so far resembles the 'altar' stone at Stonehenge; but it is of lighter colour, and so does *not* 'precisely agree' with the altar stone. It is an implement, probably a whetstone, and is moreover entered by Dr. Thurnam as having been found in a *secondary* interment in the barrow. No date, even comparative, can be given to it, and for the purpose of our Stonehenge argument, it is useless."

Part III.

By whom were these Stones set up?

IN all countries, in the earliest times, the stone or earthen circle appears to have been the mode of expressing the intention to set apart a particular spot as a "*locus consecratus*," either for worship, or sepulture. The circle was the form of the sun and moon in their completeness, and it was suggestive of infinity. The impressiveness of the stone circle would of course depend upon the size of the stones which the district produced, but where these were large, they would naturally be made use of in preference to smaller ones. It is not necessary to suppose that the constructors of Abury, Stanton Drew, Rollrich, and the numerous stone circles of Devonshire, and Cornwall, required to be taught this art by foreigners. Just as their daily wants would impel them, in common with all other early races, to shape flints into weapons and instruments, so would their religious instincts suggest to them, as to others, the particular form in which they might best give expression to them. We may safely assume that the indigenæ of all countries would spontaneously set up the rude stone circle, without any suggestion from external sources.

In the case of Stonehenge, however, there is a considerable artistic advance, which is suggestive to many of a later period of construction, and of foreign influence; and accordingly its erection has been ascribed to the Phœnicians, to the Belgæ, to the Romans, to the Romano-British, to the Saxons, and to the Danes.¹

¹ Jacob Bryant in the 3rd vol. of his "Analysis of Antient Mythology," p. 532—3 (1776), claims for Stonehenge a very high antiquity: "We have many instances of this nature [poised stones] in our own country, and they are to be found in other parts of the world; and wherever they occur we may esteem them of the highest antiquity. All such works we generally refer to the Celts,

However probable it may be that the Phœnicians carried on a direct trade with the south western portion of Britain, it is not an established historical fact that they did so,¹ and any such intercourse would probably have been confined to the sea-coast. If any Phœnician influences reached the interior of Britain it would probably have been through the Veneti, who inhabited Armorican Gaul, the district in which Karnac is found, and who, in the time of Cæsar, were carrying on a brisk trade with the British.

Aylett Sammes² (*inadvertently omitted at page 40*), appears to have been the first who broached the opinion that the Phœnicians were connected with Stonehenge. In vol. i., of his "Britannia Antiqua Illustrata," 1676, p. 395, is a treatise of the ancient monument called Stonehenge. It is very prosy, and the gist of it is, that he

and to the Druids; under the sanction of whose names we shelter ourselves, whenever we are ignorant and bewildered. But they were the operations of a very remote age; probably before the time when the Druids or Celtæ were first known. I question, whether there be in the world a monument, which is much prior to the celebrated Stone-Henge. There is reason to think that it was erected by a foreign colony; one of the first which came into the island. Here is extant at this day, one of those rocking stones, of which I have been speaking above. [P] The ancients distinguished stones erected with a religious view by the name of amber; by which was signified anything solar and divine. The Grecians called them 'Πετρæ Αμβροσιαί,' Petræ Ambrosiæ; and there are representations of such upon coins. . . . Stonehenge is composed of these amber-stones; hence the next town is denominated "Ambrosbury:" not from a Roman Ambrosius; for no such person existed; but from the Ambrosiæ Petræ, in whose vicinity it stands."

¹ Mr. C. T. Newton, of the British Museum, concluded a lecture on Phœnician Art in Britain, given at the Annual Meeting of the Archæological Institute, at Dorchester, in 1865, "by reverting to the question whether the Phœnicians had ever landed on the coast of Britain. This question it will be better to consider still in abeyance. What is wanted for its ultimate solution is a diligent notation of facts. The examination of barrows in the southern counties should be carried on with the most minute care, and the names of places along the coast should be analyzed by the tests of modern philology; for, if the Phœnicians frequented any portion of the British Coast, it is probable that they would have given names to the more important harbours and promontories, as they did in Africa and Spain."—*Builder*, August 26th, 1865.

² Aylett Sammes was of Christ's College, Cambridge, and of the Inner Temple. Wood in his "Athenæ Oxonienses" states that the real author of the work was Robert Aylett, L.L.D., a master in chancery, who was Sammes' uncle, and left him his papers.

considers that the Phœnicians were the giants of the "Chorea Gigantum," and that the *art* of erecting these stones, instead of the stones themselves, was brought from the farthest parts of Africa, the known habitations of the Phœnicians. Sir William Betham (in the "Gael and Cymbri," 8vo., Dublin, 1834) has advocated the same opinion, but he considered that the Phœnicians were preceded in the occupation of both Britain and Ireland by the Caledonians, afterwards called the Picts, whom he conceives to have been a people of Scandinavian origin, the Cimbri of antiquity. The Phœnicians he considered to be the same people with the Gael or Celts.

Of the Belgæ, and their probable connection with Stonehenge, the writer will speak presently.

Some have supposed that Stonehenge was constructed by the Romans during their occupation of Britain. But the Romans preferred the plains and valleys for their villas and temples to the hill-tops and cold downs. It is perfectly true that there was a continuous Roman occupation of the Mendip Hills, as evidenced by the remains of their amphitheatre, and by the considerable number of coins, fibulæ, incised stones, etc., which are constantly being found, especially at Charterhouse; but to such utilitarians as the Romans, it was a matter of importance to occupy these heights, in order that they might derive the full advantage accruing to them from the smelting of lead, and other metals, by the native and subject population. But neither was Salisbury Plain the site which Romans would have selected for the erection of a temple, nor was the style of Stonehenge that which would be adopted by a Roman architect. In Gaul they built such temples as those at Nîmes; in the west of Britain they built to Sul Minerva such a temple as that of which the remains may still be seen at Bath. Moreover, the Romans were wont to make their stones "vocal," as Bolton quaintly puts it, "by inscriptions," or by sculpture. Much stress is often laid upon the silence of Roman writers respecting the megalithic structures of Britain, and Mr. Herbert and others argue from this¹ that they must therefore be of post-Roman date;

¹ "Humboldt confirms a statement I have often made, that we dare not draw too much from the silence of an author. He refers to three weighty and quite undeniable facts, to which there is no testimony in the very places where we

but the Caledonian Wall of the Romans has received but scanty mention from their own historians; and the megalithic works in Gaul are passed over by them in silence as complete as those in our own island. To the writer, the best reason for the absence of any notice of Stonehenge by the Romans, is this; that to any educated Roman who was familiar with the grand and magnificent works of Rome and the neighbourhood, under the late Republic and early Empire, such a work would appear to be rude in form, puny in effect, and scarcely worthy of any special notice. To Mr. Herbert, however, the rudeness and uncouthness of the Stonehenge structure would cause it to have an especial claim upon the attention of the Romans "Nothing could be more new and admirable to the eyes of a Greek or Roman than the sight of structures, so rude and uncouth, and yet so stupendous."¹

Mr. Herbert's theory, as propounded in his "Cyclops Christianus" (1849), is that on the lapse of the Britons into a kind of heathenism after the Romans had left Britain, "groves of upright stones were substituted by them for the oak-groves of obsolete Druidism (as Carnac was a grove of the Armorican Britons after Christianity and the rows of stones their walks of sacred groves); that when Britain became free from Roman rule, Ambresbury appears to have been the place to which the national councils were summoned by the king, where the independence of the island was celebrated by joyous festivities, and where the rites and orgies of its fanatics were solemnized. There kings were elected, anointed, and crowned; and there also buried." But it may be asked whether the Romano-British, after the departure of the Romans, had ever a period of sufficient

should most certainly expect it. In the Archives of Barcelona there is no trace of the triumphant entrance received by Columbus there. In Maroo Polo there is no mention of the Chinese wall. And in the Archives of Portugal there is nothing about the voyages of Amerigo Vespucci in the service of that crown." Dr. Luthardt's "St. John the author of the Fourth Gospel," 1875.

¹ Mr. Rickman, in "Archæologia," vol. xxviii, p. 411, considered that Abury was constructed "not earlier than the third century of the Christian æra, and that the more difficult operations requisite for the formation of Stonehenge may be assigned to the next century, or, (to speak with due caution) that this temple was completed before the final departure of the Romans from Britain."

peace and quietness in which to build Stonehenge. Even before the Romans left, the Saxons were ravaging the coasts of Britain. There is reason to believe that, during this period, Britain was torn with civil quarrels, "while its Pictish enemies strengthened themselves by a league with marauders from Ireland (Scots, as they were then called), whose pirate boats were harrying the western coast of the island, and with a yet more formidable race of pirates who had long been pillaging along the English Channel. These were the English."¹ Under any circumstances, as Dr. Thurnam says, it was scarcely conceivable that the Romanised Britons would have erected these rude masses of stone, when they had such examples before them of architectural skill and beauty as existed at Bath and other Roman cities in this country; or, as Dr. Guest puts it, "I would ask the archæological reader whether he thinks it comes within the limits of a reasonable probability that men who had for centuries been familiarized with the forms of Roman architecture, could have built Stonehenge?"²

Had Stonehenge owed its erection to any event connected with the Saxons, we should doubtless have had some mention of it. Dr. Guest³ says, "It has always appeared to the writer most unreasonable to doubt, that from their first arrival in the island, our ancestors had *some* mode of registering the events of their history. From these rude memorials were probably formed more perfect registers, which gradually swelled into the chronicles we now possess. The oldest extant copy of the Saxon Chronicle was written shortly before the year 900, or at the close of Alfred's reign; but we know that some of its entries were copied, almost *verbatim*, from chronicles which must have been in existence before the time of Bede, and there are others which may have been written at a time when Hengest and Ambrosius were yet rivals."

The Saxons would probably have left some record of their connection with Stonehenge if they had constructed it, or if any event

¹ Green's "History of the English People," p. 6.

² Archæological Journal," 1851, p. 155.

³ "On the Early English Settlements in South Britain."—Salisbury Volume of Arch. Institute, p. 46.

with which they had been associated had led to its construction. Not to press, however, too far, the absence of written records, we may fairly say, that even if their political position had been favourable to such undertakings, the Saxons would hardly have built a stone temple in the centre of a British necropolis; and that if they had done so, it would have been, to a certain extent, surrounded by Saxon-graves, as well as by British; but no traces of Saxon interment are here to be found. It has been urged, too, that they would never have called it by the ignominious name of "Stone Gallows," if they had themselves erected it.¹

Of the Danes, as the architects of Stonehenge, it will be enough to say, with Warton,² that, "during their temporary visits and un-matured establishment, they had not leisure or opportunities for such laborious and lasting structures, however suitable to their rude conceptions," or, with Mr. Herbert, that "the advocates of the Danes, as the builders of Stonehenge, ascribe to a transitory irruption the performance of some settled government."³

And here it may be as well to notice the opinions of those, who having made Indian Antiquities their study,⁴ have come to the

¹ Stukeley, p. 7, reprint.

² History of Kiddington, p. 70.

³ Cyl. Chr., p. 2.

⁴ Mr. Max Müller, writing about the great resemblance of Indian cromlechs, cairns and kistaevens, to those of Cornwall, Ireland, and Scotland, and the frequency with which Indian officers speak of them as if they were Celtic or Druidical, says:—"All these monuments in the South of India are no doubt extremely interesting, but to call them Celtic, Druidical, or Sythic, is unscientific, or, at all events, exceedingly premature. There is in all architectural monuments a natural or rational, and a conventional, or it may be, irrational element. A striking agreement in purely conventional features may justify the assumption that monuments so far distant from each other as the cromlechs of Anglesea and the 'Mori-Munni' of Shorapoor owe their origin to the same architects, or to the same races. But an agreement in purely natural contrivances goes for nothing, or, at least, for very little. Now there is very little that can be called conventional in a mere stone pillar, or in a cairn, that is, an artificial heap of stones. Even the erection of a cromlech can hardly be claimed as a separate style of architecture. Children, all over the world, if building houses with cards, will build cromlechs; and people, all over the world, if the neighbourhood supplies large slabs of stone, will put three stones together to keep out the sun or wind, and put a fourth stone on the top to keep out the rain. Before monuments like those described by Captain Meadows

conclusion that Stonehenge owes its origin to the Brahmins, and that it was a temple of Boodh.¹

In the appendix to "Asiatick Researches," vol. ii., Calcutta, 1790, p. 488, Mr. Reuben Burrow writes as follows: "From the aforesaid country (the Bengal district) the Hindoo religion probably spread over the whole earth: there are signs of it in every northern country, and in almost every system of worship: in England it is obvious: Stonehenge is evidently one of the temples of Boodh; and the arithmetic, the astronomy, astrology, the holidays, games, names of the stars, and figures of the constellations; the ancient monuments, laws, and even the languages of the different nations have the strongest mark of the same original. . . . That the Druids of Britain were Brahmins is beyond the least shadow of a doubt, but that they were all murdered and their science lost, is out of the bounds of probability; it is much more likely that they turned Schoolmasters and Freemasons and Fortune-tellers, and in this way part of their sciences might easily descend to posterity, as we find they have done."

Mr. Maurice, in the sixth volume of his "Indian Antiquities," (1801,) discusses at length the resemblance between the doctrines and forms of worship of the Druids and those of the Brahmins, and comes to the conclusion that at some remote period, the two orders were united, or at least were educated, in the same grand school with the magi of Persia and the seers of Babylon. "To satisfy ourselves that the race who erected the stupendous circular temple of Stonehenge were a tribe of Brachmans, of the sect of Boodh, we have only to call to mind the peculiar predominant superstition of that tribe, which, according to Lucian, was the adoration of the sun, as a secondary deity, in a circular dance, expressive of his supposed revolution:

Taylor can be classed as Celtic or Druidical, a possibility, at all events, must be shown that Celts, in the true sense of the word, could ever have inhabited the Dekhan. Till that is done, it is better to leave them anonymous, or to call them by their native names, than to give to them a name which is apt to mislead the public at large, and to encourage theories which exceed the limits of legitimate speculation."—"Chips from a German Workshop," iii., 281—2.

¹ The Welsh Triads connect the British Isles with Ceylon, which was the great seat of Buddhism.—See Borlase's History of Cornwall, c. xxii.

and to attend to the mode after which that sect principally represented their favorite deity." He quotes from Pliny (Nat. Hist. lib. xxx. cap. i.) the following: "Britannia hodie eam (Magiam) attonite celebrat tantis ceremoniis, ut cum Persis dedisse videri possit." "The famous circular stone monuments of the Druids so numerous in Britain, were, doubtless, intended to be descriptive of astronomical cycles, by a race, who, not having, or politically forbidding, the use of letters, had no other permanent method of instructing their disciples, or handing down their knowledge to posterity. For the most part the stone pillars which compose them are found to be *twelve* in number, alluding to the twelve months; and many to consist of *thirty*, in reference to the number of years, which, according to the Druids, formed an age or generation, and was one of their favorite cycles, or else to that of the days of which the ancient lunar month consisted."

Mr. Fergusson, in the "Quarterly Review," No. 215, gives the following as the summary of his argument for the Buddhist origin of Stonehenge: "There are few chapters in the history of the world at present so dark as that which treats of the doings of the Celtic races of Britain before the advent of the Saxons, and none to which the new science of ethnography is likely to be of more value. All however which concerns us at present is to know that Buddhism, in some shape or other, and under some name that may be lost, did exist in Britain before the conversion of its inhabitants to Christianity. If this has been made clear, a great step has been gained in the elucidation of the antiquities of this illiterate people. If we may venture to turn the lamp of Indian Buddhism on these hitherto mysterious monuments, we see at once what was meant by the inner choir at Stonehenge by comparing it with Sanchee and elsewhere. We are no longer puzzled by the small granite monoliths, standing unsymmetrically between the two original groups, and inside the principal, for we can at once assume them to be the danams of succeeding votaries, offered after the temple was finished; and we can easily see how it came to be a cenotaph, or memorial church, dedicated to those who died and were buried at Amesbury. . . . There is, in fact, no winding in the labyrinth through which this thread might not conduct us in safety, and nothing so mysterious

that we might not hope by these means to understand it. But to effect this end, explorations must be made afresh, and researches set about in a purpose-like manner, not aimless gropings in the dark, such as alone have yet been undertaken." Mr. Fergusson is of opinion "that all the great stone monuments of this country belong to the period that elapsed between the departure of the Romans and the conquest of the country by the Danes and Saxons—to that great Arthurian period to which we owe all that we know of the Celtic race, and which seems to have been their culminating point in the early form of their civilization. In France, where the Saxons never went, the Celts, seem to have retained their old faith and old feelings to a much later period. But even if these propositions are not fully admitted, their rejection does not affect the conclusion that Stonehenge itself was erected by Aurelius Ambrosius, who reigned from about 464 to 508 A.D., and who raised it as a memorial to those who fell in the Saxon war."

Let us now revert to the Belgæ, who, as the known occupants of that portion of Britain in which Stonehenge is found, at the time of Julius Cæsar, deserve to have a full and fair consideration. Dr. Guest (whom it would be an impertinence to praise), has paid much attention to the incursions of this people into the south of England, and in his article on the "Belgic Ditches and the probable date of Stonehenge" (*Journal of the Arch. Institute*, vol. viii.), has propounded his views as to their gradual acquisition of territory, their ultimate establishment within the country bounded by the Wansdyke, and their erection of Stonehenge as their "*locus consecratus*." Dr. Guest was not, however, the first to broach this opinion with regard to Stonehenge, for the Rev. Richard Warner,¹ the historian of Bath, was the person, according to the Rev. W. Lisle Bowles,² who started

¹The Rev. Richard Warner was born 1763, and died at Chelwood, near Bristol, of which place he was rector, at the advanced age of 93, in 1857. He was for twenty-three years Curate of St. James', Bath, and while resident in that city, he wrote its history in a quarto volume, 1801; "A walk through some of the Western Counties of England," 1800; "Excursions from Bath," 1801; "Bath Characters," 1807; and other works.

²Hermes Britannicus, 1826, p. 123.

the idea—in his opinion, a most happy one—that the Belgæ, having taken this (the southern) part of the country from the Celts as far as Wansdyke, raised this monument of Stonehenge in rival magnificence to that of Abury. According to Stukeley, the Belgæ, as they gradually expelled the British tribes who preceded them, constructed successive lines of defence—Combe Bank, Bokerly Ditch, the ditch immediately north of Old Sarum, and Wansditch. Warton supposes that there were not less than seven of these ditches. Dr. Guest considers that as such lines of defence would require an organized body of men to guard them, and the maintenance of such a force would be beyond the means of races only imperfectly civilized, the proper character of these ditches is that of boundary lines; and that the number of them has been exaggerated not only by Warton, but even by Stukeley. “It may be asked,” he says, “what right have we to assume that the Belgæ overspread the south of Britain, in successive waves of conquest, such as are pre-supposed in the hypothesis we are considering? The only ground for such a hypothesis, that I am aware of, is contained in Cæsar’s statement, ‘*Maritima pars ab iis (incolitur) qui prædæ, ac belli causâ Ex Belgio transierunt qui omnes fere iis nominibus civitatum adpellantur quibus orti ex civitatibus eo pervenerunt, et bello inlato ibi remanserunt atque agros colere cæperunt.*’ (B.G. i., 4.) It may perhaps be inferred from this passage, that there was a succession of predatory inroads, some of which were followed by Belgic settlements; and when in the district which we know to have been colonized by the Belgæ, we find successive lines of boundary evidently made by a people inhabiting the sea-board, to separate themselves from the tribes of the interior, it may, I think be admitted that the hypothesis advanced by Stukeley and accepted by Warton, is, to say the least, not an unreasonable one. If we attempt to trace the progress of Belgic conquest by the light of Welsh tradition, we shall be disappointed. The all but silence of the Triads, with respect to a people who fill such a place in history, is one of the most puzzling circumstances connected with these mysterious records. The Triad, which mentions the three refuge-seeking tribes, tells us the first of these tribes came from Galedin, and had lands allotted to them in the Isle of Wight. Welsh

scholars consider Galedin to mean the Netherlands, and perhaps, we may conclude, that according to Welsh tradition, the Belgæ came as refugees to this country, and were first located in the Isle of Wight—driven, it may be, from their own country, by some inundation of the sea, an accident which appears to have been the moving cause of several of those great migrations we read of in Roman history. It is clear from Cæsar, that for some centuries before Christ, the Belgæ were the most energetic and powerful,—and among half-civilized races, this means the most aggressive,—of the Gaulish tribes; and we can have little difficulty in supposing, that the fugitive Belgæ, with the aid probably of their continental brethren, might soon change their character of refugees into that of assailants. Of the inlets, opposite the Isle of Wight, by which the mainland could be assailed, Tweon-*ea* (now Christchurch) at the mouth of the Stour and the Avon, appears to have been one of the most important in the earlier periods of our history.¹ Here, it would seem, the Belgæ landed. The uplands in the neighbourhood are barren, but the vallies rich, and the Belgæ, we may presume, were soon in possession of the pastures along the Stour, as far as the neighbourhood of Blandford. This town lies in a kind of defile, over which, at that period, the woodlands of Cranbourne Chase, in all probability, extended. At this wooded gorge the Britons seem to have held their own, and the course of Belgic conquest to have been diverted—in the direction afterwards followed by the Roman road and the modern railway—into the vallies of the Piddle and the Frome. We may now ask, whether there be any earthworks which might serve as boundaries to the district we have thus marked out. In the first place, we observe between Holt Forest and Cranbourne Chase the well-known earthwork called Bokerley-ditch, shutting in from the northward the rich valley drained by the Wymburne-brook. From Bokerley-ditch the boundary may have followed the outline of Cranbourne Chase, have crossed the Stour south of Blandford, and then run to the north-westward along Combe-bank. There were also some years back 'in

¹To illustrate this portion of the paper the writer has had recourse to Dr. Guest's map appended to his paper on the "Belgic Ditches," in vol. viii of the "Archæological Journal," and has had it copied.

the road from Bindon to Weymouth a great ditch, like Wansdike, for several miles.' Hutchins' 'Dorset,' i., 217. No such ditch is now visible on this line of road, but, after a long day's search, I succeeded by an accident in finding its mutilated remains between the Frome and Owre-brook. The bank was to the *eastward*, and I have little hesitation in regarding this dike as a portion of the western boundary of the first Belgic conquest. What course it took to join Combe-bank, is, at present, only matter for conjecture; but there are reasons for believing, that fragments of it still exist in the neighbourhood of the Piddle river and its tributaries."¹

"The second Belgic conquest," continues Dr. Guest, "may have included the downs of Hants and South Wiltshire. The narrow valleys that intersect the latter meet in the neighbourhood of Old Sarum (Sorbiadunum) which must always have been, what in military language might be termed, the *key* of the district.

"North of Heytesbury I found an ancient boundary-line—one clearly of British origin, and *perhaps* anterior to the Roman conquest. I traced it from the west of 'Knook Castle' to within a couple of

¹ Mr. C. Warne, F.S.A., in his "Ancient Dorset," (p. 4.) says. "Of the many great works of early ages in Dorset, none can be said to have retained a more tenacious hold of the surface than this great barrier called Bockley (or Bokerley Dyke); for, while other Celtic works, as Woodbury and similarly entrenched hills, are almost obliterated, this fine old Dyke still stands out in all the freshness of its pristine grandeur,—a wonder of the present, and a monument of a past age, untouched by the hand of time, and but slightly by that of man. This work is so stupendous, and of such a bold aspect as to challenge a parallel in any of the great Dykes which intersect other parts of this kingdom, or exist in other countries.

"Some idea of the magnitude and strength of Bockley may be understood from the fact, that it measures 43, and in some places 50, feet from the base of the fosse on the Wiltshire side to the apex of the rampart, and from 24 to 30 feet thence to the level of the ground on the Dorset side." (p. 7.)

Mr. Warne, in his valuable work, gives the following extract from Aubrey's "Monumenta Britannica," p. ii., p. 64: "Over Blagdon Hill, west of Merton [Martin] there runnes a great crooked ditch, which comes from Cranborne Chase. J. Golden told me it is called Grimsditch, quære, how far it runnes? It parts Dorsetshire from Wiltshire." "Aubrey's informant, Golden, confounded Bockley Dyke with Grimsditch, the former being the one here described."

See also the interesting paper on the ancient Wiltshire Dykes, by the Rev. Prebendary W. H. Jones, in the fourteenth vol. of the Wiltshire Archæological and Natural History Society's Magazine.

miles of Tilshead, when it gradually died away in cultivated land. Ancient roads occasionally entered its ditch, more particularly at the salient angles, and its mound was broken and pierced in all directions by the trackways leading to the two British villages north of Knook Castle; but still, amid all the changes of two thousand years, its crest was seen stretching over the plain, and could be followed without the chance of a mistake. The next day I found the 'Tilshead Ditch,'¹ within little more than a mile from the spot where I had lost the former one. It was a ditch with *two* mounds, and these gradually became lower as I traced it to the eastward, a mile or two beyond Tilshead. If this ditch be a continuation of the former one I cannot satisfactorily account for its change of character. I could find no remains of this Belgic boundary—if we may venture to give it such a title—north of Beacon Hill. Even the 'unmutilated remains of a bank and ditch,' on Wick-down, turned out to be merely a deep ditch with a low mound on each side of it. But south of the hill, the Amesbury bounds presented appearances which strongly resembled those of an ancient earth-work, and we may be allowed to conjecture that they were once connected with 'The Devil's Ditch' east of Andover, and with the boundary-line, a fragment of which still remains to the south of Walbury.

"According to these speculations, the second Belgic boundary must have included the valleys of South Wiltshire, and then have

¹ Dr. Thurnam, in his work on "British Barrows," (p. 15,) says: "The position of some of the long barrows in relation to the very ancient earthworks known as Belgic dykes is indicative of the superior antiquity of the former.

The earthwork (bank and ditch) which stretches across Salisbury Plain from North East to South West, and is laid down on the Ordnance and other maps, as 'Old Ditch,' is especially prominent near Tilshead, where is one of the largest of our long barrows, measuring as it does 380 feet in length and 11 feet in height. On reaching the east end of this mound, which is situated on its north side the ditch makes a decided curve in order to avoid the tumulus, 'which,' as Sir R. Hoare justly observes, 'is a certain proof of the superior date of the barrow.'—(Ancient Wilts, i., 90.)

"Another example is on the southern border of the county, near the villages of Martin and Tippet, where the course of a branch of Bokerley Ditch has been diverted 'in order to avoid a long barrow, which,' as Sir Richard again says, 'proves the high antiquity of the sepulchral mound.'—(Ancient Wilts, i., 233.)"

swept round so as to separate the downs of Hampshire from the woodlands which encircled Scots Poor.¹ The hypothesis does not seem an unreasonable one, and I know of no other which can satisfactorily account either for the boundary-line north of Heytesbury, or for the lines which are found in the neighbourhood of Walbury and Andover. It will be seen that the writer differs from Stukeley in considering the first and second of his ditches as forming part of one continuous boundary; and in denying altogether to the ditch which runs immediately north of Old Sarum, the character of a Belgic earthwork.

“The general consent of our antiquaries has fixed upon the Wans-dike as the last of the Belgic boundaries. Were it called the last frontier of the Belgic province—understanding by that phrase the district which the Roman geographers assigned to the Belgæ proper—I should be little disposed to quarrel with the conclusion they have come to. . . . This magnificent earthwork reached from the woodlands of Berkshire to the British Channel. Its remains

¹Mr. Jones calls this boundary-line the “Old Dyke,” and thus describes it: “This is no doubt a very ancient dyke. It can be traced almost across the county from west to east. . . . There can be little doubt as to the Old Dyke being of British origin, and it well may be anterior to the Roman conquest. It has the foss to the north, so that we may infer that it was made by a people coming up from the south. All along are remains of British villages and earthworks, to say nothing of numberless tumuli, some of them of large size and of the shape, which, authorities tell us, indicate the greatest antiquity. The most western portion which remains can be traced from Boreham down, in the north part of Warminster parish; thence it runs along till it comes to Knook Castle, the two ancient encampments of Battlesbury and Scratchbury being about two miles to the south of it. Thence it goes on within a couple miles of Tilshead, and, in its course, turns at right angles to avoid, as it would seem, interfering with what is now called Tilshead Long Barrow. Again you trace it just above what is called Silver Barrow (a name corrupted from Sel-berg, *i.e.*, great barrow); here it diverges to the north, and you trace it again close by Ell-barrow, (that is Eald-berg, old barrow) and across Compton Down. Again it goes northward, and you meet with it close by Chisenbury Camp and Lidbury Camp, and it reaches what are called the Twin Barrows, close by Combe Hill. It would seem no unlikely conclusion that it then went on to Sidbury, an ancient encampment in the parish of North Tidworth but from this we cannot, as far as I know, trace it, for the Amesbury bounds mentioned by Dr. Guest are clearly too far from it to be considered as portions of it.”—(Wilts Mag., vol. xiv.)

have been carefully surveyed by Sir R. C. Hoare. The conquests it was intended to include seem to have been, first, the Vale of Pewsey; secondly, the mineral district of the Mendip Hills; and, thirdly, the country lying between the range and marshes of the Parret. Ptolemy gives us Winchester, Bath, and Ilchester, as the three principal towns of the Belgic Province. If we run a line along the Wansdyke from Berkshire to the Channel, then along the coast to the Parret, then up that river eastward till we strike the southern borders of Wiltshire, and then follow the first Belgic boundary across Dorsetshire to the sea, we shall have defined, with tolerable accuracy, the northern and western boundaries, which Roman geographers assigned to the Belgæ proper. It will be seen that the Wansdyke bends to the south, as if to avoid Avebury, and approaches close to, but does not include Bath. It seems reasonable to infer, that when the line of demarcation was drawn, the Dobuni insisted on the retention of their ancient temple, and of their hot baths; and if this inference be a just one, another and a more important one seems naturally to follow. Assuming that the Belgæ were thus excluded from Avebury, is it not likely that they would provide a '*locus consecratus*' at some central point within their own border—a place for their judicial assemblies, like the Gaulish temple 'in finibus Carnutum quæ regio totius Galliæ media habetur?' May not Stonehenge have been the substitute so provided?" Dr. Guest further gives it as his opinion that Stonehenge "could not have been built much later than the year 100 B.C., and in all probability was not built more than a century or two earlier." Whenever it was built, it must have been when the builders were at peace amongst themselves, and with their neighbours the Damnonii, if the smaller stones came from Devonshire; and with the Ordovices, if they were brought from North Wales. And if it were asked, How could the Belgæ procure these stones, which were brought from beyond the Wansdyke, the Belgic limit? it might be supposed (with the Rev. W. L. Bowles), that the great line of Wansdyke was thrown up by mutual consent, and that the Britons, upon the condition that their holy precincts should be undefiled, and their great temple left uninjured, might grant the Belgians the right to convey, to their

own district, the stones to raise the temple to their own God.¹

The writer would conclude this section with the words of his deceased friend, Dr. Thurnam, in which he fully concurs: "The builders of Stonehenge, we believe, in common with the learned Master of Gonville and Caius College, to have been the Belgæ, or possibly a confederacy of the whole of those Belgic tribes, by whom, at a no very long time before our era, a great part of South Britain was conquered and settled. Whether the invading Belgæ brought with them from Gaul the fashions of more elaborate forms of tumuli, our knowledge of those in North-Eastern France does not enable us to determine. There have been many important explorations of the chambered barrows and dolmens of France; but it does not appear that any zealous and munificent antiquary has demonstrated the form, the structure, and contents of the barrows of the bronze period of that country, in like manner as our Wiltshire baronet has those of this part of England. In the absence of such information, we incline to the opinion of their indigenious origin, and conclude that the bell and disc-shaped tumuli were invented on the spot by the Belgic builders of Stonehenge, whence their fashion was gradually distributed over those parts of Britain to which Belgic influence and authority extended. The erection of circular barrows over the distinguished dead seems to have been continued as late as the conquest of South Britain under Claudius and his successors; there being no proof that the islanders were in any material degree Romanized in their customs before the time of Agricola; to which period their adoption of Roman funeral usages may in all likelihood be referred."²



¹ *Hermes Britannicus*, p. 126.

² "*Archæologia*," vol. xliii., p. 309.

How were these Stones brought and set up?

TO the visitor of the ruins of Stonehenge who is aware that the stones composing it have been brought from a distance, three interesting questions naturally suggest themselves; 1, How were the stones brought here? 2, How were they shaped and prepared with their mortises and tenons? 3, How were they raised into their upright, and transverse positions?

Let us see whence and how they can have been brought here before the use of metal, and the means and appliances with which man in more recent times has been so fully supplied. Having selected a block of proper dimensions from the neighbourhood of Marlborough,¹ it would then be the work of the party to be employed in its removal to cut down with their flint or horn axes,² poles sufficiently strong and long to serve as levers; then to provide themselves with wooden wedges; and lastly to cut trees, of proper size, into proper lengths, for rollers upon which the stone should run.³

Having raised their stone upon the rollers, they would, with their

¹ "Many of them [the sarsen, or as he calls them, sarsdon, stones] are mighty great ones, and particularly those in Overton Wood. Of these kind of stones are framed the two stupendous antiquities of Aubury and Stone-heng."—Aubrey's Nat. Hist. of Wilts (Britton's edition, p. 44).

Dr. Charleton, too, believed that the Stonehenge stones came "from the fields adjoining Aibury or Rockly," p. 44.

² Mr. E. T. Stevens, in his "Flint Chips," at page 68, gives us an interesting account of the modern use of stone tools. "Many persons," he says, "are loth to believe that rude stone hatchets have been used for cutting down trees, and still less that planks and boats can have been made with similar tools." He goes on "to cite some of the uses to which tools of stone, bone, horn and shell have been applied in modern times. . . . The axe used formerly by the natives of Vancouver's Island in felling the largest tree, which they did without the use of fire, was made of elk-horn, and was shaped like a chisel. The natives held it as we use the chisel, and struck the handle with a stone not unlike a dumb-bell, and weighing about two pounds."

³ Strabo, Geogr., iv., p. 280, says: "The Forests (of the Britons) are their towns; for they fence in a spacious circuit *with felled trees*, and build themselves huts there, and stables for their cattle, (which they occupy) for no long time."

levers, shove it along, levelling and smoothing the uneven ground before them as best they could, and placing relays of rollers continually in advance. By this means, after much toil and time, they would land their stone at its destination.

Let us suppose, however, that in the intercourse with eastern people, trading for tin or otherwise, the builders of Stonehenge had become acquainted with the use of bronze and of the rope, they would then have been at a greater advantage. Perhaps the bronze implements might not be able to do much more for them than the flint, but the rope would be an immense assistance, in enabling them to bring so much draught-power of men to their aid, and possibly of beasts, if the *bos longifrons* and the horse, (whose remains are found in the barrows,) were to be found in sufficient numbers on the downs and their neighbourhood.

At Rome, when the writer was there in the winter of 1865-6, it was amusing to see the primitive manner in which the large blocks of Carrara marble were transported from the Tiber to the artists' studios. Sir George Head, in his "Tour of many days in Rome," vol. ii., p. 397, thus describes the slow and clumsy operation: "A sledge of sufficient size and strength having been constructed for the purpose, consisting simply of a low framework of stout timber, connected by transverse pieces and supported on wooden runners, such as are used for the transport of heavy merchandise over the snow in the roads of North America, the block of marble, divested previously of all its unnecessary bulk, was laid upon it, which preliminary part of the operation, however, I did not see performed. But the manner of putting the sledge in motion, which I did see, was as follows: in the first place, at the distance of sixty or seventy yards in front of the object a hole was made in the ground, and an iron crowbar not less than twelve inches in circumference, inserted in the hole as a point to haul upon, including a massive triangular frame to support a capstan lashed close to the crowbar. A block and pulley having been fixed to the sledge, and another block and pulley to the frame of the capstan, the rope was in the first instance made fast to the sledge, and finally once more carried forward and rove with a double turn round the shaft

of the capstan, so that as the shaft revolved the rope was coiled on the ground by a man, who, with the end in his hand, sat upon the capstan-frame below. There were four arms to the windlass, each manned on ordinary occasions, by a couple of men, and by four men, which number I never happened to see exceeded, in case of an acclivity. In order to obtain an uniform surface for the machine to pass over, there were used, instead of rollers, wooden planks, covered with soft soap; and the services of two men were constantly required, one to soap the boards, and the other to remove them from the rear to the front as the sledge proceeded. The operation thus performed by successive removals of the crowbar to a farther distance, so soon as the rope became expended and coiled, occupied no less, with the exclusion of Sundays and saints' days, than a whole month, and the motion was in fact so slow as to be hardly perceptible." The distance from the Marmorata on the banks of the Tiber to the destination of this block of marble in the Via del Babuino, would be under two miles.

Herodotus tells us (II., c. 124) that Cheops, when he succeeded to the throne closed the temples, and forbade the Egyptians to offer sacrifice, compelling them instead to labour, one and all, in his service (for the erection of his pyramid). Some were required to drag blocks of stone down to the Nile from the quarries in the Arabian range of hills; others received the blocks after they had been conveyed in boats across the river, and drew them to the range of hills called the Lybian. A hundred thousand men laboured constantly, and were relieved every three months by a fresh lot. In Canon Rawlinson's translation of Herodotus, and in Sir Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians" (iii., 328, ed. 1837),¹ may be seen wood-cuts of the representation of a colossus

¹"The ancient Assyrians and Egyptians have recorded on their walls by paintings and sculpture the method employed in transporting these masses. Apparently the lever was the only mechanical power used, and with unlimited supplies of human labour this would be the most direct and expeditious implement; but it is probable that other mechanical aids were employed where stones such as obelisks had to be lifted. From a carved slab, moreover, which formed part of the wall panels of the palace of Sardanapalus we learn that the pulley was known in a simple form."—Sir John Hawkshaw's Address delivered before the British Association, at Bristol, Aug. 25th, 1875.

which a number of men are employed in dragging with ropes, and which representation was found by Messrs. Irby and Mangles in a grotto behind E'Dayr, a Christian village behind Antinoe and El Bersheh. In this picture we see represented the statue bound upon a sledge with ropes, a man standing on the knees of the colossus beating time with his hands, and giving out the verse of a song, to which the men responded; another man on the sledge at the feet of the colossus, pouring out in front of the sledge a liquid, perhaps grease, from a vase; four rows of men, in pairs, dragging the statue; Egyptian soldiers; men carrying water or grease; others carrying implements; taskmasters; and reliefs of men. In one of the quarries at El Maasara, another mode of transporting a stone is represented. "It is placed on a sledge, drawn by oxen, and is supposed to be on its way to the inclined plain that led to the river; vestiges of which may still be seen a little to the south of the modern village." Mr. Samuel Sharpe,¹ in his account of the mechanical arts, as practised by the Egyptians, says: "Of the various ways in which the engineering difficulties might have been overcome, we may take it for granted that the rudest was that actually used. We know that when a town was to be stormed, the military engineers were often driven to the slow and laborious method of raising against it a mound of earth of the same height as the city wall, and from this the besiegers attacked the garrison on equal terms. . . . If an obelisk ninety feet long was to be placed upright, it was probably lifted up by means of a mound of earth, which was raised higher and higher, till the stone, which leaned on it, was set up on one end. If a huge block was to be placed on the top of a wall, it may have been rolled on rollers up a mound of sand to its place. Such labour will, in time overcome difficulties which yield more quickly to a smaller force when skilfully directed. Of the six simple machines called the mechanical powers, the Egyptians used the wedge, the lever, and the inclined plane; but seem not to have known the screw, pulley, or the wheel and axle. Though their chariots ran on wheels, they chose to drag a colossal statue on a sledge, rather than to risk the

¹ *History of Egypt*, i., 40, Ed., 1839.

unsteadiness of putting rollers under it. Though their sailors pulled up the heavy sail by running a rope through a hole in the top of the mast, they had no moveable pulley fixed to the sail whereby a man can raise more than his own weight."

Mr. Layard, in his "Nineveh and Babylon," p. 24, (1867,) gives an interesting account, with illustrations, of the bas-reliefs found by him at Konyunjik which represent the building of an artificial mound, and the process of dragging the colossal figure to its summit. "As some of the largest of these sculptures were full twenty feet square, and must have weighed between forty and fifty tons, this was no easy task when the only mechanical powers possessed by the Assyrian appear to have been the roller and the lever. A sledge was used similar to that already described, and drawn in the same way. In the bas-relief representing the operation, four officers were seen on the bull, the first apparently clapping his hands to make the drawers keep time, the second using the speaking trumpet, the third directing the men who had the care of the rollers, and the fourth kneeling down behind to give orders to those who worked the lever. Two of the groups were preceded by overseers, who turned back to encourage the workmen in their exertions; and in front of the royal chariot, on the edge of the mound, knelt an officer, probably the chief superintendent, looking towards the king to receive orders direct from him. Behind the monarch were carts bearing the cables wedges, and implements required in moving the sculpture. A long beam or lever was slung by ropes from the shoulders of three men, and one of the great wedges was carried in the same way. In the bas-relief representing the final placing of the colossal bull, the figure no longer lay on its side on the sledge, but was held upright by men with ropes and forked wooden props. It was kept in its erect position by beams, held together by cross-bars and wedges,¹ and was further supported by blocks of stone or wood. On the sledge, in front of the bull, stood an officer giving directions with outstretched hands to the workmen. Cables, ropes, rollers, and levers

¹ It may be remarked, that precisely the same kind of framework was used in the British Museum for moving and placing the great sculptures.

were used by the workmen. . . . When moving the winged bulls and lions, now in the British Museum, from the ruins to the banks of the Tigris, I used almost the same means as the ancient Assyrians, employing, however, a cart instead of a sledge."

Of the power of numbers unaided by artificial contrivance, Dr. Charleton well observes: "Allowing them to have been as unskilful as you please in such instruments, yet consider how numerous they were, and how strenuously great swarms of them used to join hands together in such attempts; and you have not forgot the old verse, *multorum manibus grande levatur onus*, many hands make light work. What prodigious matters may be effected by mere strength and hand-force of great multitudes without rules of art, may be discerned from the savage Indians; who, being destitute of other mathematicks but what nature dictated to them, and wanting the advantage of engines, did yet by their simple toil and indefatigable diligence, remove stones of incredible greatness: for Acosta ('*Histor. Indic.*, lib. 3, cap. 14), relates, that he measured one stone brought to Tiagu-anaco, which was 38 foot long, 18 broad, and 6 thick: and that in their stateliest edifices were many other of much vaster magnitude."¹ ("Stoneheng restored to the Danes," p. 46.)

¹ "In his interesting '*Himalayan Journal*,' (vol. ii., p. 276,) Dr. Hooker states that he found the Khasias, a wildish hill-tribe, on the mountain confines of Upper India, still erecting megalithic structures. He remarks that among the Khasias, 'funeral ceremonies are the only ones of any importance, and they are often conducted with barbarian pomp and expense; and rude stones, of gigantic proportions, are erected as monuments, singly or in rows, or supporting one another, like those of Stonehenge, which they rival in dimensions and appearance.'

"In reply to personal enquiries by Sir James Simpson, Dr. Hooker informed him—

'In answer to your query, Do you remember any recent erection, any arrangement the same as the cromlechs—viz., two, four, or six upright stones supporting a large mass?—this is a common erection now in vogue, such as are put up annually during the cold season. The whole country for many square miles was dotted with them and they are annually put up. Some I saw were quite fresh, and others half finished, and had I been there during the dry season, I was told I could have seen the operation. A chief or big man wants to put up such a cromlech; to commemorate an event or for any other purpose; he summons all the country-side, and feeds them for the time. They pass half the time in revelry, the other half in pulling, hauling, pushing and prizing; it is

But enough, if not more than enough, upon the transport of stones and colossi in early times with scanty and simple means. Those who would go farther into this interesting subject should turn to the tenth volume of the Wiltshire Archæological Society's Magazine, where they will find a paper by Mr. A. C. Smith, in which the method of moving colossal stones as practised by some of the more advanced nations of antiquity, is much more fully discussed than can be done here.

And now having, at last, brought our huge block to the place where it is to be set up, the next thing to be done is to "dress" it. With what instrument is this very hard stone to be worked? Our masons have stone hammers and stone chisels, and, it may be, bronze tools besides. But bronze is a rather soft metal for such tough work. Sir Gardner Wilkinson, in a note to ch. 86 of the second book of Herodotus (Rawlinson's translation), says that in metallurgy the Egyptians possessed some secrets scarcely known to us, for they had the means of enabling copper to cut stone without hardening it by an alloy, and of giving to bronze blades the elasticity of steel with great hardness and sharpness of edge. With the possession of such a secret, we can easily understand how this wonderful people were able to chisel out their great granite statues and obelisks—but it is not likely that our Celtic ancestors had any such means of hardening their bronze. What can be done, however, with flint in cutting stone, is told us by Mr. E. T. Stevens, in his interesting and valuable work, entitled "Flint Chips," p. 495: "In the museum at St. Germain," he writes, "There are some blocks of granite, upon which figures resembling those upon the stones of Gavr Inis have been cut with an *ancient* flint tool within the last two or three years, and Sir James Simpson has proved experimentally that ring and cup-cuttings *can* be produced upon the Argyleshire schist and hard Aberdeen

all done by brute strength and stupidity. They have neither science nor craft, nor any implements of art but the lever. I was told that the ashes of the burnt dead were often deposited under them; but could not make out that this was a general custom. The whole country is studded with stone erections, usually a cromlech, with a row of tall stones behind it.'"—From Col. Sir Henry James' work on Stonehenge published in connection with the Ordnance Survey.

granite, with a flint chisel and a wooden mallet. In the Edinburgh Antiquarian Museum there is a block of grey Aberdeen granite from Kintore: it is one of the ancient sculptured stones of Scotland, and has upon one side two crescents, &c. On the back of this hard granite Mr. Robert Paul, the door-keeper of the museum, tried, at Sir James Simpson's request, the experiment alluded to, and cut in two hours two-thirds of a circle, with a flint and a wooden mallet. The flint used was about three inches in length, an inch in breadth, and about a quarter of an inch in thickness. The circle which was sculptured with it in the granite is seven inches in diameter, and the incision itself is nearly three quarters of an inch in breadth, about a quarter of an inch in depth, and very smooth on its cut surface. In sculpturing the circle, the sharp tips of the flint tool from time to time broke off, but another sharp edge was always immediately obtained by merely turning the flint round. This experiment shows conclusively that such sculptures might have been produced during the Stone Age," and also that, even without metal, all that was done to the sarsen and other stones at Stonehenge might have been effected by flint alone.¹ Dr. Thurnam was of opinion, that, in making the mortises and tenons, the stones, after certain chippings had been made, had been rubbed into form by means of stone mullers, with sand and water.²

If we may judge from the feet of the fallen trilithons, the part to be imbedded in the ground was, in *some* instances, by chipping made smaller and narrower than the part to stand above ground; and it would appear from the statement contained in the following cutting from a Salisbury newspaper of October 3rd, 1863, attested by Mr.

¹ Though hundreds of beautiful stone axes and ornaments have been found in the Brittany tumuli, no weapons of metal have yet occurred in them. It has been supposed that the carvings on some of the stones could not have been cut without metal. Actual experiments, however, as Messrs. Bertrand and de Mortillet have shown me, prove that the stone can be cut with flint, while bronze produces no effect on it."—Sir J. Lubbock, *Prehistoric Times*, p. 110, second edition.

²The irregular form and size of these mortises and tenons justify the conjecture of William Smith, the geologist, that these had been formed by friction with stones and sand."—*Crania Britannica*.

J. Browne, that the hole into which the upright was to be dropt was prepared with a bed of concrete: "It has been a matter of surprise to observant persons, that the now wholly prostrate trilithon at Stonehenge should, considering the extreme smallness of its base, ever have stood for ages immemorial. On the 22nd ult., Sir Edmund Antrobus' under-gamekeeper, Mr. Eli Vockins, of Seven Barrows, when digging deeply for rabbits, proved that the upright had been embedded in a rough strong concrete, the great quantity and tenacious quality of which fully account for their long and otherwise inexplicable stability.—Joseph Browne, eye-witness."

And now that our stone is prepared, and the hole for its reception has been dug out and lined with concrete, how is it to be raised, and set up in its place? Mr. R. W. Emerson, who visited Stonehenge with Mr. T. Carlyle, could not see much difficulty in handling and carrying stones of this size: "The like is done in all cities, every day, with no other aid than horse-power. I chanced to see a year ago men at work on the substructure of a house, in Bodmin Square, in Boston, swinging a block of granite of the size of the largest of the Stonehenge columns, with an ordinary derrick. The men were common masons, with Paddies to help, nor did they think they were doing anything remarkable. I suppose there were as good men a thousand years ago."¹ It is probable that there were as good men a thousand or two thousand years ago, but it is very improbable that the latter had derricks.

Mr. Rickman, in the twenty-eighth volume of the "Archæologia," gives a plate embodying his ideas of the manner in which the uprights were raised into their positions. He has assumed, however, that the people of that day had ropes. The Rev. Richard Warner, the historian of Bath, in his "Walk through some of the Western counties of England," p. 216, (1800,) says: "What is there in these Celtic temples that should so greatly excite our admiration? Even in Stonehenge, the most stupendous of them, we see nothing that might not readily be effected by the united efforts of tumultuary numbers. The wondrous stones which compose it would be found

¹ "English Traits," 1856.

in the neighbourhood of Marlborough, amongst that assemblage of rocky fragments called the Grey Wethers; would be floated down the Lesser Avon to Amesbury; conveyed to the spot where they now stand with the assistance of rollers; and lifted to their present situation by the inclined plane; operations which seem to include no particular sagacity in their designation, or difficulty in their execution; particularly when it is recollected that the whole strength of the nation was directed to accomplish the work by the irresistible impulse of superstition." Mr. Max Müller, in his interesting paper on "Cornish Antiquities," in the third volume of "Chips from a German Workshop," thus treats this question: "Marvellous as are the remains of that primitive style of architectural art, the only real problem they offer is how such large stones could have been brought together from a distance, and how such enormous weights could have been lifted up. The first question is answered by ropes and rollers, and the mural sculptures of Nineveh show us what can be done by such simple machinery. We there see the whole picture of how these colossal blocks of stone were moved from the quarry on to the place where they were wanted. Given plenty of time, and plenty of men and oxen, and there is no block which could not be brought to its right place by means of ropes and rollers. And that our forefathers did not stint themselves either in time, or in men, or other cattle, when engaged in erecting such monuments, we know even from comparatively modern times. Under Harold Harfagr, two kings spent three whole years in erecting one single tumulus; and Harold Blatand is said to have employed the whole of his army and a vast number of oxen in transporting a large stone which he wished to place on his mother's tomb. (Saxo Grammaticus, 'Historia Danica,' lib. x., p. 167, ed. Francfurt, 1576.) As to the second question, we can readily understand how, after the supporters had once been fixed in the ground, an artificial mound might be raised, which, when the heavy slab had been rolled up on an inclined plane, might be removed again, and thus leave the heavy stone poised in its startling elevation."

The writer is indebted to Weaver's "Monumenta Antiqua" (Nichols 1840), for the following quotation: "Bray, in his work on the part

of Devonshire bordering on the Tamar and the Tavy, observing that in India, on the tops of some of the pagodas, there are amazing masses of rock, adds, that to place them in such elevated situations they had recourse to *aggeration*. They took the laborious method by accumulated earth of forming an easy ascent or inclined plane to the top, by means of levers rolled them to the summit, and then removed the mound (Bray, vol. i., p. 228)."¹

Mr. Tom Smith, sometime master, successively, of the Craven and Hambledon packs of hounds, a good artist and a clever man, had a theory about the manner in which the stones were set up, which is worth giving in the words of his biographer: "Being shortly after on a visit to the Bishop [Denison, his brother-in-law], a party was made up to go to Stonehenge. On their return there was a discussion on that wonderful structure, in which Mr. Smith did not take part. This caused the Bishop to ask if he did not agree with the rest as to the almost superhuman character of the pile, and the inadequacy of any known means for raising it: he replied that he saw nothing so marvellous about it, and that he thought he could point out a way in which it might have been constructed. Pen, ink, and paper were forthwith placed before him, and he was desired to put his ideas in a tangible shape. He at once made a sketch, and the matter furnished conversation for the evening. The Bishop, looking at the sketch, allowed that there might be something in the supposition, and next asked where the huge stones of Stonehenge could have come from. Mr. Smith then gave an account of a fox having been run to earth at the Grey Wethers, and explained that these stones are just of the same character; some of them being twenty feet long, seven or eight wide, and three or four thick. He allowed that it would require a great number of men to transport such stones for ten miles over Salisbury Plain: but anyone who looks at the Wansdyke, which traverses the same district for thirty or forty miles, will

¹ One would like to know how the roof of the Mausoleum of Theodoric, at Ravenna, which is formed from a single block of limestone, 36 feet in its internal diameter, and estimated to weigh above 200 tons, was raised to its place.

² "Sporting Incidents in the Life of another Tom Smith," 1867.

see that there is no real objection. Whoever they were that dug that wide dyke, and threw up that high bank, must have had abundance of labour at command ; and though Mr. Goodman's fourteen horses could not move one of the Grey Wethers, long levers very probably could. As Dr. Johnson says in *Rasselas*, 'The master of mechanics laughs at strength ;' and Archimedes had said long before him, 'Give me a place to stand on, and a lever, and I will move the world.' . . . Trunks of oaks bound with iron, and pierced with holes for levers would furnish rollers to propel the stones to very near their ultimate destination. It is also necessary to suppose the site of Stonehenge occupied by a mound, either natural or artificial ; the ascent being by an easy incline from the quarter whence these stones were brought. On the top of the mound we must suppose as many holes dug as there were upright stones to be placed. On the arrival of each stone, it would be dropped into its hole ; and when all were thus placed, there would only remain the more easy task of laying on the imposts, each end of which evidently has been mortised on to the perpendiculars. The earth would then be dug away, leaving the structure complete ; and if this earth must be accounted for, we may think it probable that we see it in the numerous barrows near, that still exist on Salisbury Plain."



For what purpose were these Stones set up?

NO the writer, who believes in the pre-Christian erection of Stonehenge, it does not appear impossible to arrive at something like a rational conception of the objects of the founders of Stonehenge. Man, even the most savage and degraded, must have his god or gods. The religious instinct implanted in man, and fostered by the constant realization of his own weakness, and of the existence of powers above him, around him, and independent of him, by which his welfare is more or less affected, must have an outcome. And if he knows not the Creator he will worship the creature. And which of God's creatures would he be so likely to make the object of his simple-minded adoration, as that great body, which, by its light and heat, would appear to him to exercise the most potent influence over his material good? As the sun simply, or as the sun in connection with the moon and stars, it would be regarded by him as the natural object of his daily worship. "In the East," says Dr. Döllinger, "where the stars shine brightly in an ever-cloudless sky, and men more readily receive the influences of these heavenly bodies, astrolatry, or the worship of the stars that illumine the earth, developed itself. Above all, it was the sun, the great quickener of nature, adored as the centre and lordly power of the visible universe, as the common source of light and life, by which men felt themselves irresistably attracted. For their high, ever-increasing susceptibility of natural impressions, and of the properties of the universe, led them to give themselves up with longing and passion to the sidereal powers, and they felt themselves governed by them as if by magic. The cultus they rendered them, the direction of all their intellectual powers towards them, the sympathy with their phases, their setting, disappearances and re-appearances, the every-where prevalent notion in all antiquity that the heavenly bodies were not dead masses of fire or earth, but living animated beings—all this involved them more

and more in a service of complete idolatry and worship—religion became astrolatry.”¹

Dean Milman says, “Down to the captivity, the Jews of Palestine had been in contact only with the religions of the neighbouring nations, which, however differently modified, appear to have been essentially the same, a sort of Nature-worship, in which the host of heaven, especially the sun and moon, under different names, Baal and Moloch, Astarte and Mylitta, and probably as symbols or representatives of the active and passive powers of nature, no doubt with some distinction of their attributes, were the predominant objects. These religions had long degenerated into cruel or licentious superstitions; and the Jews, in falling off to the idolatry of their neighbours, or introducing foreign rites into their own religious system, not merely offended against the great primal distinction of their faith—the unity of the Godhead—but sunk from the pure, humane, and comparatively civilised institutes of their law-giver, to the loose and sanguinary usages of barbarism.”²

Let us hear, too, what Mr. Tylor (who has made the primitive culture of mankind his especial study) says upon solar worship: “Rivalling in power and glory the all-encompassing heaven, the sun moves eminent among the deities of nature, no mere cosmic globe affecting distant material worlds by force in the guise of light and heat and gravity, but a living reigning Lord:—

‘O Thou, that with surpassing glory crown’d,
Looks’t from thy sole dominion like the God
Of this new world.’

It is no exaggeration to say, with Sir William Jones, that one

¹ “The Gentile and the Jew,” vol. i., p. 67.

² History of Christianity, book i., c. 2. Dean Milman refers to Bohlen, (*das alte Indien*, p. 139 et seq.) who gives a long list of the festivals of the sun; and to Dr. Richard’s valuable work on Egyptian Mythology; on the Deification of the Active and Passive Powers of Generation; the marriage of the Sun and the Earth, p. 40, and pp. 62—75.

The writer cannot divest himself of the idea that, at Abury, a symbolical representation was intended of the generative and fructifying powers of the sun in its connection with the earth, the “*παμμῆτορ τε γῆ*” apostrophized by Prometheus, (*Prom. Vincetus* 90).

great fountain of all idolatry in the four quarters of the globe was the veneration paid by men to the sun: it is no more than an exaggeration to say, with Mr. Helps, of the sun-worship in Peru, that it was inevitable. Sun worship is by no means universal among the lower races of mankind, but manifests itself in the upper levels of savage religion in districts far and wide over the earth, often assuming the prominence which it keeps and develops in the faiths of the barbaric world. Why some races are sun-worshippers and others not, is indeed too hard a question to answer in general terms. Yet one important reason is obvious, that the sun is not so evidently the god of wild hunters and fishers, as of the tillers of the soil, who watch him day by day, giving or taking away their wealth and their very life. On the geographical significance of sun-worship, D'Orbigny has made a remark, suggestive if not altogether sound, connecting the worship of the sun not so much with the torrid regions where his glaring heat oppresses man all day long, and drives him to the shade for refuge, as with climates where his presence is welcomed for its life-giving heat, and nature chills at his departure."¹

¹Tylor's *Primitive Culture*, ii., p. 260. Most of us, doubtless, are acquainted with Southey's sonnet:—

" I marvel not, O Sun! that unto Thee
In adoration man should bow the knee,
And pour his prayer of mingled awe and love;
For like a God thou art, and on thy way
Of glory sheddest with benignant ray,
Beauty, and life, and joyance from above.
No longer let these mists thy radiance shroud,
These cold raw mists that chill the comfortless day;
But shed thy splendour through the opening cloud
And cheer the earth once more. The languid flowers
Lie scentless, beaten down with heavy rain;
Earth asks thy presence, saturate with showers;
O Lord of Light! put forth thy beams again
For damp and cheerless are the gloomy hours."

The most eloquent writer of English in modern times, says: "It may be easy to prove that the ascent of Apollo in his chariot signifies nothing but the rising of the sun. But what does the sunrise itself signify to us? If only languid return to frivolous amusement, or fruitless labour, it will, indeed, not be easy for us to conceive the power, over a Greek, of the name of Apollo. But if, for us also, as for the Greek, the sunrise means daily restoration to the sense of passionate gladness and of perfect life—if it means the thrilling of new strength through every nerve,—the shedding over us a better peace than the peace of night, in the power of the dawn,—and the purging of

In such a climate as that of Britain, dependent so much on solar influence, for its material prosperity, would it be unreasonable to suppose that the solar cultus would prevail? It can hardly have been an accident that the stone without the circles at Stonehenge should have been so placed that the sun should rise immediately over it at the summer solstice. A remarkable account is given by Mr. W. G. Palgrave of a very similar structure to Stonehenge, which he found in Arabia, where the heavenly bodies were the objects of worship; it is as follows: "We had halted for a moment on the verge of the uplands, to enjoy the magnificent prospect before us. All along the ridge where we stood, and visible at various distances down the level, rose the tall, circular watch-towers of Kaseem. But immediately before us stood a more remarkable monument, one that fixed the attention and wonder even of our Arab companions themselves. For hardly had we descended the narrow path where it winds from ledge to ledge down to the bottom, when we saw before us several huge stones, like enormous boulders, placed endways perpendicularly on the soil, while some of them yet upheld similar masses laid transversely over their summit. They were arranged in a curve, once forming part, it would appear, of a large circle, and many other like fragments lay rolled on the ground at a moderate distance; the number of them still upright was, to speak from memory, eight or nine. Two, at about ten or twelve feet apart one from the other, and resembling huge gate-posts, yet bore their horizontal lintel, a long block laid across them; a few were deprived of their upper traverse, the rest supported each its head-piece in defiance of time and of the more destructive efforts of man. So nicely-balanced did one of these cross-bars appear, that in hope it might prove a rocking-stone, I guided my camel right under it, and then

evil vision and fear by the baptism of its dew;—if the sun itself is an influence, to us also, of spiritual good—and becomes thus in reality, not in imagination, to us also, a spiritual power,—we may then soon overpass the narrow limit of conception which kept that power impersonal, and rise with the Greek to the thought of an angel, who rejoiced as a strong man to run his course, whose voice, calling to life and to labour, rang round the earth, and whose going forth was to the ends of heaven."—Ruskin's "Queen of the Air," p. 11.

stretching up my riding stick at arm's length could just manage to touch and push it, but it did not stir. Meanwhile the respective heights of camel, rider, and stick taken together would place the stone in question full fifteen feet from the ground. These blocks seem by their quality, to have been hewn from the neighbouring limestone cliff, and roughly shaped, but present no further trace of art, no groove or cavity of sacrificial import, much less anything intended for figure or ornament. The people of the country attribute their erection to Darim, and by his own hands, too, seeing that he was a giant; also for some magical ceremony, since he was a magician. Pointing towards Rass, our companions affirmed that a second and similar stone circle, also of gigantic dimensions, existed there, and lastly they mentioned a third towards the south-west. That the object of these strange constructions was in some measure religions, seems to me hardly doubtful; and if the learned conjectures that would discover a planetary symbolism in Stonehenge and Carnac have any real foundation, this Arabian monument, erected in the land where the heavenly bodies are known to have been once venerated by the inhabitants, may make a like claim; in fact, there is little difference between the stone wonder of Kaseem and that of Wiltshire, except that the one is in Arabia, the other, the more perfect, in England."¹

Dr. Thurnam, in his "Historical Ethnology of Britain" (chap. v. of the introduction to the "Crania Britannica") says; "Various British coins exhibit symbols of stars, crescents, and suns, which may refer to the ancient astral and elemental worship," and refers

¹ Narrative of a year's journey through Central and Eastern Arabia, 1862—63, by William Gifford Palgrave, vol. i., p. 250, 1865. Sir J. Lubbock, referring to Bonstetten, *Sur les Dolmens*, p. 27, says, "that Kohen, a Jesuit Missionary, has recently discovered in Arabia, near Khabb, in the district of Kasim, three large stone circles, described as being extremely like Stonehenge, and consisting of very lofty triliths."—p. 122, second edition. Dr. Thurnam has a memorandum to the following effect, from Selden "de Dis Syris, Syntagma ii., c. xv., acervus Mercurii, &c." Selden is quoting several Jewish and Talmudic writers, one of them saying: "Lapidei fani Merkolis sic dispositi erant, ut unus hinc, alter illinc, tertius super utrumque collocaretur;" and that "Merkolis, binis lapidibus, sibi mutuo adjacentibus, tertius lapis imponebatur."

to the engravings of some gold coins found on Farley Heath, Surrey, which are given at p. 304 of the thirteenth volume of the *Archæological Journal*. The Rev. Prebendary Earle, also argues from these characters on British coins in favour of the solar theory, but this view is not acquiesced in by all numismatists. The writer's old and valued friend, Mr. W. S. W. Vaux, F.R.S., President of the Numismatic Society, has kindly furnished him with the following communication: "There is no mystery about the origin of the earliest coins of Britain. They are degraded types of Gaulish coins, and these Gaulish coins again are degraded types of those of Philip of Macedon. When the Gauls invaded Macedonia, they brought back, as part of their plunder, gold money of Philip; and as they had none before (so far as we know) they set to work to copy what they had found. The first copies are sufficiently well done to be like their originals. You find $\phi\text{I}\Delta\text{I}\text{I}\text{I}\text{I}\text{I}\text{I}\text{OY}$ legible and a victory driving a chariot. Soon the Greek letters are lost, and the victory and chariot become indistinct. Some of these indistinct coins found their way to Britain in the course of trade, and were imitated by the Britons, each imitation being one stage farther off from the original Philip's, till, at length, all notion of a horse and chariot is lost. The horse remains, but such a nondescript animal (sometimes with his tail divided into three distinct tails!) that you would hardly guess that it was meant for a horse. Then the chariot departs altogether, and its wheels appear *anywhere* on the coins—above, before, in front of other objects. Some of the circles alluded to by Dr. Thurnam are probably these wheels. I doubt altogether the existence of any *astral* or mythic marks, though, of course, a star or a wheel with the spokes crossing will be seized on by some as representing the sun, and so on. These gold British coins may be considered as before or as contemporary with Julius Cæsar. After his time we find Roman types on British coins."

Having said so much upon the probable connection of Stonehenge with sun-worship, it will be well to introduce here the opinions which have been broached by antiquaries and others since the publication of Sir Richard Hoare's volume of "*Ancient Wilts*," in 1812.

Sir Walter Scott, in his edition of Dryden's works (1818), commenting upon Dr. Charleton's work, in which the erection of Stonehenge was attributed to the Danes, and which work had been commended by Dryden, says: "The Doctor's opinion is hypothetical and inconsistent with evidence, for Stonehenge is expressly mentioned by Nennius, who wrote two hundred years before the arrival of the Danes in Britain. If it be true, which is alleged by some writers, that it was anciently called Stanhengist, or indeed, whether that be true or no, the monument seems likely to have been a Saxon creation, during their days of paganism; for it is neither mentioned by Cæsar nor Tacitus, who were both likely to have noticed a structure of so remarkable an appearance."

Of Dryden's address to the Doctor the following lines may be given:—

"Such is the healing virtue of your pen,
 To perfect cures in books as well as men:
 Nor is this work the least: you well may give
 To men new vigour, who *make* stones to live.
 Through you the Danes (their short dominion lost)
 A longer conquest than the Saxons boast.
 Stoneheng, once thought a Temple, you have found
 A throne, where Kings our earthly Gods were crown'd.
 Where by their wond'ring subjects they were seen,
 Joyed with their stature and their princely mien.
 Our Sovereign here above the rest might stand,
 And here he chose again to rule the Land.
 These ruins sheltered once His sacred head
 When he from Wor'sters fatal battle fled;
 Watch'd by the Genius of his royal place,
 And mighty visions of the Danish race.
 His *Refuge* then was for a *Temple* shown:
 But, *He* restor'd, 'tis now become a Throne."

The late Rev. Edward Duke considered Stonehenge "as forming part of a planetarium, in connection with Abury, in the more northern part of the country, and with a series of remains to be traced on the face of the intervening country, the gigantic proportions of which were such that its meridian line was extended no less than two-and-thirty miles." See this explained at length in "Druidical Temples of Wilts" (1848), and in Mr. Duke's letter relative to Stonehenge, in the Salisbury volume of the Archæological Institute.

The Rev. John Bathurst Deane (an old and valued friend of the writer, now unhappily deprived of sight), in his work, on the "Worship of the Serpent" (1833), says that "the circle and the horse-shoe were both sacred figures in the Druidical religion, as may be seen in Stonehenge, where they are united; the outer circles enclosing inner horse-shoes. I cannot find any connection between the latter symbol and the tenets of the Celtic religion, unless it be intended as a representation of the moon" p. 370.

Mr. Henry Lawes Long, in his interesting and learned work on "the Early Geography of Western Europe," 1859, writes as follows: "It is evident from the words of Cæsar: 'The doctrine was discovered in Britain, and imported into Gaul,'¹ that Druidism must have been the religion of the first inhabitants of Britain, and found there by the more recent settlers; that is, that it was the religion of the Cymry, and that the Belgic settlers, upon so discovering it, became its converts, and transmitted it to their parent states in Gaul. No doubt this change took place many years before the time of Cæsar, his expression 'existimatur' implies this, because it evidently relates to a distant event: besides, some considerable time is necessary for the thorough and universal establishment of Druidism in Gaul.

. . . . The Cimbri were a portion of the extended Cymry who occupied the whole of the western coast of Britain from the Clyde, through Cumberland and Wales, to the south-western extremity of Britain, comprising the counties of Somerset, Devon, and Cornwall. It was here, then, that the Western Belgæ, the inhabitants of Wilts, whom I believe to have been Ambiani, were brought into contact with the Cymry, and from them they must necessarily have received the Druidical religion, in the place of the superstition, whatever it may have been, which they brought over with them from the continent. The conversion of the Belgæ to Druidism would naturally have led to the erection of a temple in honour of their new creed. Druidical remains, in the shape of rude circles of

¹ "Disciplina hæc in Britannia reperta; atque inde in Galliam translata esse, existimatur, et nunc, qui diligentius eam rem cognoscere volunt, plerumque illò, discendi causâ, proficiscuntur."—Cæs. de Bell. Gall. lib. iv.

stones are found in Somersetshire and in various places along the territories of the Cymry, through Wales and in Cumberland, all of them partaking of the same primitive character—huge masses of unhewn stone, arranged in a spherical position. Six or seven miles north of the mounds of Old Sarum, the ancient capital of the Western Belgæ, is that marvel of Britain, which now bears the Saxon appellation of ‘Stonehenge.’” (pp. 100—2.)

Mr. J. M. Kemble thought it quite possible that the triliths might have served as gallowses, on some grand occasion; and that after a defeat some British leaders may have been sacrificed by tying them up to Woden on the same. As long as the Anglo-Saxon language is Anglo-Saxon, Stonehenge can mean nothing but “The Stone Gallowses.” *Notes and Queries*, second series, vol. iii., p. 2.

Mr. J. Y. Akerman, F.S.A., in a letter to Dr. Thurnam, dated November 1st, 1860, writes as follows: “Most of the writers on Stonehenge seem determined to show us how little qualified they are to discuss such a subject. I think it not unlikely that the pagan Saxons made Stonehenge on some grand occasion their *offering place*. It should be remembered that when they offered human victims to Woden, they *hung them up*, and here was a not inappropriate spot.”

In Halliwell’s “*Rambles in Western Cornwall*,” 1861, is the following: “With regard to Stonehenge, the theory of its being a temple of the Druids is unsupported by the least evidence, the little there is at all respecting it leading to the belief, that in it we see the remains of a gigantic mausoleum, in the middle of an ancient British cemetery, which continued in use during the Roman sway.”

A critic of Mr. Halliwell’s work (*Saturday Review*, April 12th, 1862), remarks, that “No ancient writer mentions these stone erections, supposed to be Druidical works, in connection with Druidical rites; and much might be said to show that they were of much older date than the Druids, and probably of Phœnician origin. Certain it is, that the Israelites, in common with ancient nations, erected monuments of single stones; and it would appear stone-circles, as the tokens of some great national achievement or national victory. The Book of Joshua furnishes evidence of the first usage; and the latter will, if we mistake not, be found referred to in a book

of much later date, where such stones are described as the stones of a crown—literally, ‘circled stones lifted up for an ensign upon the land.’ Zech. ix., 16.”

Mr. J. H. Parker, C.B., the energetic explorer and expounder of Roman Antiquities, holds that Stonehenge is a Gilgal, and was erected for the purpose of celebrating holy rites, a place where the army met, and where the chieftains were buried. It might be called a burial place, or a House of Commons.

The Rev. Canon Jackson, to whom all members of this Society and readers of its Magazine are so deeply indebted, read a paper on Stonehenge at the Society’s meeting at Marlborough, in 1859. It has never been published, but was briefly reported in the newspapers of the time, together with some observations, in reply, of the veteran Wiltshire antiquary, Mr. Matcham, who was one of the friends and coadjutors of Sir Richard Colt Hoare, and a member of the Stourhead Antiquarian Club, of which Mr. Joseph Hunter gives such an interesting account in the Salisbury volume of the Archæological Institute. In this Salisbury volume are “Remarks on two communications respecting Stonehenge,” in which Mr. Matcham urges that Stonehenge, like Abury, “is susceptible of an entire astronomical explanation; and that it displays in its different groups not only the rudiments of a lunar calendar, but according to the Oriental and Metonic system a accurate measurement of the solar year.” Canon Jackson’s paper was (in substance) as follows: “He said many ingenious theories as to the origin of the structure had been put forward by various writers. We were not obliged to adopt their conclusions, but at the same time we ought to feel indebted to them for their exertions to clear up the mystery that hung over it. His own belief was, that while writers had ransacked the world in search of an explanation of Stonehenge, the real key to the mystery lay all the time at home. The late Mr. Algernon Herbert’s opinion was that it was erected in the fifth century, shortly after the Romans abandoned Britain, and it was to the 150 years between A.D. 408 and A.D. 552 to which he (Mr. Jackson) wished to call their attention. The first point to be considered was the political and religious state of the country at that time. The Romans, then, were masters of the country, but they did not people

it. They only governed it; and in much the same way as England now governed India. After the rebellion of A.D. 408 there was a rush of the British princes to seize the throne. The successful competitor was Vortigern, who forced the family of the last Roman king into Brittany, and this fact he wished them to bear in mind, as they would hear of one of that family, Aurelius, again. As to the religious state of the country, matters had run into great extravagance—in fact it was full of enthusiastic absurdities. He based his belief that Stonehenge was a work of the fifth century on the references contained in the writings of the bards and chroniclers nearest to the time, and he observed that he could find no historical data whatever corroborative of the statement that the structure was in existence before the Romans came over to this country. True, the compositions of these old British writers contained a good deal that might be fabulous, but those fables, it should be remembered, had come down to them from others. They also used the form of metaphor and fable for telling what they did know. It was our ignorance of the key to these stories that made them seem incredible. But though a man may write in a strange style, he may be telling the truth. Bearing in mind, therefore, the political and religious condition of the country at that time, they would doubtless be less surprised at hearing him, with Mr. Herbert, assign the erection of Stonehenge to the mysterious Merlin. Merlin (according to Mr. Herbert) was not a man's name, but an official name for the high-priest of a sect called Ambrosians—a name which he considered to have been adopted from large stones termed *Petræ Ambrosiæ* by the Latins, *Ambres* by the British. There was no *historical* evidence for assigning it to any other period than that which these old British writers afforded. He believed that during the years which followed the expulsion of the Romans, under the advice of those fanatical Ambrosians, the king commenced a new era in British independence, by erecting a new sanctuary, which sanctuary was no other than Stonehenge. There are, it is true, other British accounts of the purpose for which Stonehenge was built; one of them being that it was made by Vortigern's successor, Aurelius, in memory of certain British princes who were treacherously

massacred by Hengist. The writer of this account was probably ashamed of the follies of the previous reign, and so gave this colour to the transaction. This discrepancy does not in the least affect the main point, the *period* at which Stonehenge was raised. Whether it was in one king's reign or his successors', is, so far, quite immaterial. If on account of such variation we are to reject the united evidence as to the period, we must strike out many other facts in history. There is similar confusion about Robin Hood. Sir Walter Scott associates him with Richard I. The Records, on the other hand, gave the date of Edward II. It does not signify: he lived about that time. Make the same allowance for the story of Stonehenge. Although the bards and chroniclers somewhat differed as to the origin of the structure they agree as to the period when it was built—the fifth century. He was therefore disposed to accept this date as the only historical one, and preferred it to vague speculations made without any authority whatsoever. This brings Stonehenge out as what it is most likely to have been, a British work; erected for British purposes—a strange structure indeed, but the times and builder were strange. Mr. Jackson then produced some curious circumstantial evidence from the legends and stories relating to Stonehenge, which he traced up to its source: all of which were explained by adopting this period and the substance of the story as told by the old British writers: but which were utterly inexplicable in any other way. He considered the small greenstone obelisks as the key to the history. They were certainly brought from some great distance, and had been a sacred circle of great reputation. Like the Casa Santa at Loreto, a small cottage said to have been the Virgin Mary's house at Nazareth, but now enshrined in a magnificent church, so these obelisks, possessing some great traditional value, were transported hither, and enshrined in a coronet of the mightiest Grey Wethers that Wiltshire could produce. The central stone, commonly called the altar, he did not believe had ever been used for any purpose of the kind: but that was merely a station for some important personage during public meetings. It was altogether different from the rest. He then pointed out that the largest stones both at Avebury and Stonehenge

were in point of size, perfectly insignificant compared with the enormous statues and obelisks of Egypt. The statue of Sesostris, at Thebes, weighed 892 tons, being one single block. So that there was no great magic required for moving stones of 40 or 50 tons. It was only a question of so many bullocks or men. The whole story of Stonehenge admitted of a perfectly simple explanation, if people would only be satisfied with the story stripped of the absurdities with which time and the want of regular history has invested it. But they had been so long accustomed to think that it must necessarily belong to some unknown period of antiquity, that to call it only 1300 or 1400 years old was not to be endured. The subject was enveloped in obscurity, but, upon the whole, he leaned to the opinion that it was of the fifth century.

“ Mr. Matcham said he had no intention of attempting to answer every argument which Mr. Jackson had adduced, but there were one or two observations which had fallen from that gentleman to which he would take the liberty of adverting. With reference to Stonehenge having been the work of the Belgæ (a suggestion, by the way, not originally made by Dr. Guest, but propounded before he was born), he asked, how the stones forming the outer circle at Stonehenge could have been obtained, supposing Wansdyke to have been the boundary between the Belgæ and the ancient Britons? It was pretty well established that they were sarsen stones, which could not have been found in sufficient quantity on the southern side of Wansdyke. Stones of that kind must have existed in considerable quantities, to have enabled the workmen to pick out large uniform blocks like those at Stonehenge. So far with reference to the Belgæ having been the authors of Stonehenge. Supposing it, however, to have been built by Vortigern, there was no occasion to enter further into the question, but he (Mr. Matcham) thought there were strong reasons against that supposition. Now as to its erection subsequent to the desertion of this island by the Romans:—everybody who visited Stonehenge must acknowledge it to have been the result of a vast amount of labour—the whole mind and body of the people must have been brought together for that one purpose. That, he apprehended, could not have been the case at the time of the desertion

of Britain by the Romans, for the country was then split into parties, not only political but religious. Now the religion of the southern portion of the county was mainly Christian, although he quite admitted with Mr. Jackson and Mr. Herbert that there was an attempt to infuse into it the spirit of other creeds. If however, a new building was to be raised, and there had been anything like a mixture of religions, there would most probably be the marks of two religions upon that building. Now Stonehenge bore not the slightest mark of Christianity, and this had always been, to his mind, a great objection to the theory of the late Mr. Algernon Herbert. Then again the specimens of pottery which had been found in the neighbourhood were of the rudest description, and evidently belonged, not to the Romans, but to the ancient Britons. Again, the country was, at the time of Vortigern, ravaged by war, and it was not likely that such a period would have been selected for the erection of such a mighty monument as that of Stonehenge. The writings of the Welsh bards simply went to show that the building was standing at that time—indeed, Mr. Davies, the author of ‘Celtic Researches,’ who well understood the old Welsh poetry, said the opinion of the bards was that Stonehenge had been standing from time immemorial. The only authority for Mr. Herbert’s theory was Geoffrey of Monmouth. He could not suppose that at the time when the country was invaded by the Picts and Scots, Vortigern could ever have sent a fleet to Ireland to bring something like thirty stones to the Amesbury Downs. The smaller stones were certainly not from the neighbourhood, and they *might* have come from Ireland. . . . He himself was inclined to the belief that the outer circle of Stonehenge was erected by Phœnician architects. They first settled at the Land’s End, in Cornwall, and having lead and iron mines, in Wales, it was by no means improbable that they drew these stones from different parts of the country as emblems of the places whence they derived their wealth. He did not say it was so, but there was just as much reason for the supposition, as that Merlin brought them from Ireland.”

The following are the conclusions to which one of our most thoughtful and learned antiquaries, the Rev. John Earle, has come:

first, that Stonehenge was constructed with reference to sun worship, and, secondly, that there might be some truth in the legend which made it a sepulchral monument. "As regarded the date he was inclined to believe it should be resolved into two parts, and that the interior oval and the interior circle were of one and the same age, and were to be classed with other unhewn monuments existing in various parts of the country, and that they were not in a position to form any definite opinion as to their date. With reference to the external circle, the stones composing which had been worked with iron, he was of opinion that it must have been raised after the Romans left this country. The only objection he had ever heard to this view was that the chippings of the two kinds of stones had been found together, but he should like to know the circumstances under which they were found, because it appeared highly improbable that the smaller stones were ever chipped, because they were all of granite or other igneous rock, of which he understood the like was only to be found in Wales or the West of Ireland. In conclusion, he said when they considered that the erection of Stonehenge had left no record behind it, they might naturally reflect how late in the career of the human race written history entered. A large number of monuments in different parts of the world, more or less analogous to Stonehenge, were the only records of a vast period of unwritten antiquity. In them they saw what grand conceptions, what symmetrical designs, what heavy undertakings, men were capable of before they arrived at the art of even the rudest chronicling. And there is nothing in the execution of those works on which investigation had hitherto been able to fasten as a character, whereby they might be arranged in a chronological scale. Those who took their stand upon records and monuments made their way upwards to meet those who, starting in the remote era of geologic time, were striving to connect their researches with the history of man."

The last opinion shall be the brief, but weighty one, of the distinguished writer on ethnological archæology, Sir John Lubbock, who has done so much, by his purchase at Abury, and by his speeches in Parliament, to awaken, and strengthen, an interest in the preservation of our ancient monuments. He thinks "it may be

regarded as a monument of the Bronze Age, apparently not all erected at one time, the inner circle of small, unwrought blue stones, being, probably, older than the rest;” and that it was “used as a Temple.” (“Pre-Historic Times,” p. 116.)

Herbert, in his learned and amusing book, speaks, in his sarcastic vein, of the variety and vanity of the opinions about Stonehenge. Whatever any Member of the Society may think about their vanity, there can be but one opinion as to their variety.



Part IV.

Salisbury Plain and the Stonehenge Barrows.

TO the lover of our open downs it is refreshing to read of Salisbury Plain before it had been encroached upon, as now, by the plough. The Rev. William Gilpin, in his "Observations on the Western Parts of England, relative especially to Picturesque Beauty," dedicated to Speaker Addington, 1798, says: "The plain¹ on which Stonehenge stands, is in the same style of greatness as the temple that adorns it. It extends many miles in all directions, in some not less than fifty. An eye unversed in these objects is filled with astonishment in viewing waste after waste rising out of each new horizon.

'Such appears the spacious plain
Of Sarum, spread like Ocean's boundless round,
Where solitary Stonehenge, grey with moss,
Ruin of ages, nods.'

"The ground is spread, indeed, as the poet observes, *like the ocean*; but it is like the ocean after a storm, it is continually heaving in large swells. Through all this vast district, scarce a cottage or even a bush appears. If you approach within two or three miles of the edge of the plain, you see, like the mariner within soundings, land at a distance, houses, trees, and villages; but all around is waste. Regions, like this, which have come down to us rude and untouched,

¹ Stukeley was not insensible to the charms of "this delightful plain,

'Juvat arva videre
Non rastris, hominum non ulli obnoxia curæ.'—*Virgil*.

Nought can be sweeter than the air that moves o're this hard and dry chalky soil. Every step you take upon the smooth carpet, (literally) your nose is saluted with the most fragrant smell of *serpillum* and *apium*, which with the short grass continually cropt by the flocks of sheep, composes the softest and most verdant turf, extremely easy to walk on, and which rises, as with a spring, under one's feet." (p. 9.)

from the beginning of time, fill the mind with grand conceptions, far beyond the efforts of art and cultivation. Impressed by such views of nature, our ancestors worshipped the god of nature, in these boundless scenes, which gave them the highest conceptions of eternity.

. . . All the plain, at least that part of it near Stonehenge, is one vast cemetery. Everywhere, as we passed, we saw tumuli or *barrows*, as they are called, rising on each hand. These little mounds of earth are more curiously and elegantly shaped than any of the kind I remember elsewhere to have seen. They commonly rise in the form of bells, and each of them hath a neat trench fashioned round its base; though in their forms, and in the ornamental circles at their bases, some appear to be of more distinguished workmanship. They are of various sizes, sometimes of thirty, sometimes of forty, or fifty yards in diameter. From many places we counted above an hundred of them at once; sometimes as if huddled together without any design; in other places rising in a kind or order. By the rays of a setting sun, the distant barrows are most conspicuously seen. Every little summit being tipped with a splendid light, while the plain is in shadow, is at that time easily distinguished. Most of them are placed on the more elevated parts of the plain, and generally in sight of the great temple. That they are mansions of the dead is undoubted; many of them having been opened, and found to cover the bones both of men and beasts; the latter of which were probably sacrificed at the funeral. We suppose also that some of them contained the promiscuous ashes of a multitude, as Virgil describes them:—

‘ Confusæ ingentem cædis acervum,
 Nec numero, nec honore cremant. Tunc undique vasti
 Certatim crebris collucent ignibus agri.
 Tertia lux gelidam cælo dimoverat umbram;
 Mærentes altum cinerem, et confusa ruebant
 Ossa focus; tepidoque onerabant aggere terræ.’

Indeed this mode of burial, as the most honourable, seems to have been dictated by the voice of nature. We meet with it in Homer; we meet with it in Herodotus. The vestiges of it are found on the vast plains of Tartary; and even among the savages of Guinea.

“ Though Salisbury Plain in Druid times was probably a very

busy scene, we now find it wholly uninhabited. Here and there we meet a flock of sheep scattered over the side of some rising ground ; and a shepherd with his dog attending them ; or perhaps we may descry some solitary waggon winding round a distant hill. But the only resident inhabitant of this vast waste is the bustard. This bird, which is the largest fowl we have in England, is fond of all extensive plains, and is found on several ; but these are supposed to be his principal haunt. Here he breeds, and here he spends his summer-day, feeding with his mate on juicy berries, and the large dew-worms of the heath. As winter approaches, he forms into society. Fifty or sixty have been sometimes seen together. As the bustard leads his life in these unfrequented wilds, and studiously avoids the haunts of men, the appearance of anything in motion, though at a considerable distance, alarms him. . . . As he is so noble a prize, his flesh so delicate, and the quantity of it so large, he is of course frequently the object of the fowler's stratagems. But his caution is generally a protection against them all. The scene he frequents, affords neither tree to shelter, nor hedge to skreen, an enemy ; and he is so tall, that when he raises his neck to take a perspective view, his eye circumscribes a very wide horizon. All open attempts, therefore against him are fruitless. The fowler's most promising statagem is to conceal himself in a waggon. The west-country waggons, periodically travelling these regions, are objects to which the bustard is most accustomed ; and though he retires at their approach, he retires with less evident signs of alarm, than from anything else. It is possible, therefore, if the fowler lies close in such a concealment, and with a long-barrelled gun can direct a good aim, he may make a lucky shot. Sometimes also he slips from the tail of a waggon a couple of swift greyhounds. They soon come up with the bustard, though he runs well ; and if they can contrive to reach him, just as he is on the point to take wing (an operation which he performs with less expedition than is requisite in such critical circumstances) they may perhaps seize him.¹

¹ On the Bustard and its extinction in England, see *Wilts Arch. Magazine*, vol. ii., p. 212 ; also the interesting article on this bird, in vol. iii., by our Wiltshire ornithologist, as well as antiquary, the Rev. A. C. Smith. In Sir

“Some encroachments have been made by the plough, within these few years, upon Salisbury Plain. But these inroads, though considerable in themselves, bear little proportion to the vastness of these downy grounds. The plough is a heavy invader; and its perseverance only can produce a visible effect in so vast a scene.

“Another reason also may operate powerfully in preserving these wide domains in a state of nature. The soil is, in most places, very shallow, not above five or six inches above a rock of chalk; and as the tillage of two or three years exhausts it, without more expense than the land will answer, it hath been thought but ill husbandry to destroy a good sheep walk for a bad piece of arable land.”

APPEARANCE OF STONEHENGE FROM THE PLAIN.

Mr. Warner truly says that “the distant effect of Stonehenge is not so striking as the description of its magnitude would lead us to imagine, since being an isolated object, situated in the heart of the plain, without anything around it for a standard of comparison, every impression of its greatness is swallowed up and overwhelmed in that idea of immensity which the prospect on every side presents to the mind. This very circumstance of *unaccompanied* locality, however heightens, perhaps, the effect of the fabric when we approach it, for the mind, not being interrupted or distracted by neighbouring objects, bends its undivided attention to the solitary wonder before it.”¹ And Mr. Fergusson justly observes of it that “when viewed from a distance the vastness of the open tract in which Stonehenge stands takes considerably from its impressiveness, but when the observer gets close to its great monolithic masses the solitary situation lends it a grandeur which scarce any other building of its class can be said to possess.”²

Richard Hoare's *Ancient Wilts*, i., 94, is a very curious account of two bustards having attacked men on horseback, near Tilshead, in June, 1801. In the *Times* newspaper of March 2nd, 1876, was a letter from the Rev. F. O. Morris, the well-known ornithologist, in which he stated that he had heard recently from a friend that a great bustard had taken up its quarters in the fens of Cambridgeshire, and he claimed for it the protection given by the recent Act of Parliament. It is vain to hope that the poor bird will be allowed to live at peace in England.

¹ Warner's "Excursions from Bath," 1801, p. 172.

² *Quarterly Review*, No. 215, p. 202.

ON THE BARROWS¹ SURROUNDING STONEHENGE.

To the sanctity attaching to Stonehenge, the numerous and important "monumental hillocks" on the adjoining plain bear testimony, but no one who looked carefully at them, could, for a moment, entertain the idea that these were the graves of slaughtered heroes whom survivors had "buried darkly at the dead of night." They carry with them unmistakeable indications of having been leisurely and carefully made by a people who were living in peace and safety upon and around the neighbouring down. From the great size of many of them and their commanding positions on the more elevated portions of the plain, they are very striking objects, and greatly enhance the interest awakened by the stone circles, and their sacred precincts.

Leland describes those near Stonehenge as "monticuli illi ex egestâ terrâ conglobati;"² and Camden, writing of Wiltshire, says: "Many such artificial hills both round and pointed are to be seen in these parts, and are called burrowes or barrowes, probably thrown up in memory of soldiers slain thereabouts. Bones are found in them."

From the chapter on barrows in the "Monumenta Britannica" of Aubrey, part ii., and which has for its motto the following from Seneca, de Consolatione ad Polyb: "Quæ per constructionem lapidum, et marmoreas moles, aut terrenos tumulos in magnam eductos altitudinem constant, non propagabant longam diem, quippe et ipsæ intereunt," the writer has extracted the following notices of barrows in the neighbourhood of Stonehenge: "In the Farme of West Amesbury (within which is that famous Antiquity of Stoneheng) is a place called the King's Graves (which is now the *Sheep-penning* of West Amesbury) where doe appeare five small Barrows, or Tumuli,

¹ Called "Loves," in Derbyshire; "Howes," in Yorkshire. "The raising of mounds of earth or stone over the remains of the dead, is a practice," says Mr. Akerman, "which may be traced in all countries to the remotest times." Dr. Wilson adds that "their origin is to be sought for in the little heap of earth displaced by interment, which still to thousands suffices as the most touching memorial of the dead."

² Comment de Script. Britann. De Ambrosio Merlino Cambro, 1709, p. 44.

at one corner of the Penning.¹ At the end of these graves were stones, which the people of late yeares, sc. since 1640, have fetcht away: for in these parts, stones (except flint stones) are very scarce. Mrs. Trotman of Bishopstone, wife of Anth: Trotman, who then lived at the farme (from whom I have these excellent remarques and traditions concerning Stonehenge and these Barrows) told me that there were some letters on the stones: but what they were I could not learn.

“Near the Penning aforesaid, where the Kings-graves are, is Normanton-ditch, but why so called, no tradition. In the field thereby hath been found, by ploughing, within 30 years last past (sc. about 1638 or 1640) as much Pewter as was sold for five pounds. the shephard had pitcht through it in many places in pitching for their Fold. It was pure pewter, here were not any Coines found.

“In this Farme is Pitt-poole, which is so called from a King, who upon his escape, rideing hastily downe the Sheep-shoot, was then drowned. See the Chronicle de hoc.

“About Stonehenge are Seaven Barrows (called so by the Travellers) one whereof is called Panbarrow. Quære the names of the rest of the barrows. Mrs. Trotman says that one of the Chronicles recites the names of these Barrows, and who are there buried, but I much doubt it. Mrs. Trotman knows a man that sawe the digging, and will enquire of him dates.

“Capt. J. Ryves says, are severall Barrowes that retain Danish or Saxon names, sed non credo.”

On the next page is a note to his description of Gawen's Barrow, in the parish of Broad Chalke, which the writer would like to print: “I never was so sacralegious as to disturb or rob his urne: let his ashes rest in peace: but I have oftentimes wish't that my corps might be interred by it: but the Lawes ecclesiastick denie it. Our

¹This word “Penning” or “Pennings” seems to be in use in other parts of Wiltshire. Sir R. C. Hoare speaks of a “Great Penning,” near Tilshead (*Ancient Wilts*, i., p. 94.); and Dean Merewether speaks of a “Penning,” near Abury; “at Mr. George Brown's above Beckhampton.” “The phrase belongs to a disused enclosure adjoining the farm-yard and fold near at hand. The term ‘Penning,’ is applied by the husbandmen to other similar enclosures and earthworks.” (*Salisbury Vol. of Arch. Institute*, pp. 109, 110.)

Bones, in consecrated ground, never lie quiet: and in London once in ten yeares (or thereabout) the earth is carried to the dung-wharfe."

Stukeley (c. x.) thus speaks of the barrows: "I come in the last place to speak of the barrows, observable in great numbers, round Stonehenge. We may very readily count fifty at a time, in sight from the place: easily distinguishable: but especially in the evening, when the sloping rays of the sun shine on the ground beyond them. These barrows are the artificial ornaments of this vast and open plain. And it is no small entertainment for a curious person to remark their beauties, their variety in form and magnitude, their situation. They are generally of a very elegant *campaniform* shape, and done with great nicety. There is likewise a great variety in their shape and turn, and in their diameters, in their manner of composition. In general, they are always on elevated ground, and in sight of the temple of Stonehenge. For they all regard it. This shews *they* are but superficial inspectors of things, that fancy from hence, great battels on the plain; and that these are the tumultuary burials of the slain. Quite otherwise, they are assuredly, the single sepulchres of kings and great personages buried during a considerable space of time, and that in peace. There are many groups of them together, and as family burial places; the variety in them, seems to indicate some note of difference in the persons there interr'd, well known in those ages. Most of the barrows have little ditches around, extremely well defin'd. In many is a circular ditch 60 cubits in diameter, with a very small tumulus in the center. 60 or 100 cubits is a very common diameter in the large barrows. Often they are set in rows, and equidistant, so as to produce a regular and pretty appearance, and with some particular regard to the parts of the temple, the avenues, or the cursus."

In 1722 Lord Pembroke opened one of a pair of twin barrows by the east side of the road from Wilton to Stonehenge.

"On the west side, he made a section from the top to the bottom, an intire segment, from center to circumference. The manner of composition of the barrow was good earth, quite thro', except a coat of chalk of about two foot thickness, covering it quite over, under

the turf. Hence it appears, that the method of making these barrows was to dig up the turf for a great space 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 considerable time, these barrows must have look'd white: even for some number of years. And the notion of sanctity annex'd to them, forbad people trampling on them, till perfectly settled and turf'd over. Hence the neatness of their form to this day, At the top or center of this barrow, not above three foot under the surface, my Lord found the skeleton of the interr'd, perfect, of a reasonable size, the head lying towards Stonehenge or northward." The year following he began upon a barrow north of Stonehenge, in that group south of the cursus. "T'is one of the double barrows there; and more easterly and lower of the two (No. 29 in Sir R. Hoare's map), likewise somewhat less. It was reasonable to believe this was the sepulture of a man and his wife; and that the lesser was the female; and so it prov'd, at least a daughter. We made a large cut on the top from east to west. After the turf taken off, we came to the layer of chalk, as before, then fine garden mould. About three foot below the surface, a layer of flints, humoring the convexity of the barrow. These flints are gather'd from the surface of the down in some places; especially where it has been plow'd. This being about a foot thick rested on a layer of soft mould another foot: in which was inclosed an urn full of bones. This urn was of unbak'd clay, of a dark reddish colour: crumbled into pieces. It had been rudely wrought with small mouldings round the verge and other circular channels on the outside, with several indentures between, made with a pointed tool. The bones had been burnt, and crowded all together in a little heap, not so much as a hat crown would contain. The collar bone and one side of the under jaw are grav'd in their true magnitude. It appears to have been a girl of about 14 years old. . . . Beads of all sorts, and in great number, of glass of divers colours, most yellow, one black, were mix'd with the bones. Many single, many in long pieces, notch'd between, so as to resemble a string of beads, and these were generally of a blue colour. There were many of amber, of all

shapes and sizes, flat squares, long squares, round oblong, little and great. Likewise many of earth, of different shapes, magnitude and colour, some little and white, many large and flattish like a button, others like a pully. But all had holes to run a string thro', either thro' their diameter or sides. Many of the button sort seem 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 these was cover'd with a thin film of pure gold. These were the young lady's ornaments, and had all undergone the fire; so that what would easily consume fell to pieces as soon as handled. Much of the amber burnt half thro'. This person was a heroin, for we found the head of her javelin in brass. At bottom are two holes for the pins that fastened it the staff. Besides there was a sharp bodkin, round at one end, square at the other, where it went into a handle. [These ornaments are engraved in Stukeley's Stonehenge, plate xxxii.] Then we op'd the next barrow to it enclos'd in the same ditch, which we suppos'd the husband or father of this lady. At fourteen inches deep, the mould being mixed with chalk, we came to the intire skeleton of a man. The skull and all the bones exceedingly rotten and perish'd through length of time."

On this interesting account of one of the few barrow-openings at Stonehenge before the time of Cunnington and Hoare, the latter says: "Not dissuaded by the external appearances, and convinced by experience that all interments found near the surface were subsequent deposits, Mr. Cunnington, in 1803, explored the second tumulus, by making a section rather to the south of the centre, when at the depth of six feet, he came to the floor of the barrow, which was covered with ashes; and on digging still further to the south he found a fine oblong cist, about eighteen inches deep, fifteen inches wide, and two feet long, and in it a complete interment of burnt bones, and with them six beads apparently of horn, four of which were perforated; the other two were circular, and rather flat, but all appeared as thought they had been burned. Dr. Stukeley made the same observation respecting the articles found in the other barrow; but he must have been mistaken as to the amber,

for we know that fire would entirely consume it.¹ Stukeley also opened what he calls a Druid barrow (? No. 169), "next to bush barrow, westward of it." He found "a squarish hole three-and-a-half feet long, and nearly two broad in the centre of the tumulus. In it were burnt bones." He opened besides "another of these of like dimensions, next to that Lord Pembroke opened, south of Stonehenge. He found a burnt body in a hole in the chalk as before." He finishes his account as follows: "In some other barrows I open'd, were found large burnt bones of horses and dogs, along with human. Also of other animals, as seem'd: of fowl, hares, boars, deer, goats, and the like. And in a great and very flat old fashion'd barrow, west from Stonehenge, among such matters, I found bits of red and blue marble, chippings of the stones of the temple, so that probably the interr'd was one of the builders. . . . This is the sum of what is most material, that fell within my observation, relating to the barrows about Stonehenge."

In Stukeley's Common Place Book is the following: "Forty-five barrows in sight of Stonehenge. A^o 1666, one of the 7 barrows being digged up they found coals, goats' horns and stags horns. [In margin, 'Remains of sacrifice at the Briton's burial.'] Near to the penning is Normanton Ditch, here in ploughing was found A^o 1635, very good pewter, sold for £5."² (This Stukeley must have learnt from the "Monumenta Britannica.")

No less than 300 barrows are laid down on Sir R. C. Hoare's map of "Stonehenge and its environs," within an area of no more than twelve square miles. "It can scarcely be doubted that those interred under tumuli near this sacred place (*locus consecratus*) were the distinguished dead³ brought probably from all parts of the

¹ Ancient Wilts, i., 162.

² Wilts Mag., xi., 342.

³ The question naturally arises. "If these grave-mounds contain the 'corpora clarorum virorum,' where are the graves of the innumerable members of the 'ignobile vulgus?'" They must have been buried where they died. If the bodies were burnt, the ashes un-cisted and un-urned, would soon become mingled with the surrounding earth; if buried entire, the bodies would be laid but a few inches below the surface, and the percolating rain of centuries would generally cause the bones to crumble and decay. Some years ago the writer

territory of the Belgæ for interment near the place where their great annual assemblies seem to have been held." The barrows cannot be considered apart from the mysterious stony structure which they surround. Sir R. C. Hoare says: "I scarcely know how we can separate the æra of the one from the other," and Dr. Thurnam, in his important work on British barrows (*Archæologia*, vol. xliii), from which the writer proposes to make copious extracts, writes as follows: "That Stonehenge belongs to the same epoch as the barrows by which it is surrounded might be inferred from their relative situation. We might, perhaps, surmise priority in the case of two small tumuli, encroached on and inclosed by the vallum and ditch, which, at the distance of a hundred feet, form the *enceinte* to the stones; one of which tumuli, on being excavated was found to cover an interment of burnt bones. Two other barrows however, at no great distance, appear to have been contemporary, or at the most, of a date very slightly posterior to that of Stonehenge itself. In digging down to the base of them, chippings and fragments not merely of the sarsens were found, but likewise of the blue felspathic horn-stones, foreign to Wiltshire, which assist in the formation of this megalithic structure."

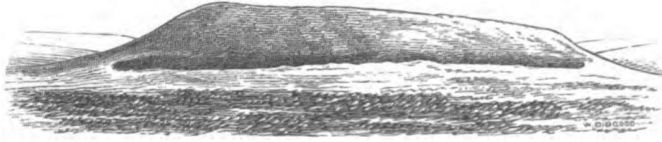
By comparison with the number of barrows on a similar area around the circles of Abury, Dr. Thurnam found that those in the latter district were only one hundred and six, little more than one third as many as in the Stonehenge district.¹

The barrows around Stonehenge are of different ages,² of different

found a skeleton in a hut-circle on Walton Down, near Clevedon, Somerset, at a depth of from four to five feet from the surface. A short notice of this was inserted by Mr. Albert Way, in the sixteenth vol. of the *Archæological Journal*, p. 157. Dr. Thurnam, to whom the writer gave the skull, pronounced it to be that of a young woman.

¹ "The large map of Stonehenge and its environs has an area of about sixteen square miles, but the barrows comprised within do not extend over more than twelve. . . . In no place in the British Isles—perhaps, if we except the plains at old Upsala, not in Europe,—are the tumuli so numerous as around Stonehenge, where they form a great necropolis."—Dr. Thurnam.

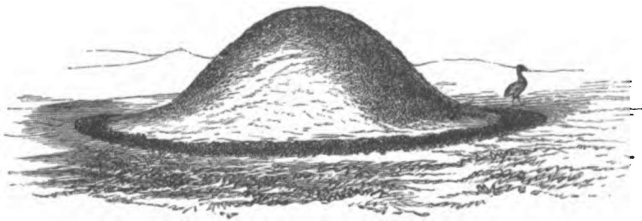
² By "different ages" is here meant that some appear to have been erected before the Stonehenge circles; some when they were in course of construction, and others, after their completion. In no instance, however, have Roman coins



Long Barrow.



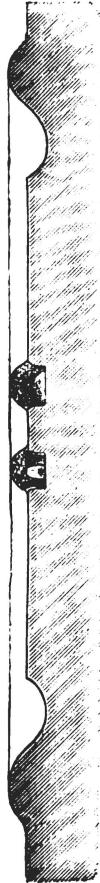
Bowl-shaped Barrow.



Bell-shaped Barrow.



Disc-shaped Barrow.



Section of Disc-shaped Barrow, at Winterbourn Stoke, Wilt., with burnt Bones and Urn in shallow Graves.

sizes, and of different forms. It may be well, therefore, to give the result of Dr. Thurnam's careful investigations into, and classification of, the barrows in this part of the country (*Archæologia*, vol. 43). "There is nothing," he says, "to object to in Sir R. C. Hoare's designations of the three first of his primary forms of the long, bowl- and bell-shaped barrow. That of Druid-barrow, which he adopts from Stukeley, and by which he designates his fourth form, is, however, very objectionable; and, as involving a hypothesis without probable basis, ought to be abolished. I have for several years past designated this species of barrow by the term disc-shaped, which appears sufficiently to characterise the form, which is that of a circular shallow dish inverted. Adopting these four primary forms, with their really important modifications, I propose further to classify the barrows of this part of England according to the following scheme:—

CLASSIFICATION OF BARROWS.

I.—*Long Barrows.* (Stone Period.)

1. Simple or unchambered long barrows.
2. Chambered long barrows.

II.—*Round Barrows.* (Bronze Period.)

- | | | |
|-------------------------|---|---|
| 1. Bowl-shaped barrows. | { | <ol style="list-style-type: none"> a. Simple bowl-barrows. b. Trenched. c. Composite bowl or oval barrows. |
| 2. Bell-shaped barrows. | { | <ol style="list-style-type: none"> a. Simple bell. b. Twin. c. Triple. |

been found in them. This appears to have been the case in a barrow at Morvah, Cornwall, in the stone cist of which, with the urn, were found coins of the Constantine period. (*Nænia Cornub.*, p. 251.) "It was no doubt" says Dr. Thurnam, "in North Britain, beyond the wall, and in the wild and remote districts of Wales and Cornwall, that barrow burial prevailed furthest down into the Roman period." "Mr. Whittaker is of opinion," says Sir Richard Hoare, "that the custom of burying under tumuli survived the introduction of Christianity, and continued beyond the departure of the Romans;" but Sir R. Hoare himself, from the researches he had made, "was induced to think that few or any interments in barrows took place after the Roman invasion." As a rule, Dr. Thurnam considered, that Roman coins found in tumuli might be taken to indicate the time when, or subsequent to which, some rifling of the barrow or some secondary interment has taken place.

3. Disc-shaped barrows. } *a.* Simple, with flat area.
 } *b.* With one, two, or three
 } small central tumuli.
 } *c.* With one low mound nearly
 } covering the area.

“ But though the outer form is important, there can be no satisfactory classification of barrows which does not likewise refer to their internal contents. . . . In none of the first class, or long barrows, whether unchambered or chambered, have objects of metal, either bronze or iron, been found ; and so far as we know, they are of the stone period. In the second class, or round barrows, not only are there objects of stone, but also, and chiefly, those of bronze, and in very rare instances of iron also. They may be regarded, therefore, as belonging to the Bronze Period, and to that of Bronze and Iron transition.”

Accepting this classification, let us first see about the long barrows of Wiltshire generally, and of this district in particular.

Dr. Thurnam counts as many as sixty of these large grave mounds in Wiltshire, of which eleven in the north of the county are chambered.¹ “ If,” he says, “ we estimate the barrows of all sorts in the county at 2000 in number, this will give a proportion of one long barrow to about thirty-five round barrows. . . . Of the whole number, as many as twenty-four are on that part of Salisbury Plain which lies between the valley of the Salisbury Avon on the east and Warminster on the west, and between the Vale of Pewsey on the north and that of Wily on the south. In no other part of England are long barrows so numerous as on this part of Salisbury Plain, where, in an area of 150 square miles or thereabouts, we have on an average one in every six square miles. . . . It is a very rare circumstance to find two (long barrows) within sight or even within a mile’s distance of each other ; and generally they are two or three miles apart. In Wiltshire I know of only one decided exception to this rule, being that in the parish of Milston, on the very confines of Hampshire, where a small but true long barrow is seen to lie

¹ “ In this rough estimate I include the barrows levelled since the explorations of which there is record in ‘ Ancient Wilts.’ ”

parallel with another of average proportions, and is only separated from it by an interval of about 100 yards. At Knowl Hill, on the southern border of the county, near Fordingbridge, are two long barrows of large size, which I have not myself seen, but which are laid down on the maps much nearer to each other than is at all common. As a rule long barrows occupy the highest points on the downs, in situations commanding extensive views over the adjoining valleys, and so as to be visible at a great distance. Salisbury Plain may be said to be guarded as it were by a series of such long barrows, which look down upon its escarpments like so many watch-towers. Others occupy elevated central spots on the interior of the plain; and some of these—as Ell-barrow and Knighton-barrow—are well-known landmarks to the hunter and wayfarer over these extensive and (in winter) dreary downs. Several of the clusters of round barrows near Stonehenge are grouped around, or in close proximity to, a single long barrow. On inspecting such a group as that on Winterbourne Stoke Down, where out of twenty-seven tumuli we find a single long barrow, or as that on Lake Down, where to twenty-three circular barrows of various forms we also have one long barrow, it might at first be thought that the long and circular barrows were of the same date, and that the elongated tumulus, as well as the variations in the forms of the round barrows, had its origin merely in the taste or caprice of those by whom it was erected. Knowing, however, as we do, that the examination of the long barrow discloses an entirely different method of sepulture, and indicates a much earlier epoch than does that of the round barrows, we come rather to regard them as the burial places of an earlier race, probably the original possessors of the soil, around which the tombs of a later and more cultivated people were afterwards erected. As a rule, these tumuli stand apart from those of circular form. . . . In by far the greater proportion of long barrows, the mound is placed east and west, or nearly so, with the east end somewhat higher and broader than the other. Under this more prominent and elevated extremity the sepulchral deposit is usually found at or near the natural level of the ground; but although this is the general rule, a certain proportion depart decidedly from such a system of

orientation, being placed pretty nearly north and south, and this is an arrangement which I find obtains in about one out of six of our Wiltshire long barrows. In this case, as I have found by excavations, sometimes the south and sometimes the north end is the higher and broader of the two, and covers the sepulchral deposit. They vary in size from one or two hundred to three and even nearly four hundred feet in length, from thirty to fifty feet in breadth or upwards, and from three to ten or even twelve feet in elevation. Along each side of the whole length of the tumulus is a somewhat deep and wide trench or ditch, from which trenches no doubt a great part, or sometimes even the whole, of the material of the mound was dug, but which it is very remarkable are not continued round the ends of the barrow.

"The absence of chambered long barrows in South Wiltshire appears to be due to the fact that in those chalk regions there is an absence of stone suitable for the construction of chambers. In North Wilts the case is different; and sarsen stones of large dimensions and in great numbers are found in the hollows of the higher chalk downs. Of the chambered barrows of Wiltshire, which inclusive of Wayland's Smithy, just over the border are twelve in number, nine, all in the chalk district, have, the chambers formed of the hard silicious or sarsen stones."

Usually the human remains in the long barrows comprise numerous skeletons, which are described by Sir R. C. Hoare as "strangely huddled" or "thrown promiscuously together," or "as lying in a confused and irregular manner." In a large proportion of the long barrows opened by Dr. Thurnam, many of the skulls exhumed have been found to be cleft, apparently by a blunt weapon, such as a club or stone axe. From a minute examination of the fractures he thinks it evident that the violence was inflicted prior to burial, and in all probability during life. He hence concludes that the skeletons with cleft skulls are those of human victims immolated on the burial of a chief.¹ The body of the chief would be as a rule unmutilated, whilst marks of violence might be expected to be met

¹ On the "Ossuary" theory in opposition to the "Human Sacrifice theory" of Dr. Thurnam, see Professor Rolleston's paper "On the People of the Long Barrow Period," *Journal of the Anthropological Institute of Great Britain and Ireland*, vol. v., No. ii., pp. 134, 5, 6.

with in the remains of the slaves and retainers slaughtered in his honour. And in accordance with this conclusion it is not unusual, as already stated, to find one of the central skeletons with the skull entire, whilst in all the others it is more or less extensively cleft. The solitary skeleton which formed the primary interment in the Winterbourne Stoke long barrow was entire and unmutilated, and the absence of associated skulls with cleft skulls rendered it probable that the usual funeral rites were in this instance never completed. In the Tilshead Lodge long barrow, in which were two skeletons, the skull of one was cleft, while that of the other was intact. Dr. Thurnam, moreover, considers it very probable that at this period anthropophagism prevailed, and sees "no difficulty in acceding to the conclusion of Mr. Greenwell, that in the disjointed, cleft, and broken condition of the human bones in many of the long barrows, and especially in those examined by him at Scamridge, near Ebberston, and near Rudston, Yorkshire, we have indications of funeral 'feasts, where slaves, captives, and others were slain and eaten.'" ¹

Dr. Thurnam often found not far from the human remains, though at a somewhat higher level, the bones of oxen, those of the skull and feet being the portions of the skeletons most generally met with. These he found to be of the small short-horned species, the *bos longifrons* or *bos brachyceros*. He concludes that oxen were slaughtered at the time of the obsequies for the supply of the funeral feast, and that the heads and feet, not being used for food, were thrown on the yet incomplete barrow, as offerings, perhaps, to the manes or other deities.

Out of thirty-one long barrows there are three cases in which the burial was attended by the burning of the dead. "The cremation however seems to have been of an imperfect and defective sort, quite different from that of the round barrow period; when, moreover, instead of the burning having been practised at the most in a tithe of the instances (in Wilts and the south-west of England), it was decidedly the more usual mode." According to Dr. Thurnam's enumeration

¹ Archæological Journal, 1865, xxii., 107.

of the circular barrows of Wiltshire, the exploration of which is recorded in the "Ancient Wiltshire," of Sir R. C. Hoare, and which he reckoned as three hundred and fifty-four in number, cremation had been practised in not fewer than two hundred and seventy-two instances, or in the proportion of rather more than three to one.

In no case whatever has any object of metal been found in the simple long barrows with the primary interment. The rarity of objects of flint and other stone, and those of bone, as well as pottery, is also very remarkable; and leads to the inference that those which have been met with have seldom been deposited intentionally, or as a necessary part of the funeral rites. Mr. Cunnington makes no mention of having found any flint implements or weapons in the long barrows opened by him and Sir R. C. Hoare, but Dr. Thurnam found in the Winterbourne long barrow, close to the right arm of the single skeleton which formed the primary interment a naturally "bludgeon-shaped flint about eight inches long, and well adapted for being grasped in the hand. From one end numerous flakes had been knocked off, and it had evidently constituted an object of considerable importance to its owner." In the Norton Bavant long barrow in which he found the remains of eighteen skeletons, there was a globular ball or nodule of flint, much battered, and weighing three pounds and three-quarters. "It lay close to one of the skulls, and had obviously been appropriated to some special purpose. It was possibly the instrument by which so many of the skulls had been fractured." From Fyfield, Walker's Hill, and Rodmarton long barrows, Dr. Thurnam and Mr. Lysons procured some very delicate and beautifully-chipped leaf-shaped arrow-heads, of which there are notices in "Proceedings of Society of Antiquaries second series," iii., 168. Similar leaf-shaped arrow-heads of flint were found by Mr. Bateman in the long barrows of Derbyshire. Neither Sir R. C. Hoare nor Mr. Cunnington appear in any instance to have found earthen vases of any sort, or even fragments of such, with the primary interments. Dr. Thurnam found in the long barrow at Tinhead a fragment or two of rude black pottery of a peculiar character, thin, smooth on the outside, and having the clay of which it is formed mixed with pounded shells, apparently fossil

shells of the district. At Norton Bavant, imbedded among the human skeletons, he discovered the greater part of a thin curious vase of a wide-mouthed semi-globular form, and which was capable of being partially restored. In both instances there is not the slightest trace of ornamentation, either by the pressure of cords or or thongs or by any other process; in this respect the contrast being great with most of the pottery from the round barrows.

It was fortunate that the opening and re-opening of these long barrows was carried out by one who was thoroughly conversant with craniology, and who was able to turn his scientific examinations to ethnological account. Sir R. C. Hoare and Mr. Cunnington took no note of the character of the skulls they discovered, nor did they preserve them.¹ The first skull obtained by Dr. Thurnam from an

¹“The priority of the dolichocephalic skulls from the chambered and other long-barrows of Britain, was maintained by the late Mr. Bateman, who made so large a collection of the most ancient crania, associated implements and other remains, from the barrows-excavated by himself and friends, in Derbyshire, Staffordshire, and Yorkshire. Mr. Bateman assigned the chambered barrows to ‘the most remote antiquity, when the sole material for the spear and arrow was flint.’ After exploring several such mounds (much less remarkable, however, in the size of their chambers than those of the Dobunian district), he says, ‘the interments within the chambers have been many, and apparently continued over some length of time. They are marked by a strongly-defined type of skull, the more obvious feature being excessive elongation, and a laterally compressed appearance, enhanced sometimes by the sagittal suture being elevated into a ridge.’ To a later period, he assigned the smaller barrows covering one or two skeletons, accompanied sometimes by objects of bronze in addition to those of flint, the crania from which, he says, are of a short round form.” (Ten Years’ Diggings, 1861, p. 146; Journal Brit. Arch. Assoc., 1862, vol. vii., p. 210.) In the latter paper, Mr. Bateman says, p. 211: “While allowing the hazard of any attempt to generalize from data which are somewhat limited and imperfect, I am still induced to claim some degree of consideration for these observations which are of a classifying tendency, from their being the fruit of nine years’ close examination of tumuli of many kinds, and a careful comparison of between one and two hundred crania derived from them.” Dr. Wilson, the author of “Pre-historic Annals of Scotland,” 1861, appears to have been fully alive to the great difference between these two classes of skulls. According to Dr. J. B. Davis, the coadjutor of Dr. Thurnam, in the “Crania Britannica,” the first publication which called attention to the long and short skulls derived from ancient barrows, attributing them to different races, was, “Om Hovedskallerne og Beenradene i vore gamle Gravhøle, by Professor Eschricht, Dansk Føkeblad, 1837, p. 109.—“Cr. Brit.” on Skull from Long Lowe Barrow, Staffordshire.

unchambered long barrow, and which was also the first to be described, was from that at Winterbourne Stoke, in 1863. (Memoirs of the Anthropological Society of London, 1864, i., 144, pl. I.) Since then he had accumulated twenty-seven skulls from the unchambered long barrows in South Wilts, which are all remarkably long and narrow, and designated *dolichocephalic*, *stenocephalic*, and *kumbecephalic*,¹ by modern craniologists. "In Europe, at the present day, there is no people with skulls so long and so narrow; and we have to search for cranial proportions similar to those of the old long barrow folk far away in Africa, India, Australia, or the Melanesian Islands. The contrast in form between the long skulls from the long barrows and the short or round skulls, which to say the least, prevail in our Wiltshire circular barrows, is most interesting and remarkable, and suggests an essential distinction of race in the peoples by whom the two forms of tumuli were respectively constructed."²

¹ "Long-headed," "narrow-headed," "boat-shaped."

² "The mean stature, derived from 52 measurements was 5 feet 6 inches for the men of the Long Barrows, and 5 feet 9 inches, for those of the Round Barrows."—Thurnam Mem. Anthropol. Soc., iii., 71. Very different was the stature of some skeletons found at Lundy Island, in the Bristol Channel, a few years ago, of which the writer procured the following account for Dr. Thurnam from the son of Mr. Heaven, the chief resident on the island: "The skeletons were found on the top of the island, about 2 feet under ground, in digging foundations for a wall for farm buildings; the ground was slightly mounded; if artificial, it must have been some time ago, as it was always taken for a natural rise in the land. The number of the more perfect skeletons was seven, lying in a row with the heads to the West. The first in the row, a male, measured 8 feet 5 inches; by the head were placed two upright stones with the head lying in a little hollow, and protected by a third stone. None of the others had any appearance of coffins by them but great numbers of limpet shells. The one measured was measured by my father, by whose orders the remains were buried again, but I am afraid much injured by the workmen in doing so. Some pottery and some beads were found with them. About thirty yards from one male skeleton were those of a woman and child. Mr. Etheridge, then curator of the British Institution, showed some of the pottery to a friend of his, an antiquary, I believe, who said it was undoubtedly Ancient British. I believe a slight notice of the discovery appeared in a Bristol paper. The ground was not fully explored." The writer would have been glad, if he could have met with this newspaper notice. He was informed of the discovery by the late Commander R. W. Hardy, R.N., who was acquainted with Mr. Heaven, and wrote to him for the above information.

To make shorter work of this most interesting subject, which ought to be carefully studied in the two papers entitled "Principal Forms of Ancient British and Gaulish Skulls," and "On the Two Forms of Ancient British Skulls," both contributed by Dr. Thurnam to the Memoirs of the Anthropological Society, the writer will print two extracts from the former paper, which will give a general sketch of Dr. Thurnam's views respecting the respective occupants of the long and short barrows:—

"The evidence before us appears to favour the conclusion, that whilst in Britain the chambered long barrows were erected by a dolichocephalous race, in Gaul such tombs were raised by a brachycephalous as well as by a dolichocephalous one, though especially by the former. Hence the inference, that the two races came into contact in Gaul at an earlier period than in Britain. In this country, it has been shown that the evidence is in favour of the dolichocephalous race having preceded the brachycephalous; by whom it seems to have been absorbed, or, as is less likely, extirpated. In Britain, the remains of the brachycephalous Celtic race do not distinctly appear except in the circular tumuli, which are generally to be referred to the ago of bronze; whilst the chambered and other long barrows of the stone age, so far as yet examined, always contain skeletons with crania of a dolichocephalic type. . . . In order to connect the dolichocephalic crania from the megalithic tombs of the stone period in Britain, with those of the Basques, and, through them, with the ancient Iberians, we require to know the form of the ancient Iberians' skull, as revealed to us by researches in the most ancient tombs of Aquitania and Spain, and especially in the south of the Peninsula. . . . So far as I have been able to ascertain, the form of skull which prevails in the Peninsula, at the present day, is preponderatingly dolichocephalous, and is thus strongly contrasted with the more cranial form of modern France. . . . That the Iberian¹ race extended itself into Gaul,

¹ Mr. Henry Lawes Long, in his work on the "Early Geography of Western Europe," (1859, Reeve,) considers from the application of the linguistic test, that no tribe of Iberic origin ever made a settlement in Britain. From the central or Celtic division of Gaul, he thought that we might

at least as far as the Garonne, is on all hands admitted. The limits of its original distribution in that country form a legitimate subject for enquiry. In Britain, many circumstances point to an Iberian source for at least part of the earliest population, especially in the south-west of the island. Tacitus remarks the dark complexion and curly hair, which, in his day, were believed to indicate the Iberian origin of the Silures,¹ especially named, perhaps, as representative of the south-western tribes. The description of the Cassiterides preserved in Strabo, is, no doubt, likewise applicable to the Damnonian peninsula, also the place of resort of the Phœnicians of Gades. This evidently very ancient notice represents the inhabitants as nomadic and pastoral, and as habited in long tunics covered by black mantles—a garb apparently identical with that of the Iberians, who are likewise described as *melanchlæni*, or dark robed,² and which is in striking contrast with the bright party-coloured dress of the Gauls. Altogether, the doctrine of an Iberian, or Ibero-Phœnician origin of a very early, perhaps the earliest, population of at least part of Britain, though not as yet proved, derives much additional weight from the comparison here instituted of the skulls of the British dolichocephali of the stone period with those of the Basques.”

safely infer that some colonies issued and established themselves to a considerable extent in our island, although the fact of their advent has not been so much noticed in history as that of the emigrants from the Belgic states; this he would explain by the circumstance of their arrival having occurred at a much earlier period in history, of their being more barbarous than the Belgic settlers, who by a later immigration probably introduced the improved civilisation of the continent, with which from their maritime situation, they continued to preserve a closer intimacy; nevertheless, the immigrants from Celtic Gaul, occupying the central parts of Britain, formed a people of great bravery and power, and seem to have attained a supremacy over the other inhabitants, and to have been the foremost in all the opposition which withstood so vigorously the arms of the Romans.

¹ “Silurum colorati vultus, torti plerumque crines, et posita contra Hispania, Iberos veteres trajecisse easque sedes occupasse, fidem faciunt.” (Vit. Agric. c. xi.) Dionysius, and his paraphraser Priscian, say expressly that the Cassiterides were peopled by the Iberians: “populus tenuit quas fortis Iberi.” (Dion. Perie, v. 563. Priscian, Perieg, v., 578.) The question of an Iberian origin for an intrusive or pre-Celtic population in Britain is discussed in its historical bearings, in Cran. Brit., chap. v. § 2, pp. 52—58.

² Strabo lib. iii., c. 5, § 11: comp. lib. iii., c. 3, § 7: Diod. Sicul. lib. v., c. 33.

The long barrow at Winterbourne Stoke has led us into a lengthy (but it is hoped, not an uninteresting,) notice of the characteristics of barrows of this description, and of the ethnological theories respecting those interred in them, which have been formed by some of the most careful and scientific of the antiquarians of our age. The account given by Dr. Thurnam of the opening of this barrow (at which the writer was present,) shall be given in a note;¹ and

¹ "About a mile-and-a-half to the west of Stonehenge, on the boundary of the parishes of Winterbourne Stoke and Wilsford, is a cluster of circular barrows, which, as in many other instances, are grouped around an immensely long tumulus. The twenty-six tumuli, which, in addition to the long barrow, form this group, are mostly of the more elegant, and probably less ancient, forms. In five, the interment has not been found; two, however, are those absurdly called 'pond barrows,' and probably not sepulchral. Of the twenty-one, seven have been raised over the entire body, and fourteen over the burnt remains. All are probably of the 'bronze period;' and in three, containing skeletons, and one, burnt bones, there were fine blades or pins of that metal, one of the last with an ivory handle. Drinking cups, or other earthen vases, were obtained from four of the barrows; and there was a bone pin with another of the deposits after cremation. The tumulus is about 240 feet in length, and nine in height at the north east end, where it has a breadth of about 65 feet; at the other extremity it is not quite so high or broad. The summit is thrown up almost to an acute ridge, but at the two ends the surface is more rounded. On each side is a trench stretching the whole length of the barrow, but, as usual, not continued round either end. A large excavation at the south-west extremity, disclosed no sepulchral traces; and this immense mound, with an interment only at one end, was no doubt intended as much for a monument as a tomb. At the north-eastern end, about two feet below the highest part of the tumulus were six skeletons, viz; one of a man of about sixty years, one of a young woman under twenty, one of a child about seven, and three of infants of less than two years, the youngest, perhaps, fetal. The skull of the man lay to the north-east, that of the woman to the south-west. *Secondary* interments of the Anglo-Saxon period have been found near the summit of long barrows; but these were obviously British, as shown by the flexed position of the skeletons, by an empty vase of very coarse British pottery, and an oval flint knife. The male skull is well preserved, and of extremely brachycephalic type; the skulls of the woman and children were obtained in a fragmentary condition, but the latter present the same well-marked type, with the occiput flattened. These interments can hardly have been other than secondary, and of a later date than that for which the tumulus was erected; and it became a question whether, on the primary interments being reached, the skull would prove of the same, or of dolichocephalic type. Continuing the excavation, the chalk rubble was dug through, to a depth of six feet, into a stratum of black unctuous earth, of which the lower third of the barrow through its entire length seems to have been formed. At a further depth of three feet, the chalk rock

leaving his description of the chambered long barrows of North Wilts and Gloucestershire, the writer will as briefly as possible, give a *resumé* of the Doctor's account of the other barrows which encircle Stonehenge. He classifies them as to external form as follows:—

1. Bowl-shaped	278
2. Bell-shaped	40
3. Disc-shaped	36

Total 354

I. The bowl-shaped barrow is the simplest form of tumulus met with throughout the whole of the British Isles. The variety in the shape and size of the bowl-barrow is considerable. The form of the majority may be compared to that of the third of an orange cut horizontally. The prevailing height is from three to five feet. In diameter the usual limits are between twenty and sixty feet, though in rare instances one hundred feet is reached and even exceeded. Dr. Thurnam believes it must be allowed that the bowl-shaped is the primitive form of the circular barrow. Occasionally it is surrounded by a slight ditch.

was reached, where were the remains of the original interment; viz., the skeleton of a man laid on the right side, with the knees drawn up in a closely-contracted posture, and the head to the south-west. Close to the right arm, lay a natural bludgeon-shaped flint, about 8 inches long, well adapted for being grasped in the hand; from one end of which numerous flakes had been knocked off. The skull was dolichocephalic; though less decidedly so than many of the crania from the chambered barrows. Near the back of the head was a round 'cist' or hole, scooped out of the chalk rock, about 18 inches wide and the same in depth. Two feet further to the north, were two similar cists of oval form, but somewhat larger, and scarcely so deep. These holes, like others beneath the long barrows of South Wilts, had perhaps been used for deposits of meat and drink, as a *ciaticum* for the dead; or possibly for the blood of human victims, whose mangled remains appear often to have been buried with the body of their chief in this class of tumuli. A few scattered bones of sheep and other animals were found near the summit, and about a yard from the feet of the primary interment, was the symphysis of the ischium of an old horse. The skeleton was that of man of less than middle stature; viz., about 5 feet 6 inches." (Dr. Thurnam's paper on "Principal Forms of Ancient British and Gaulish Skulls," printed in vol. i. of *Memoirs of the Anthropological Society of London*, 1865.)

Of the two hundred and seventy-eight bowl-shaped barrows, seventy-one appear to have contained skeletons, and the remainder (two hundred and seven) burnt bones. The "oval" form of the bowl barrow is a diminutive kind of long barrow, and differs from it in having a ditch all round it. An example of this kind of barrow is No. 49. These barrows belong to the same people and epoch as the round barrows, and especially those of the bowl form.

2. The bell-shaped barrow,¹ an elegant form of tumulus, moulded with much accuracy and symmetry, in a sort of bell-shape. "It is surrounded by a circular ditch, from which part of the material of the mound has been dug, and within this there is a flat circular area on the same level as the surrounding turf. In the centre of this

¹ In Derbyshire, according to Mr. Bateman, almost all the tumuli are bowl-shaped. In the North and East Ridings of Yorkshire, the barrows, which are numerous, are, with scarcely an exception, of the bowl-shape. In Scotland there are no disc-shaped or bell-shaped barrows. The barrows in the Orkneys are bowl-shaped and conoid. The conoid, few in number, are remarkable from their size and great height in proportion to their base. The barrows near Bircam, in Norfolk, are of the bell-shaped form. In Sussex, near Chichester, are campaniform barrows, and on the Sussex down are disc-shaped barrows. On the Mendip Hills the barrows are bowl-shaped, and on the noble ridge-way between Dorchester and Weymouth hardly any other than bowl-shaped are to be distinguished. Mr. Charles Warne says of the Dorset tumuli that the prevailing form is bowl-shaped, frequently surrounded by a shallow fosse. Mr. Sydenham observes that "as the explorer advances in a north-eastern direction towards the adjoining county of Wilts, the barrows present increasing evidence of greater refinement and of a further advance in art." Dr. Thurnam thinks that he alludes chiefly to the richer character of the objects found in the barrows of Wiltshire, but may likewise refer to their frequently more elaborate external form. In that very north-eastern corner of Dorsetshire to which Mr. Sydenham refers, is the well-known group of tumuli, at Woodyates, many of bell and disc-shape, which may compete for beauty with those in the neighbourhood of Stonehenge itself. The evidence afforded by the distribution of the different forms of barrows, goes far to prove that the Durotriges were an aboriginal or primeval tribe, whose territory may have been encroached on, but was never entirely over-run or subjugated by the immigrant Belgæ. [According to Dr. Guest, the whole north-eastern angle of Dorsetshire, embracing the district of Woodyates, two miles from the present boundary of Wiltshire, belonged, not to the Durotriges, but to the Belgæ.] From Mr. J. T. Blight we learn that bell-shaped barrows are rare in Cornwall. (Condensed from Dr. Thurnam's paper, in the *Archæologia*, vol. 43.)

platform stands the tumulus, which is usually of greater size than the bowl-shaped barrow, and varies from about five to fifteen feet in elevation. It is likewise steeper in proportion to its size, and is consequently more conical in outline. Many of the bell-shaped barrows have a diameter approaching one hundred feet, but not a few very considerably exceed this dimension. The two largest and most beautiful bell-barrows¹ I am acquainted with are each within half-a-mile of Stonehenge. They respectively measure fifteen and fourteen and a half feet in height and one hundred and thirty one and one hundred and forty five feet in diameter. Aubrey seems to have been the first to recognize this as a peculiar form of tumulus, whilst Stukeley distinguished it by the name which it still bears, and regarded it as 'of the newest fashion among the old Britons.'² The bell-shaped barrow is by far more numerous and of more beautiful form in Wiltshire, and especially on the plain around Stonehenge, than in any other part of England; it is indeed probable that it was first constructed in this part of the island, and that it was thence diffused slowly and partially over other districts. Out of the forty bell-shaped barrows, the contents of which are described by Sir R. Hoare, thirty yielded deposits of burnt bones, and ten entire skeletons in the place of the primary interment. Of the thirty with interments after cremation, no fewer than twelve were without ornaments or implements of any description. At first sight it might be thought that the practice of burying such objects with the dead, '*omnia quæ vivis cordi fuisse arbitrantur*,' (Cæsar, B. G., vi., 19,) declined as the Britons advanced in civilization; and that, in place thereof, they bestowed more pains on the form of the monumental tumulus." A good example of the twin bell-barrow is No. 29. It consists of two bell-shaped barrows placed side by side on the same platform, and surrounded by a common ditch, which thus becomes oval in form. See Stukeley's Stonehenge, xxxv., Ancient Wilts, i., 161.

¹ Nos. 30 and 164. "The two largest barrows" in Wiltshire appears to be those near Winterslow Hut; one called "colossal" by Mr. Hutchins: Hoare, Ancient Wilts, i., 217.

² Abury, p. 41.

3. The disc-shaped barrow. "The disc-shaped barrow consists of a circular area, on the same level as the surrounding turf, generally about a hundred feet in diameter, though sometimes much less, and sometimes nearly double this size.¹ The inclosed area is surrounded by a ditch with a bank on the outside, both very regularly formed. In the centre there is usually a small mound of very slight elevation, not more than one foot in height; sometimes there are two, or even three, such mounds, corresponding to so many sepulchral deposits. So insignificant are these central mounds that they are scarcely recognized as tumuli by the casual observer. These barrows are more common around Stonehenge than in any other part of Wiltshire; and in other parts of England are of very infrequent occurrence. As compared with the bell-shaped they are probably of more recent invention, being more uniformly connected with the rite of cremation. The interments, with scarcely an exception, consist of the burnt remains, deposited in small dished graves scooped out in the chalk rock, and hardly ever inclosed in urns. Of the thirty-six disc-shaped barrows, of the exploration of which there are details, thirty-five contained interments after cremation.² In thirteen of this number there were beads and other ornaments of amber, glass, and jet, often in such profusion as to justify the conclusion of Sir Richard Hoare that they are the burial-places of women; especially as such objects are rare in the bowl-shaped barrows, and still more so in those of bell-shape. This attribution is confirmed by the uniformly small size of the bronze blades, probably those of two-edged knives, found in at least four of these barrows."

¹ One at Woodyates has a diameter of more than 190 feet; and another, at Idmiston, reaches 194 feet. See *Ancient Wilts*, i., 217, 238.

² In four instances only, out of thirty-six, were there unequivocal signs of urn-burial in the place of primary interment. Whether with or without a central mound, this form of barrow has often proved unproductive to the excavator.

In No. 33, however, which had no elevation in the centre, Sir R. Hoare's workmen hit upon the place of interment, and at the depth of two feet found a circular cist, containing a deposit of burnt bones, together with beads of glass, stone, and amber.

The following is Dr. Thurnam's classification of circular barrows in equal areas around Avebury and Stonehenge :—

	Avebury.		Stonehenge.	
	No.	Per Cent.	No.	Per Cent.
Bowl-shaped	84	80	191	70
Bell-shaped	12	10.5	44	16
Disc-shaped	10	9.5	40	14
	} 20		} 30	
Total	106	100	275	100

“ If we look at the relative proportions, it will be seen that in the Stonehenge district half as many more are of the more elaborate forms as in that of Avebury. The invention or introduction of bell-shaped and disc-shaped tumuli must be regarded as a more recent event in the Avebury district than in that of Stonehenge. It is certain also that these types of barrow are of decidedly more elegant form in the last-named district. The bell-shaped barrows, in particular, are higher and more conical, and as a rule, stand on platforms of larger extent. Many of the bowl-shaped barrows near Avebury, as in North Wilts in general, are trenched close to the base, and in this respect show an approximation to the bell-shaped barrow, which to some degree they represent in this district. Altogether, it is probable that the elaborate bell-shaped and disc-shaped grave-mounds were invented by the people who built Stonehenge, and who, in its construction, manifested a great advance in the arts over those aboriginal tribes by whom rude, though gigantic, megalithic circles, like those of Avebury and Arbor Lowe, were most likely erected.”

CHARACTER OF INTERMENTS IN ROUND BARROWS.

“ Out of the 354 circular barrows, of the more or less successful opening of which there is a record in Sir R. C. Hoare's volumes, the primary interment in 272 appears to have consisted of burnt, and in 82 of unburnt, bodies. Many observations show that the two practices must often have been strictly contemporary. On the plain, within a mile-and-a-half of Stonehenge, are two fine bell-shaped tumuli of very similar size and proportions, in such close proximity that their surrounding trenches reciprocally intersect, so as to constitute them a kind of twin barrow, leaving little doubt of their

having been erected at the same period.¹ In both, the primary interment was found at the base of the barrow, not less than fourteen feet deep. In the first, the deposit consisted of burnt bones, inclosed in a coffer of elm wood. In the second, the primary interment was represented by an entire skeleton, lying in a rude coffin, likewise, as believed, formed of the trunk of an elm. The contemporary character of the two tumuli was shown, not merely by their proximity and external form, and the mode of burial in wooden coffers, but also by the almost identical character of the accompanying relics, which comprised unusually fine objects of bronze, the more remarkable being blades of daggers, and perhaps spears.²

POSTURE OF SKELETONS.

“The posture of the skeletons, the remains of primary interments in circular barrows of the ancient British period, is very remarkable. As regards Wiltshire, it may be stated that, without recorded exception, the skeleton has been found in a contracted posture, with the knees drawn up towards the trunk, the legs bent on the thighs, and the arms more or less drawn up towards the chest and face.”³ In thirty-five out of fifty-five cases in which the position of the skeleton is recorded, the head was directed to the north, six to the north-east, two to the north-west, five to the east, three to the west, three to the south-east, and one to the south-west.

CINERARY URNS.

Dr. Thurnam, when analysing the results of Mr. Cunnington's and Sir R. C. Hoare's excavations, recorded in “Ancient Wiltshire,” found that in sixty-eight out of two hundred and seventy-two cases in which the primary interment had been preceded by cremation, the burnt bones were collected into cinerary urns. The urns were sometimes placed upright, at others in an inverted position. Sir R.

¹Nos. 15 and 16 in the Winterbourn Stoke group.

²Ancient Wilts, i., 121, 2, 3, and plate xv.

³“That the contracted posture of the skeleton is universal, or all but universal in ancient British barrows, would likewise appear from the researches of the Rev. W. Greenwell, whose table of fifty-eight unburnt interments in Yorkshire and other northern counties shows no exception.” *Archæologia*, xliiii., 318, and *Lubbock, Preh. Times*, 2nd edition, p. 135.

C. Hoare is no doubt correct in saying they are much more frequently found inverted. The urns of larger size are indeed almost always in this position. Sometimes the urn had been lined with leaves of fern or bracken (*Pteris aquilina*) before the burnt bones were placed in it. More often apparently, at least in Wiltshire, they were inclosed in linen cloth, of which fabric Sir R. C. Hoare found traces in at least six instances. Sometimes the mouth of the urn was covered by a large flat stone, as in the barrow on Tan Hill, opened in 1855; at other times with flints as in two barrows near Little Durnford; and with unburnt clay, firmly rammed in!¹ Very commonly the urn when deposited was protected by being inclosed in a heaped-up pile of flints. In six of the barrows the burnt bones were not inclosed in fictile urns, nor merely in a simple cist or grave, but in a coffer or shell rudely formed out of the unbarked trunk of a tree. In one case a more carefully-made chest of elm wood seems to have been fastened together with rivets and strips of bronze.

OBJECTS DEPOSITED WITH THE DEAD.

“In the following table the barrows in ‘Ancient Wiltshire’ are classed according as the interments were accompanied by objects of one sort or other, disregarding occasional and less significant combinations:—

	Unburnt Bodies.	Burnt Bodies.	Total.
ROUND BARROWS.			
With urns or other fictile vessels only	17	67	84
„ implements of bone	2	14	16
„ „ of stone	7	5	12
„ „ of stone and bronze	4	1	5
„ „ of bronze ²	14	58	72
„ ornaments only	9	20	29
	53	165	218
With objects	53	165	218
Without objects	29	107	136
	82	272	354
Total	82	272	354

¹ Wilts Arch. Mag., vi., 326; Ancient Wilts, i., 221; Archæologia, xxx., 60.

² The bronze implements comprised twenty-two awls (without other implements), four celts, and about fifty blades of knives or daggers, sometimes two, in one case three, with the same interment.

The writer has drawn largely upon Dr. Thurnam's work (which must always be the standard book on Wiltshire barrows) because it seemed of importance to set before those who are interested in Stonehenge the characteristics of those traces which these grave-mounds afford us of the civilization and customs of the builders and frequenters of this sacred place. But it is impossible to follow him far into all the details relating to the pottery, and stone, bone, and bronze implements, discovered in the South Wilts barrows. They can only be touched upon here very cursorily.

POTTERY.

The pottery is all more or less rude, formed of clay, mixed with minute pebbles, or fragments of broken flint or quartz, or sometimes with pounded chalk or shells, recent or fossil. For the finer vessels the clay has been tempered by the admixture of some sort of grit or sharp sand. All seems to have been hand-made; to have been partly dried by exposure to the air, and then baked, rather than burnt, in the ashes of a fire lighted over and around it. The ornamentation was generally made by the finger or finger-nail, and from the size of the markings Dr. Thurnam is inclined to think that the makers of our British fictilia, like the potters of existing American and African tribes, and lately even in the Hebrides, were of the female sex. Other modes of ornamentation were by means of twisted cord, sticks serrated at the edge, and pieces of wood or bone. Dr. Thurnam arranges these fictile vessels as follows:—

I. Culinary vessels.

II. Sepulchral vessels.

With burnt bodies.

1. Cinerary urns.

2. Incense cups.

3. Food vessels (rarely).

With unburnt bodies.

3. Food vessels.

4. Drinking cups.

Of the sepulchral pottery three forms were discriminated by Hoare, the cinerary urn, the drinking cup, and incense cup. To these, Mr. Bateman added the food vessel. The true cinerary urn was probably made to contain ashes, and the incense cup may likewise have been usually designed for funereal rites. The decorated food vase and drinking cup seem, however, to have belonged to what we may term

the table-ware of pre-historic Britain. Rude as many of these latter appear to us, they would be classed with the vessels for honourable use in the households of the period. Though made for the living, they were likewise habitually buried with the dead, and hence pass over into our sepulchral class. These vessels Dr. Thurnam has found in the form of bowls and jars, pans and pannikins, large pots often with perforated ears, cooking pots, pipkins, with handles, small cups, and strainers. Cinerary urns, or urns designed for the reception of burnt bones, are of every size, from the capacity of less than a pint to that of more than a bushel. Urns of nine or ten inches high are medium sized, those from one foot to fifteen inches large, and above this height exceptionally large, and very rare. The largest Dr. Thurnam knew are two feet or very little more in height, of which one from Wiltshire is in the Blackmore Museum. It was exhumed at Bishopstone; and measures $24\frac{1}{2}$ inches. The Stonehenge urn, of which a wood engraving copied from that in Hoare's "Tumuli Wiltunenses," is given, is $22\frac{1}{2}$ inches high, and 15 wide.

Of the sixty-eight cases in which the burnt bones, as recorded by Hoare, have been collected into urns, there were sixteen or nearly one in four, accompanied by bronze objects; viz., eight by the blades of knives or daggers, seven by awls, and one by both.

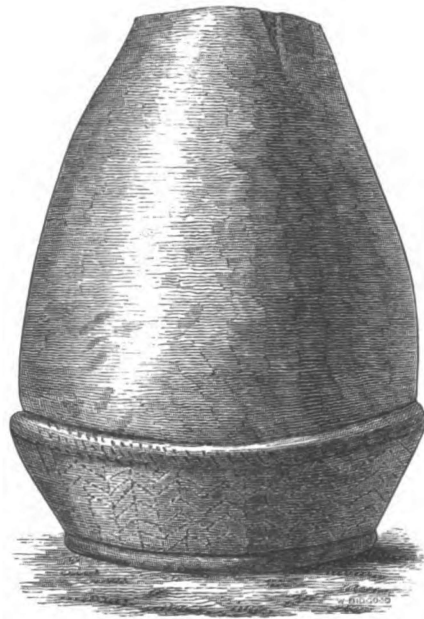
Dr. Thurnam sub-divides cinerary urns into those

- | | |
|---------------------------------|--|
| a. With overhanging rim. | |
| b. With moulded rim. | |
| c. With border in place of rim. | |
| d. Barrel-shaped. | |
| e. Flower-pot shaped. | } Almost peculiar to the
Dorsetshire barrows. |
| f. Cylindrical. | |
| g. Globular. | |

For examples of *a.* see "Ancient Wilts," vol. i., title page, and plate viii., and No. 257 in the Stourhead collection.

For example of *b.* see "Ancient Wilts," i., pl. xiii.; pl. xvi.; pl. xxviii., fig. 1.

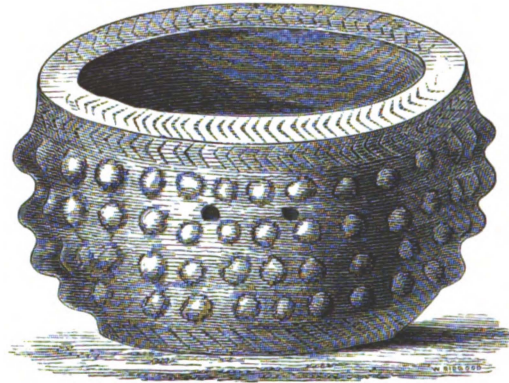
For example of *c.* see "Wilts Archæological Magazine," vi., 73. These urns have sometimes handles.



**Sepulchral Urn, with overhanging rim, 16 inches in height, 11 in diameter.
From group of Barrows, near Woodystes.**



The Stonehenge Urn.



"Nodulated," (Thurnam); "a very beautiful and perfect grape Cup," (Hoare);
from Barrow No. 138.



"Contracted," (Thurnam); from Woodyates.

INCENSE CUPS.

For example of *d.* see "Ancient Wilts," i., pl. xvi., "The Stonehenge urn," and woodcut of it on opposite page.

For an example of *e.* see Thurnam's "Ancient British Barrows," Archæologia, xliii., plate xxx., fig. 7.

For an example of *f.* see Thurnam's "British Barrows," plate xxx., fig. 8.

For an example of *g.* see Thurnam's "British Barrows," plate xxx., fig. 9.

Incense cups. "The small fictile vessels, first named 'Incense Cups,' by Hoare—a name which, for the present at least, it is expedient to retain—are a rather frequent accompaniment of interments after cremation: about one in eleven of those in the barrows of Wiltshire being so accompanied. Sir Richard registers the discovery of twenty-six, twenty-four of which are in the museum at Stourhead, and twelve figured in vol. i. of Ancient Wilts, Of the whole number four were inclosed with the burnt bones in cinerary urns; the remainder with deposits of the same description in shallow graves, or on the floor of the barrows." Dr. Thurnam distinguishes them as follows:—

I. The simple cup, in which the sides deviate but slightly from the perpendicular.

II. The contracted cup, in which the sides are bevelled in towards a narrow mouth and base.

III. The expanded cup, in which the upper part spreads out into a widely-dilated mouth.

The more important varieties of the incense cup are these:—

a. The nodulated cup.

d. The basket cup.

b. The compressed cup.

e. The slashed cup.

c. The handled cup.

f. The strainer cup.

All these types and varieties are found in the barrows of Wiltshire, and two are almost peculiar to them. Of the nodulated cups seven are known. Three are described by Hoare (i., pl. xi., pl. xxiv.); two from barrows near Abury are described by Dean Merewether (Proc. Arch. Inst., Salisbury, pp. 93, 108, fig. 2, 3); and another is in the Bristol Museum, having been found in a barrow at Priddy,

East Somerset. "This part of Somersetshire must have been within the districts of the Belgæ, beyond whose limits no such cups have been found." Of the "basket cup," the sides of which are open and resemble basket-work, the best example was obtained by Mr. Albert Way, from a tumulus at Bulford, four miles from Stonehenge. An engraving of it is to be seen on page 366 of "Archæologia," vol. xliii. Of the slashed cup, the sides of which are slashed with vertical openings, distinct from those of basket-work, the best example is from a Wiltshire barrow near Stonehenge, and is figured on plate xxv. of "Ancient Wilts," vol. i. Of the strainer cup from Lake, within sight of Stonehenge, and which is perforated at the bottom with twenty-four holes, like a colander, and with two holes at one side, an engraving is given in plate xxx. of "Ancient Wilts," vol. i. A very large proportion of these little vessels are pierced on one side with two holes, from half-an-inch to two inches apart. There are exceptions with a large number of holes, but the rule is to have two holes on one side only. It would have been difficult to suspend these cups with holes so made. If they were used as lamps the side holes might be intended for fastening them by wooden pegs in some safe corner of the building. Embers may have been placed in them, and on these embers incense, as in vessels found in France, with Christian interments of the middle age; which to complete the analogy with these cups, have holes in the side. "On the whole, the view expressed by the designation of incense cup, given to these vessels by Hoare, carries with it much probability; and the name can scarcely now be changed without clear proof of some different intention."

Food vessels are rare in the barrows of Wiltshire and the south of England. They are usually from four to five inches in height, and of an urn, flowerpot, or bowl-shape, with wide mouth, narrow foot, the shoulders moulded, as also the lip without and within. They are often scarcely to be discriminated from cinerary urns of the second type, except by their size, and by being found empty, or at the most containing traces of organic matters. Dr. Thurnam found four varieties or types of them: *a.* undecorated urn-shaped; *b.* partially decorated urn-shaped; *c.* decorated bowl-shaped; *d.* decorated shallow



Drinking Cup, from Barrow No. 93.

Half size.

bowl-shaped. A very coarse Wiltshire example of the first variety is that from a secondary interment of the round-barrow period, found near the summit of the long-barrow at Winterbourn Stoke. It is figured on page 379 of "Archæologia" vol. xliii. An example of the second, also figured by Dr. Thurnam, which was found in a barrow at Collingbourn is in the museum at Devizes.¹ "That no food vessels of the third variety have been found in the round barrows of Wiltshire is the more remarkable as fragments of such were obtained from the chambered long-barrow at West Kennet, in that county." The last variety is confined to Ireland. These vessels have probably contained offerings of food and drink such as savage and half-civilized nations still place in the tomb, and seem to have been employed for some pultaceous food or pottage which almost everywhere forms the staple diet of man before, and often for ages after, he adopts the use of bread.

The most handsome of the fictile vases of ancient Britain are the drinking cups. They are usually tall vessels of seven or eight inches in height, thin and well-baked, made from clay tempered with sand or finely-pounded stone; the colour, varying from a light brown to a somewhat bright red. The general capacity is from two to three pints. The ornamentation is profuse; the surface, covered with markings incised or punctured, symmetrically arranged in horizontal bands, which, in the more ornate, alternate with square, oblong, or chequer-shaped compartments, placed vertically or obliquely, and variously filled in. Drinking cups are the accompaniment of unburnt bodies, and were placed in the grave near the head, or more frequently (in Wiltshire twice as often), near the feet. In two instances, however, out of two hundred and seventy-two burnt interments in the Wiltshire barrows, this form of vessel was found, perhaps employed from caprice, or in the absence of others of more appropriate form. Dr. Thurnam distinguishes three principal types of drinking cups, chiefly from the character of the brim, two of which belong to England and one to Scotland: *a.* high-brimmed globose cup; *b.* ovoid cup with recurved rim; *c.* low-brimmed cup.

¹ See *Wilts Arch. Mag.*, x., 93. It was at the feet of the skeleton of a child, in the grave near the centre of the mound.

The first is the prevailing type in South Britain, to which four-fifths, probably, of the known examples belong. The body or lower part is more or less globular; the upper, separated from the lower by a constriction, frequently very defined, spreads out somewhat like the calyx of a flower, and forms a brim which almost equals the lower part in height. The sides of this brim, whether more or less erect or sloping, are straight, and not recurved at the tip. The ornamentation is profuse and elaborate. Of the second type seven examples have been yielded by the Wiltshire barrows. The cup from the Winterslow Hut barrow is figured by Dr. Thurnam, pl. xxxi., fig. 2. The third form prevails in Scotland. In very rare cases drinking cups have handles, but none have been found in Wiltshire.

Of the implements and weapons of stone obtained in Sir R. C. Hoare's excavations, Dr. Thurnam gives the following table:—

IMPLEMENTS AND WEAPONS OF STONE.

	Unburnt Bodies.	Burnt Bodies.	Total.
Celts of flint, partly polished	4	...	4
Hammer-axes, polished and perforated	2	3	5
Hammers	2	...	2
Dagger-blades of chipped flint	2	...	2
Javelin-head	1	...	1
Arrow-heads, leaf-shaped, of chipped flint	2	3	5
" barbed	5	5	10
Knives and scrapers	3	2	5
Whetstones, grooved	3	...	3
Polished Hone-stones, perforated	1	5	6
" " un-perforated	2	2	4
" Stones, use doubtful	2	...	2
" Wrist-guards
" Gorget, perforated	2	...	2
	—	—	—
Total	31	20	51
	—	—	—

Of stone implements found in the barrows around Stonehenge, mention can only be made of the following: four stone hatchets or wedges, commonly known as *celts*, were discovered with unburnt bodies; three with the same interment in a barrow at Upton Lovel. All these last were of flint; two being more or less ground or

polished, and at the broader end presenting a fine semi-lunar cutting edge. In the same barrow were as many as sixty rudely-made bone implements, and a perforated stone hammer-axe. "This is the only interment known to me in which stone celts and perforated hammer-axes have been found together. It must belong to the time when the former were in process of being superseded by the latter, or were about to be so superseded. But even this interment, the richest of any in objects of stone and bone, though regarded by both Cunnington and Hoare as of the Stone age, cannot be accepted as strictly of that period. This is proved by the insignificant bronze pin or awl found with the interment, which is figured in 'Archæologia' (xv., 125, pl. iv., fig. 5), though not in 'Ancient Wilts.'" One of the most beautiful and elaborately-polished stone celts known to Dr. Thurnam was said to have been derived from a barrow near Stonehenge. It was formerly in the Leverian Museum, and is now in the possession of the Rev. H. H. Winwood, of Bath. It is a dark stone, with delicate golden veins, polished all over, of a regular almond form, sharply pointed at one end, and measures 7 by 3 inches, and not more than 1 inch thick. It is of the rare type described by Mr. John Evans, F.R.S., "Ancient Stone Implements," p. 96—98, fig. 52. A stone hammer, found in a barrow (? 18) of the Wilsford group, is engraved at page 411 of the "Archæologia," vol. 43. Two perforated axes, the one 8½, the other 7 inches long, both stated to be from barrows near Stonehenge, are to be seen, one in the British Museum, the other in the Christy collection. Both are of exceptional size, much larger than any in the Stourhead Museum. The latter is of beautiful greenstone, and finished with a groove at the edges. Dr. Thurnam found four leaf-shaped javelin-heads of flint in an oval barrow (No. 49) within a few yards of the western end of the low earthwork known as the "smaller cursus," which are fully described (and two of them figured) in the eleventh volume of the Society's Magazine. Three of them are engraved in Mr. Evans' "Ancient Stone Implements," p. 330. A flint knife, 2½ inches in length, chipped on the convex border, from a secondary interment in the long barrow at Winterbourn Stoke, belongs to the Round Barrow period. It is engraved at page 420 of "Archæologia," vol. xliii.

Two long narrow stones, carefully formed and polished all over, and remarkable for their tenuity, being $4\frac{1}{2}$ inches long, $3\frac{1}{4}$ inch broad, and scarcely more than a $\frac{1}{4}$ inch thick, flat on one side, and rounded on the other, were found by Sir Richard Hoare in barrow No. 5. He describes them as "two pieces of a dark coloured slaty kind of stone, lying parallel with each other, which are engraved in 'Tumuli,' plate xiv." Dr. Thurnam obtained an object of this sort, of fine micaceous sandstone, precisely agreeing with the stone of the large flat slab in the centre of Stonehenge, from a barrow on the plain (No. 170) about a mile from the stones. (See note at page 93.)

Dr. Thurnam considered that some of the pebbles and stones found in the tumuli may have been preserved for their rarity and beauty, and others as amulets or fetishes. "It is not possible," he says, "to decide under which of these categories we must place 'the kidney-formed pebble of the sardonyx kind,' of a sea-green colour, curiously striated and spotted, or the 'small red pebble,' found, the one with a burnt, and the other with an unburnt body."¹

In the following table the implements and other objects of bone obtained during Sir Richard Hoare's excavations are enumerated, according as they were found with burnt or unburnt bodies:—

¹ "Ancient Wilts," i., 165, 183, pl. xxii. A bead of stone, neatly grooved round the edges, was found in one of the Barrows at Lake. (Ib. i., 211., pl. xxx., fig. 7.) A beautifully-veined stone, polished and perforated, from a burnt interment at Winterbourne Stoke (figured *Archæologia*, 43, p. 431), may, as Hoare suggests, have been worn "suspended as an amulet." Fossils were also prized; as for instance what Hoare calls "a pair of petrified cockle-shells" found with bronze and ivory relics in a barrow at Winterbourn Stoke (No. 25,) but which, one being still preserved at Stourhead, we know were Brachiopods, or lamp-shells (*Terebratula* or *Rhynchonella*,) several species of which occur in the Wiltshire strata. In the barrow at Upton Lovel, at the legs of the larger skeleton, with several perforated boars's tusks, and bone and stone implements, were, "a handful of small pebbles of different colours, several not to be found in the neighbourhood," and as many as five ætites, or eagle-stones, broken in two and forming a rude kind of Cup. Mr. Cunnington, who opened this barrow in 1801, was much puzzled as to the use of these stones, which however were amulets of great reputed virtue. The analogy, such as it is, between a hollow stone, "in a manner pregnant, having another stone within, as if in its womb," led to the notion of its having a wonderful power of retarding or accelerating delivery. Directions for its use are given by Pliny, and it retained its reputation as late as the last century, when it had still a place in the London Dispensatory.

OBJECTS OF BONE.

	Unburnt Bodies.	Burnt Bodies.	Total.
Bone pins	6	12	18
„ weapons?	63 ¹	1	64
„ mesh-rules	1	1	2
„ wrist-guard	1	...	1
Hafts of deer-horn	3	...	3
Hammer-head of horn	1	...	1
Pick of „	1	...	1
Pipe of bone, perforated	...	1	1
Tube	1	...	1
Dice (?)	1	...	1
Tweezers of bone	...	7	7
	78	22	100

Pins of various sizes, from one to nine inches in length, formed from the fibulæ and splint-bones of the legs of quadrupeds, of which the horse, deer, and goat have been identified, are often found with interments. There are many at Stourhead, of which about one third have had the head perforated as if for suspension or attachment. Many were probably used for fastening the cloak of skins or coarse woollen sagum, which formed the clothing. The same which secured the dress of the living may have served to have fastened the skin or cloth in which the remains of the dead, burnt or unburnt, were wrapped. Single bone pins were found by Hoare with eighteen interments, or about once in every twenty graves. Relatively, they were half as frequent again with burnt as with unburnt bodies. One from a barrow at Wilsford is at Stourhead. In one of the Lake barrows, Mr Duke found four "bone instruments" (pins) at the head of an unburnt body, the finest three and a half inches long, perforated. A "tube of bone" from a barrow (No. 18) of the Wilsford group, was perhaps the mouth-piece of a musical instrument, (figured on p. 439 of *Archæologia* 43). Four small objects of bone, of the same form and size, viz., about $\frac{6}{10}$ in. long and $\frac{1}{2}$ inch wide, flat below and convex above, and each marked with a different device,

¹ Sixty of this number were with a single interment.

except one which is left blank on both sides, were found with a burnt interment, accompanied by a small bronze blade, at Lake, near Stonehenge. Sir Richard Hoare supposed that they were intended, like the *talus* or *teseræ*, for some kind of game, or for casting lots. They are engraved in plate xxxi. Ancient Wilts, i. In barrow No. 9 of the Wilsford group was a "rude ring of bone" with an "ivory pin" and a small bronze celt.

The objects of bronze from the Wiltshire barrows very much exceed in number the objects of stone; those found by Hoare, as shown in the table here given, being twice as numerous:—

OBJECTS OF BRONZE.

	Unburnt Bodies.	Burnt Bodies.	Total.
Celts ¹	4	1	5
Blades of knives, daggers, &c.	16	44	60
Awls and drills	5	29	34
Crutch-headed screws	1	2	3
Large pin with rings	...	1	1
Prong with rings	1	...	1
Rivets and pieces of bronze-mounted shield (?)	1	...	1
Bracelet	1	...	1
Buckle	...	1	1
Bead	...	1	1
	Total	29	79
		108	108

Neither Sir R. Hoare, nor explorers of the Wiltshire barrows subsequent to him, have found in them objects of iron which can be classed as pre-Roman. The statement, a quarter of a century ago, by Dr. S. Birch, F.S.A., that "the evidence of the tumuli and kistvaens goes far to prove the excessive rarity of iron among the Celts

¹Sir Richard Hoare remarks "that bronze celts differ in their construction and their antiquity," and adds, "I must give the priority of age to those discovered in our barrows."—Ancient Wilts, i., 203, note. "They may," says Dr. Thurnam, "have served various purposes, and according to the form of handle and the method by which it was attached, have been axes, chisels, or even hoes."

(of Britain) anterior to the Roman dominion," derives nothing but confirmation from subsequent researches.

"The only graves hitherto opened in England, certainly of the Iron age and at the same time pre-Roman, are met with, not as we might have expected, in the southern counties, where the finest objects of the Bronze age are found, but far away to the North of the Humber. A large group of tumuli at Arras and Hessleskew, in the East Riding, yielded the remains of chariot wheels and axles of iron, with bronze and iron trappings for the horses, including four iron bits, two of them plated with bronze. A shield, with a bronze boss, had its rim of iron. The bodies, all unburnt, were in the contracted posture, and with them were ornaments of bronze, jet, amber, ivory, and glass, the beads of this last material remarkable for their beauty and size. There was also a fine finger-ring of gold.

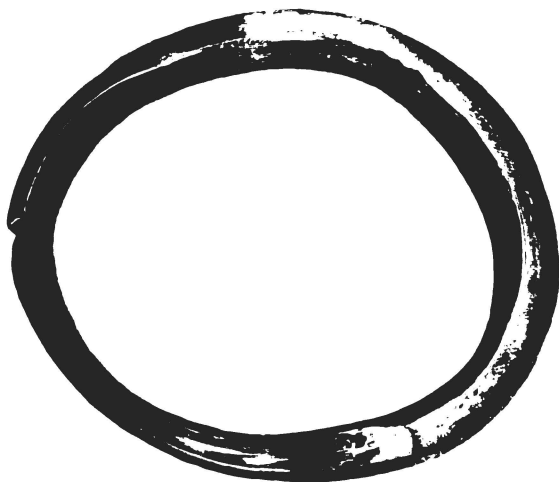
"So far as researches in the tumuli have gone, they show that the bronze civilization of Britain commenced on its southern shores,¹

¹ According to Sir John Lubbock's analysis, interments accompanied by stone implements, in Derbyshire barrows, were nearly four times as frequent as those with bronze. Dr. Thurnam hence infers that the southern tribes were better and more early provided with bronze than the northern, and that the use of weapons and implements of this metal commenced on the southern coasts, and was thence gradually spread over the interior and north of the island. (p. 158.) "Tin is the most remarkable of all the metallic products which Phœnicia obtained from Tarshish, because it is found in so few parts of the world. Only three countries are known to contain any considerable quantities of it: Spain and Portugal; Cornwall and the adjacent part of Devonshire; and the islands of Junk-Ceylon and Banca, in the straits of Malacca. [That tin should have been brought into the countries bordering on the Mediterranean from the remote islands of the Straits of Malacca, at the very early age at which its use is ascertained, is highly improbable. No such traffic is ever alluded to by ancient writers.] It is so soft a metal that of itself it is of little use; but it readily combines with others, and particularly with copper, giving it the hardness which is needed for tools and instruments of war. As it is easily fusible, and in all the countries in which it has been found appears on the surface, in fragments derived from the detritus of primitive rocks, it would be early discovered and employed. Bronze, which is one of the oldest of the alloys of copper we are acquainted with, contains about ten or twelve per cent. of tin; and it is remarkable that nearly the same proportions result from the analysis of the bronze instruments found in the sepulchral barrows of Europe; of the nails which fastened the plates with which the Treasury of Atreus, at Mycenæ, was covered; of the instruments contained in the tombs of Ancient Egypt; and the

and attained its highest development among the tribes to the south of the Thames; and suggest, though they do not prove, that the use of iron for weapons originated on the eastern coast, as far north as the present Yorkshire. The commencement of the bronze age in this island is of an uncertain epoch. The introduction of iron, as brought under our eyes in these interments, was certainly very late, not earlier apparently than the first century of our era. . . . We may not be far wrong in concluding that when Britain was invaded by Julius, and perhaps even as late as the conquest under Claudius, some of the tribes were using iron weapons, others were provided with none but bronze, and that others possessed both."

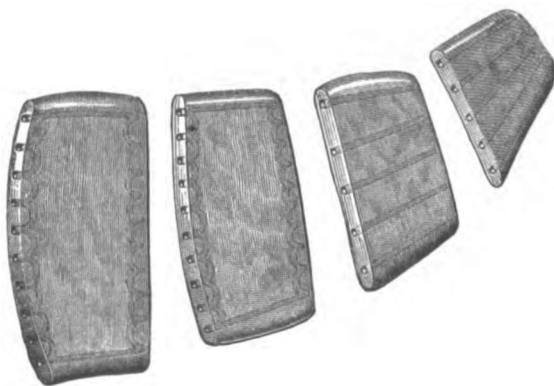
Among the more important of the Bronze objects from the barrows around Stonehenge which Dr. Thurnam has described, is the bronze celt found in Bush Barrow, which is $6\frac{1}{2}$ inches long, $2\frac{1}{2}$ broad, and only $\frac{3}{8}$ inch in greatest thickness. It has side-flanges and the centre is slightly thickened. An engraving of it is on page 444 of *Archæologia*, vol. xliii. A socketed spear or javelin-head, about $3\frac{1}{2}$ inches long, with two very small loops at the upper third of the socket, is engraved at page 447 of *Archæologia*, vol. xliii. With scarcely an exception the large leaf-shaped and triangular blades figured by Hoare are from barrows in the immediate neighbourhood of Stonehenge. Two of these are stippled or pounced; and a third labelled "Barrow No. 120," is also decorated in the same way. A fine bronze bracelet encircling the arm of a skeleton was found in a barrow (No. 27). It is a broad flat band, profusely ornamented with vertical and horizontal lines, and with chevrons at the ends, which overlap. With an interment by cremation there were two pieces of twisted bronze wire, perhaps part of a bracelet.

tools of the Mexicans and Peruvians."—"Kenrick's Phœnicia," p. 213. "We can have no hesitation in regarding Spain as the source of the tin which was so early in use among the nations bordering on the Mediterranean. How long it was before the Phœnicians discovered the far richer supply which the British Islands afford, is altogether uncertain." (p. 216.) "It is by no means improbable that tin which came originally from Cornwall, may have returned thither from Gaul or Spain, in the form of those instruments of bronze which are some of the earliest of our British antiquities in metal." (p. 221.)



Ivory Armlet from Barrow No. 25, on Winterbourn Stake Down.

Scale, two-thirds linear.



Plates for an amber collar, from Lake.

Scale, two thirds linear.

PERSONAL ORNAMENTS.

“ In the round barrows opened and described by Sir Richard Hoare personal ornaments were found with about 18 per cent. of the primary interments, though, as the following table shows, proportionately more often with the unburnt bodies :—

	Unburnt Bodies.	Burnt Bodies.	Total.
	82	272	354
With personal ornaments	19	45	64
Per cent.	23	16	18

“ Many, perhaps most, of the interments accompanied by ornaments were those of women, but many others, especially where the decorations were the richest and most numerous, were doubtless those of men. . . . The articles of this kind met with were for the most part fabricated from a few well-known materials, still prized for the same purpose, viz., ivory, glass, amber, jet, gold, and bronze. To these must be added various mineral and fossil substances, and the bones, teeth, and shells of animals. . . . The three first-named of the materials on our list are expressly named by Strabo as forming, in his day, the principal imports into this country from Gaul, viz., “ ivory bracelets and necklaces, articles of amber and glass, and other similar wares of small value.”¹ The discovery of objects made of these materials in the barrows is a confirmation of the accuracy of Strabo, and affords additional reasons for attributing many of the tumuli of the Bronze period to the Augustan age. As the context of the passage proves, this geographer wrote his description of Britain not later than early in the reign of Tiberius, and prior to the Roman conquest by about thirty years.”

The ornaments of ivory found in Wiltshire barrows amount to twelve in number, and they were probably made from the tusks of the walrus or other marine animal. Another possible source for the ivory of the barrows are the fossilized tusks of the *Elephas primigenius*, which are sometimes “ so little altered as to be fit for the purposes of manufacture.” See the wood-cut of the ivory armlet found in barrow No. 25.

¹ Strabo, iv., 5, § 3.

“The beads of glass found in the barrows of Wiltshire are of coarse material, of a light blue or green colour, long, slender form, and notched all round, so as to resemble several minute beads in one piece. They vary in length from half-an-inch to an inch-and-a-quarter, the notches varying from four or five to ten or twelve in number. They were found in twelve of the tumuli described by Hoare, and in every case with interments after cremation. With one exception they were associated with beads of amber, and in more than half the number with others of jet or shale. A necklace of glass, amber, and jet seems to have been the favourite ornament of the women of this part of Britain. In these mixed necklaces the glass beads are more numerous than those of jet or shale, but less so than those of amber. Glass beads are rarely found in the barrows of North Wilts; but one is named by Dean Merewether, and one was obtained by myself from a tumulus on Tan Hill. . . . In the barrows of Wiltshire the ornaments most frequently met with are of amber, and thirty-three interments are recorded by Hoare, six of unburnt and twenty-seven of burnt bodies, with which they were found.” Amber ornaments are of very rare occurrence in the barrows of other parts of England.¹ Those found in Wiltshire appear to have been in most instances necklaces, but rings and studs have also been found. The amber from these barrows is uniformly of the red transparent sort, which as well as the pale sort, is found in England at Cromer, Norfolk, and on the Yorkshire coast. It may however, have been imported and manufactured in England. “Amber has not been found in the ancient sepulchres of Egypt, Asia Minor, and Greece, though of frequent occurrence in those of Etruria and Southern Italy. A chain of amber beads, connected by strips of gold, has been found in a sepulchre at Cære (Cervetri), answering very exactly to the Homeric description.”² (Kenrick’s “Phœnicia” p. 221).

¹In one of the tumuli opened by the Rev. J. Skinner, at Priddy on the Mendip range, within a cist, containing the primary interment of burnt bones were found four amber beads, and a fifth in the form of a heart. They were of fine rich red or ruby colour, highly polished and transparent when held up to the light, only one of them had a hole made through it, the others were bored on one side, probably for the admission of a pin. A small blue opaque glass bead was found with them, perforated.—Arch. Journal, xvi., p. 148.

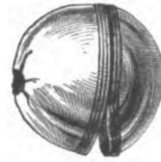
²Abeken, Mitt. und Unt. Ital. p. 271, 281. Hom. Od. 6, 460.



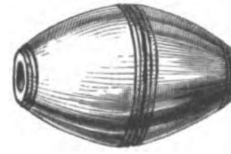
From Upton Lovell,
Wilts.



From Normanton,
Wilts.

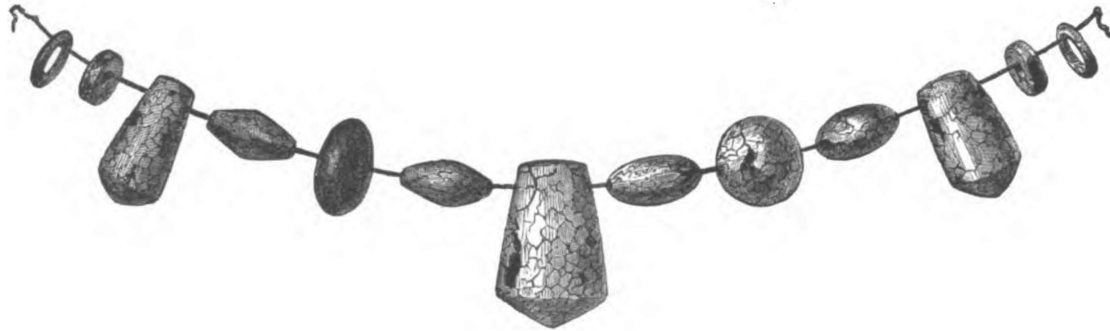


From Bircham,
Norfolk.

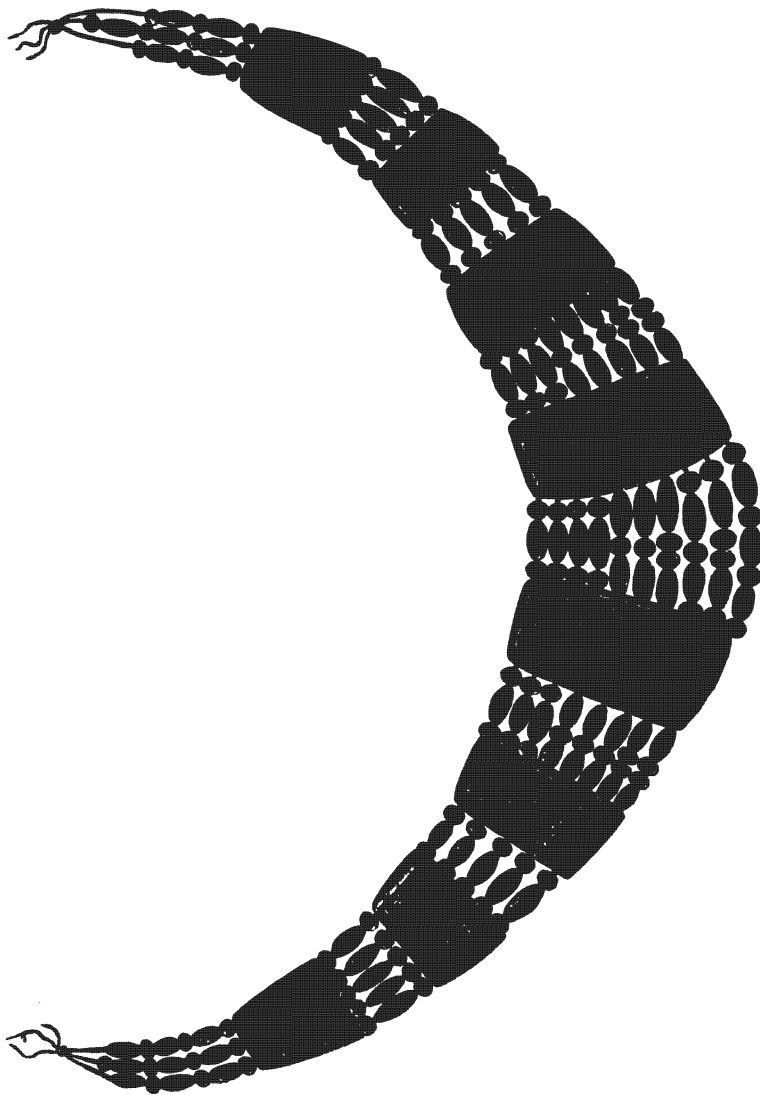


From Upton Lovell,
Wilts.

GOLD ORNAMENTS.



Amber Necklace, from Lake.
Scale, about three-fourths.



Collar of Amber, as restored, from Lake, Wilshire.
Scale, one-third linear.

By the kindness of the Council of the Society of Antiquaries the writer is able to give the cuts which illustrate Dr. Thurnam's account of the quadrangular tablets of amber found in a barrow of the Lake group, and which appears to have formed a collar. "They occur," says Dr. Thurnam, "in sets of three, six, and eight. These plates, found with seven interments, five of them burnt, are about a quarter-inch thick, rounded at the upper and lower margins, and vary in size from one to three inches in length, and from three-quarters to one-and-a-half-inch in width. In the vertical edges are a series of equidistant perforations, which, according to the size, are four, six, or even ten in number. The perforations mostly pass through from edge to edge, and are bored with great accuracy, probably with a metallic borer, worked most likely with a bow-drill. The plates were always accompanied by beads of the same material, and there can be no doubt that the two have been strung together so as to form symmetrical ornaments analogous to those of jet found in the barrows of Derbyshire and North Britain. This combination was not realized by Sir Richard Hoare, who was of opinion that the plates were strung together and worn lengthwise on the breast. The MS. notes of the late Rev. E. Duke, kindly lent me by his son, describing the barrow which yielded the set of plates of largest size, eight in number, do not expressly name these tablets, but merely say 'the skeleton was found with rows of red amber beads around the neck.' In another of the Lake barrows also about two miles from Stonehenge, opened by Mr. Duke, was 'a skeleton having on a necklace of amber beads,' to which, no doubt, belongs the set of three small plates, with four-fold perforations, still to be seen at Lake House. Through the kind aid of the present owner I have succeeded in constructing models of these two complex collars, in a style which must closely approximate to that of the original ornaments. (See woodcut.)

"The perforations in the three plates of the lesser collars, as well as in the four outer plates of the large, run straight through from edge to edge; but in the four larger and more central plates of the latter only the upper and lower perforations run through the plates, whilst the eight which are intermediate go a little way in

and pass out again, each two adjoining perforations communicating right and left by a curvilinear canal. This very ingenious method has probably been contrived to ensure the better set of the large ornaments, as well as for more security; it being obvious that if the through-and-through perforations had been continued from one to the other end of the ornament, the breaking of one or two sets of threads might have resulted in the loss of great part of the whole.

“It is to be observed that this large collar is of most unusual dimensions. In addition to the eight large dividing plates it appears to have comprised in its construction nearly two hundred beads; and when arranged in an easy curve, to have measured 15 inches across, and 25 inches in length, in the lower curvature. When worn, it must have extended from shoulder to shoulder, hanging half-way down to the waist, somewhat like a mayor’s chain or collar of SS. None of the dividing-plates in these ornaments present any trace of surface decoration, such as the favorite British chevron, so often seen on the corresponding pieces of the jet necklaces.

“Buttons of jet or shale occurred thrice with unburnt, and once with burnt bodies. At the back are double perforations for sewing them on to the dress. . . . Britain was celebrated for the abundance of its fine jet during Roman times. Kimmeridge shale, cannel coal, and some forms of lignite, seem to have been substituted for jet where this could not be had.

“Ornaments of gold were found in seven of the Wiltshire tumuli, in four with unburnt, and in three, with burnt bodies. In most of these there were several objects of the precious metal, and altogether nineteen golden ornaments or sets of ornaments may be enumerated.” Among these were three varieties of small buttons or beads, made as Sir R. Hoare believed by first modelling in wood, and covering the wooden nucleus with a plate of gold, which was made to overlap, and fastened by indentation. One large doubly-conical bead, made of two such plates, is ornamented with concentric rings and perforated lengthwise. A second, of globular form, doubly perforated on one side, seems intended to have been sewn to the clothing, though it may have been a pendant (Ancient Wilts, plate

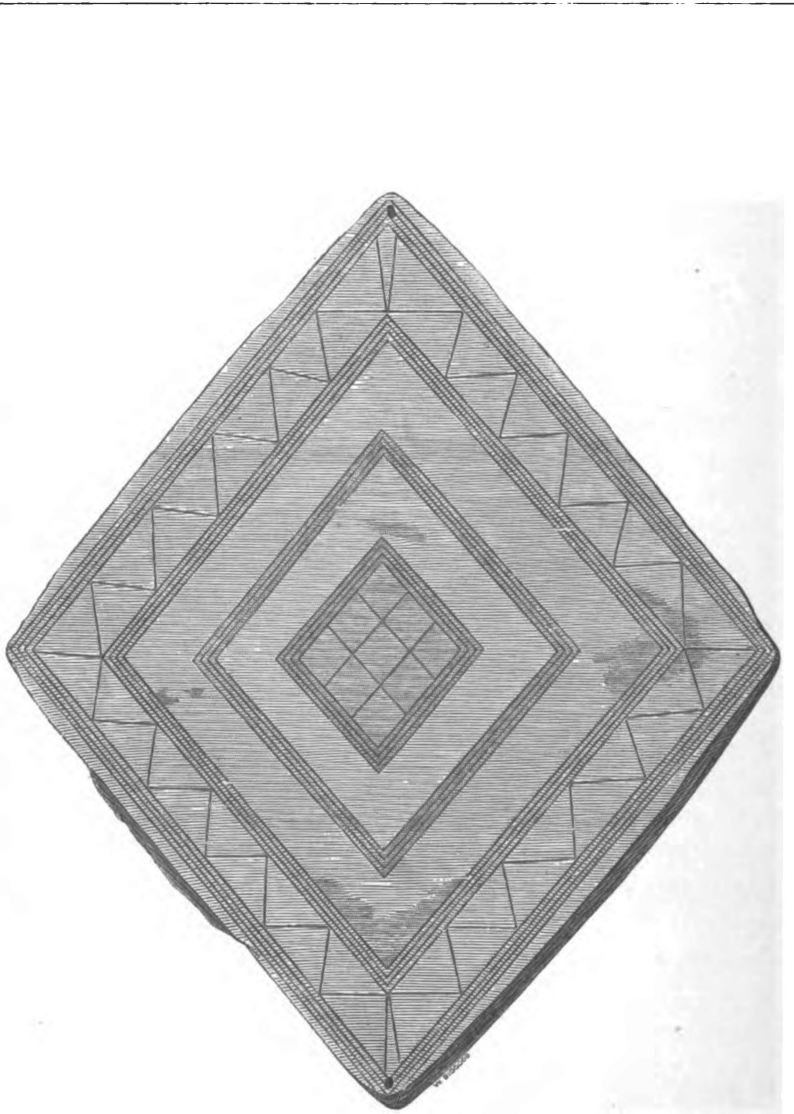


Plate of Gold, found upon the breast of a Skeleton, in Barrow No. 158.

Size, two-thirds.

xxv., figs. 7 and 8). The same may be said of the thirteen "beads" from the Upton Lovel barrow. Each is in the shape of a drum and formed of three pieces of gold, two being circular lid-shaped ends. In each are two holes at one side, supposed to be "for the purpose of stringing," but quite as likely for sewing them as buttons to the front of some vestment. Six or seven "beads" very similar to those from Normanton, near Stonehenge, some globular and some of a double-cone shape, were found in one of the barrows at Bircham, Norfolk. (See wood-cut.)

Small circular discs of gold, of the size of florins, are supposed to have been pendants for the ears. Quadrangular golden plates, of considerable size, occurred with two interments. These are ornamented in parallel lines, zigzags and chequers, and were found in connection with thin plates of wood, on which the pattern had been engraved, and over the edges of which the gold was lapped. The gold of the smaller plate, measuring 6 inches by 3, is mere foil, not thicker than writing paper; it is perforated at each of the four angles. The other, much larger (from Bush barrow, half-a-mile south of Stonehenge, the richest of all in gold objects), is a solid and substantial ornament, of lozenge form, 7 by 6 inches in its longest diameters, and perforated at the two angles most distant from each other. It is of fine gold, weighing 1 oz., 5 dwts., and lay immediately over the breast of the skeleton. Both these plates had no doubt been attached to the dress, and worn as breast ornaments.¹ (See wood-cut.) "In addition to this plate and the large

¹Dr. Thurnam was of opinion that it was from the gold of Britain that these ornaments were fabricated. Cæsar is usually made to say of the Britons "Utuntur aut ære, aut taleis ferreis ad certum pondus examinatis pro nummo;" but a beautiful MS. of about the tenth century in the British Museum, reads the passage thus: "utuntur aut ære aut nummo aureo, &c." They use either brass money, or gold money, or instead of money, iron rings adjusted to a certain weight. "It may be therefore safely asserted" says Mr. Hawkins, "that previous to the invasion of Julius Cæsar, in the year 55 A.C., and before the Roman dominion was generally established in this island, the Britons had a metallic currency of struck coin, formed on a Grecian model. Julius Cæsar himself, when correctly read and rightly interpreted, asserts the fact, and the actual discovery of coins in various parts of the island unequivocally confirms it." The Upton Lovel or "Golden" Barrow was opened for the

hook of gold, there was a small lozenge-shaped plate, not perforated, about an inch in diameter." (Tumuli, plate xxvii, fig. 5.)

Five of the seven barrows yielding objects of gold were on Salisbury Plain, near Stonehenge, four of them within half-a-mile of that structure, and a sixth on the confines of the plain, at Upton Lovel, in the vale of Wily. The seventh alone was altogether out of this district, at Mere, ten or twelve miles to the west. No objects of precious metal are found in the barrows of North Wilts, and Sir Richard Hoare inferred the "high antiquity of the tumuli near Abury from finding in them 'no costly ornaments of jet, amber, or gold.'"

In the Upton Lovel barrow were found several tusks of the wild boar, perforated at the broad end, lying near the feet of the male skeleton. In other barrows were the canine teeth of the wolf and remains of the deer, the ox, the dog, and the horse. Bones of birds were occasionally met with.

first time in 1803, by Mr. Cunnington. (See "Archæologia," vol. xv.) At the depth of 2 feet was found a little pile of burnt bones in a shallow basin-like cist, and at the distance of 1 foot from the bones was a considerable quantity of ashes with fragments of burnt bones. About 2 feet from the pile of bones were discovered: 1. Thirteen gold beads made in the form of a drum, having two ends to screw off, and perforated in two places on the sides for the purpose of stringing. 2. A thin plate of the same metal, 6 inches in length, and nearly 3 in width, richly wrought and perforated at the 4 corners. 3. Another ornament in the form of a cone, decorated with circles and zigzags, and fitted closely to a piece of dark wood, like ebony, on which the marks of the pattern still appear impressed: the bottom part of this article is also perforated. The above are all of pure but thin gold, neatly worked, and highly burnished. The large flat plate must have been, like the cone, strengthened by a strip of wood behind; and the whole by their several perforations, are strongly marked as forming the decorative accoutrements of some distinguished British chieftain. There were beside two small articles in gold, resembling little boxes, about an inch in diameter with a top, in the form of a cone to take off. (See Tumuli, plate x.) And some large plates of amber, and above one thousand beads of the same substance and different sizes, and a curious little grape cup. Subsequent researches in 1807, resulted in the discovery of two cups, one plain, the other covered with a profusion of zigzag ornaments, a small lance head and pin of bronze, and on the floor of the barrow, in an oblong cist, about 18 inches deep, a simple interment of burnt bones.

The Camp at Amesbury, commonly called Vespasian's Camp.

THE camp near Amesbury, between Stonehenge and the town, upon elevated ground, was, according to Stukeley, commonly called Vespasian's, and he endorses the name. It is locally known as "the ramparts." Sir R. Hoare considers that this was originally the stronghold of those numerous Britons who inhabited the plains around Stonehenge, an asylum in times of danger, for their wives, children, and cattle; and that like other camps of the same kind, it was occupied, as occasion or necessity required, by Romans, Saxons, and Danes. "It occupies the apex of a hill, surrounded on two sides, east and south, by the river Avon, and comprehends within its area 39 acres. It extends in length from south to north, and terminates in a narrow rounded angle at the latter point. It was surrounded by a single vallum, which has been much mutilated on the east side in forming the pleasure grounds of Amesbury Park. The ramparts on the western side towards Stonehenge, are very bold and perfect. It appears to have had two entrances, north and south; the former still remains perfect and undoubted. The area is planted and fancifully disposed in avenues, walks, &c., near the principal one of which, and on the highest ground, is the appearance of a barrow, but much disfigured in its form." The camp is divided by the high road which passes Stonehenge. In Stukeley's Common-Place Book, is the following mention of it: "The walls, Vespasian's camp, as believ'd. The people of Amesbury say the area of it is 40 acres, single trench, one graff towards Stonehenge." In his "Stonehenge described," he describes the camp as "an oblong square, nicely placed upon a flexure of the river, which closes one side and one end of it. There is an old barrow inclos'd in it, which doubtless was one of those belonging to this plain, and to the temple of Stonehenge, before this camp was made."

Progress of Down-Cultivation around Stonehenge.

IT is to be hoped that our grand-children will not have to look for Stonehenge in a field of turnips. The cultivation of the down adjoining Stonehenge is gradually closing in upon it, and on the west side has already resulted in the obliteration of the group of barrows numbered from 15 to 22 (inclusive). The large barrow, close to the road, of group No. 14, (which Mr. Edwards, of Amesbury, informed the writer had been nearly as large as No. 164,) has been deliberately degraded to its present low elevation that it may the more easily be ploughed over. The adjoining barrows of this group, from one of which the "Stonehenge" urn was taken, will soon have altogether disappeared. On the opposite side of the road, a large portion of the down on the slope below Bush Barrow and the adjoining barrows, has been ploughed up. Our iron age, with its steam ploughs, is too strong for the age of stone and bronze.

An account of the results of the examination of each barrow on the plain around Stonehenge will be given in an appendix.



Part V.

Poetical Notices of Stonehenge.

THE few following poetical notices of Stonehenge may not be unacceptable to the readers of this paper.

In the "Birth of Merlin," a play ascribed to Shakespeare (first known edition 1662), Merlin addresses his mother thus:—

"And when you die I will erect a monument
 Upon the verdant plains of Salisbury,—
 No king shall have so high a sepulchre,—
 With pendulous stones, that I will hang by art,
 Where neither lime nor mortar shall be used—
 A dark enigma to the memory,
 For none shall have the power to number them;
 A place that I will hallow for your rest;
 Where no night-hag shall walk, nor were-wolf tread,
 Where Merlin's mother shall be sepulchred."

Drayton ("Polyolbion, 1613), calls Stonehenge "first wonder of the land." In the following lines Wansdyke resents being called by Stonehenge a "paltry ditch," and shows a strong aptitude for the employment of abusive language:—

"Where she, of all the plains (Salisbury) of Britain that doth
 bear
 The name to be the first (renowned everywhere)
 Hath worthily obtain'd that Stonendge there should stand:
 She, first of plains; and that, first wonder of the land.
 She Wansdike also wins, by whom she is embrac'd,
 That in his aged arms doth gird her ampler waist;
 Who, (for a mighty mound sith long he did remain

Betwixt the Mercian's rule and the West Saxons reign,
 And therefore of his place himself he proudly bare)
 Had very oft been heard with Stonendge to compare;
 Whom for a paltry ditch, when Stonendge pleas'd t'upbraid,
 The old man taking heart, thus to that trophy said:
 'Dull heap, that thus thy head above the rest dost rear,
 Precisely yet not know'st who first did place thee there;
 But traytor basely turn'd, to Merlin's skill dost fly,
 And with his magicks dost thy maker's truth bely;
 Conspirator with time, now grown so mean and poor
 Comparing these his spirits with those that went before;
 Yet rather art content thy builder's praise to lose,
 Than passed greatness should thy present wants disclose.
 Ill did those mighty men to trust thee with their story,
 That hast forgot their names, who rear'd thee for their glory:
 For all their wondrous cost, thou hast serv'd them so,
 What 'tis to trust to tombs, by thee we eas'ly know.'

Spenser, in the second book, tenth canto, of the "Faerie Queene," speaking of Hengist's treacherous attack on the three hundred lords "all setting at his bord," adds:—

"Whose dolefull monuments who list to rew,
 Th' eternall marks of treason may at Stoneheng vew;"

and of Aurelius that he

"peaceably did rayne,
 Till that through poyson stopped was his breath,
 So now entombed lies at Stoneheng by the heath."

The following sonnet is by Dr. Thomas Warton:—

Thou noblest monument of Albion's isle,
 Whether by Merlin's aid, from Scythia's shore
 To Amber's fatal plain, Pendragon bore,
 Huge frame of giant hands the mighty pile,
 T'entomb his Britons, slain by Hengist's guile:
 Or Druid priests, sprinkled with human gore,

Taught 'mid thy massy maze their mystic lore :
Or Danish chiefs, enrich'd with savage spoil,
To Victory's idol vast, an unhewn shrine
Rear'd the rude heap ; or, in thy hallow'd round
Repose the king's of Brutus' genuine line ;
Or here those kings in solemn state were crown'd :
Studious to trace thy pond'rous origin,
We muse on many an ancient tale renown'd.

The Oxford English Verse prize poem for 1823, "On Stonehenge,"
was as follows :—

Wrapt in the veil of time's unbroken gloom,
Obscure as death, and silent as the tomb,
Where cold oblivion holds her dusky reign
Frowns the dark pile on Sarum's lonely plain.

Yet think not here with classic eye to trace
Corinthian beauty, or Ionian grace :
No pillar'd lines with sculptur'd foliage crown'd,
No fluted remnants deck the hallow'd ground ;
Firm, as implanted by some Titan's might,
Each rugged stone uprears its giant height,
Whence the pois'd fragment tottering seems to throw
A trembling shadow on the plain below.

Here oft, when evening sheds her twilight ray,
And gilds with fainter beam departing day,
With breathless gaze, and cheek with terror pale,
The lingering shepherd startles at the tale,
How at deep midnight, by the moon's chill glance,
Unearthly forms prolong the viewless dance ;
While on each whisp'ring breeze that murmurs by,
His busied fancy hears the hollow sigh.

Rise from thy haunt, dread genius of the clime,
Rise, magic spirit of forgotten time !
'Tis thine to burst the mantling clouds of age,

And fling new radiance on "Tradition's page":
 See! at thy call, from Fable's varied store,
 In shadowy train the mingled visions pour;
 Here the wild Briton, 'mid his wilder reign,
 Spurns the proud yoke, and scorns the oppressor's chain;
 Here wizard Merlin, where the mighty fell,
 Waves the dark wand, and chaunts the thrilling spell.
 Hark! 'tis the Bardic lyre, whose harrowing strain
 Wakes the rude echoes of the slumbering plain;
 Lo! 'tis the Druid pomp, whose lengthening line
 In lowest homage bends before the shrine.
 He comes—the priest—amid the sullen blaze
 His snow-white robe in spectral lustre plays;
 Dim gleam the torches through the circling night,
 Dark curl the vapours round the altar's light;
 O'er the black scene of death, each conscious star,
 In lurid glory, rolls its silent car.

'Tis gone! E'en now the mystic horrors fade
 From Sarum's loneliness, and Mona's glade;
 Hush'd is each note of Taliesin's lyre,
 Sheath'd the fell blade, and quench'd the fatal fire.
 On wings of light Hope's angel form appears,
 Smiles on the past, and points to happier years:
 Points, with uplifted hand, and raptur'd eye,
 To yon pure dawn that floods the opening sky;
 And views at length the Sun of Judah pour
 One cloudless noon o'er Albion's rescued shore.

T. S. SALMON,
Brasenose College.

The following, in English and Latin, are by the writer's departed friend, the Rev. Francis Kilvert, of Bath:—

See rocks Cyclopean, as by giant's hands
 In a rude temple's form disposed. Amid

These masses, by Heaven's bounties compassed round,
Our sires in superstition's gloom immersed,
Grim idols, terror's offering, with the blood
Of human victims and with rites impure,
Adored.—Such ills would false religion breed!
Those shades are fled. The Sun of Righteousness
Risen on the earth, with healing in His wings,
Hath chased the darkness, and with Gospel light
Illumined all the land. Lit by its rays
May we, the progeny of pagan sires, &
Whilst Fancy waving her mysterious wand
Evokes these long-past shadows, with glad hearts
And pious breathings, gratefully enjoy
Our "sober certainty of waking bliss."

Idem Latine redditum.

Saxa vides Cyclopea
Giganteis quasi manibus
In templi speciem disposita.
Has inter moles
Dei benefici muneribus circum undique septi,
Majores nostri,
Superstitionis mersi caligine,
Impiis cruentisque ritibus
Numinum terricula piabant.
Tantum malorum
Religio prava suadere poterat!
Diffugere hæ tenebræ,
Justitiæ sole salutaribus radiis exorto:
Affulsit lux Evangelii,
Cujus illustrati lumine,
Præteriti temporis umbras evanidas,
Gratis animis, piis suspiriis,
Posteris contemplemur.

Conclusion.

THE writer, in conclusion, would venture to express his own deliberate conviction : first, that Stonehenge and the barrows which surround it, are part and parcel of the same system, and that they are inseparably connected ; and secondly, that the history of Stonehenge must be read by such light as the contents of these barrows afford. The result would, of course, be to throw back the erection of Stonehenge to a pre-Christian period. He would fain hope, that ere long, Antiquaries will come to be of one accord as to the propriety of abandoning the theories which would ascribe it to the Romans, to the Roman-British, to the Saxons, or to the Danes. There is at present, much dissipation of Archæological power and much profitless "beating of the air" in the endeavour to maintain positions which the writer humbly believes to be utterly untenable. It would be a great gain if, by common consent, the stand-point of the Christian era were adopted, and if the solution of the difficulty were sought for in the times which preceded it. The result of ethnological, linguistic, and archæological researches into this higher period might be to favour the idea that a Phœnician or some other external influence of a very early date had been associated with the erection of the megalithic structures of the West of England. Till then, the writer is content to consider the Belgic theory regarding Stonehenge, originated by Mr. Warner, and so ably supported by Dr. Guest, as by far the most rational which has yet been propounded.



Appendix.

THE writer believes that the following account of the examination of the Stonehenge barrows will be found interesting and useful. It is fuller than Sir R. Hoare's own analysis in the "Tumuli Wiltunenses." The barrows of the Lake, Wilsford, and Winterbourn groups, will be found to have been numbered on the large map of "Stonehenge and its environs" according to the enumeration of them in the smaller plans in vol. i. of *Ancient Wilts*, and in that of the Winterbourn Stoke group (which adjoins the long barrow), in Dr. Thurnam's account of the *Wiltshire Barrows*, (vol. xliii. of the "Archæologia.") Two or three barrows which had been marked as belonging to the Winterbourn and Lake groups in the large map, and which were not to be found in the smaller plans, have been erased.

WINTERBOURN STOKE GROUP.

1. Long barrow, not opened by Sir R. Hoare. See Dr. Thurnam's account of the opening of it, page 159.
2. Ninety-three feet in diameter and 8 in elevation. Burnt bones, with a small urn.
3. Partly intersected in forming the turnpike road. Primary interment missed, but an urn enclosing burnt bones near the top.
- 4, 5, 6. Produced simple interments by cremation.
7. Primary interment, an adult skeleton, lying N. and S. with a drinking cup at his feet. Four feet above was the skeleton of a child, with a bason-like urn.
8. A heap of burnt bones in an oval cist, $4\frac{1}{2}$ feet long and 2 feet wide. At the distance of a foot, a fine drinking cup, richly ornamented, but broken in removal.
9. Simple interment of burnt bones.
10. Nothing found.

11. Deposit of burnt bones, a small cup of thick and ornamented pottery, and a bone pin bent into a circular form, and perforated at the head.

12. Simple interment by cremation.

13. Nothing found.

14. A "pond barrow."

15, 16. These, the finest tumuli of the Winterbourn group, are so contiguous to each other, that their circumvallations somewhat interfere. No. 15, is 89 feet in base diameter, and 14 in elevation. The burnt bones of the deceased were found deposited in a box or coffin of wood about $3\frac{1}{2}$ feet long, by 2 feet wide, placed upon the native turf, and covered with a coat of blueish clay. On removing the clay and mouldering fragments of the wood, two small pieces of ivory were discovered, with bronze rivets through each; and afterwards a beautiful spear-head of bronze, the most perfect and largest Sir Richard Hoare and Mr. Cunnington had yet found. Close to this was another lance-head, unfortunately broken; it lay above a foot from the bones, near which was a long pin of ivory, neatly polished and pointed at the thinnest end. The workmen found the remains of five or more skeletons at a short depth beneath the surface of the sepulchral mound. No. 16 is 112 feet in its base diameter, and about 15 feet high. The original interment was a skeleton, in a shallow oblong cist which had been deposited within the rude trunk of an elm tree, with its head lying to the north-east. On the left side of the head, a beautiful, but crushed urn, in tint resembling red Samian pottery, but not more than half baked, like those of British manufacture. (Tumuli, plate xv., No. 1.) A bronze dagger, which had been guarded by a case of box wood, part of which had been gilt, was near the breast. Besides these were a bronze pin, with an ivory handle, another spear-head of bronze, moulded, and another article of ivory. (Tumuli, plate xv., Nos. 2, 3, 4.)

17. A simple interment of burnt bones. 18. Contains within its area three small tumuli, in each of which, at the depth of 12 inches, were interments of burnt bones. In the largest, which is in the centre, was a small urn, and two or three large beads of amber. In

the second, two or three beads, and in the third, only burnt bones.

18. Ninety-seven feet in diameter, and 7 high. Primary interment, a skeleton, with head toward the west, at a depth of 7 feet. At a depth of nearly 3 feet a sepulchral urn covering a little pile of burnt bones, and almost immediately under them a skeleton. Before coming to the urn were found two interments of burnt bones in the east and west corners of their sections. A perforated pebble stone, about 2 inches long, and very neatly polished, which had apparently been burnt.

20. Is, what Sir R. Hoare called a "pond barrow." 21, from the fragments of burnt bones promiscuously dispersed about the soil, gave proof of a prior opening.

22. The body appeared to have been placed on the chalk, and a large conical pile of flints raised over it. "From finding some of the bones above the floor, and amongst the flints, we might almost be led to suppose that the Briton here interred, had suffered a similar death to that of Achan." The skeleton was laid from north to south, and from the size of the bones, appeared to be that of a young person, or a female. 23¹ and 24. Unproductive. 25. A large and rude bowl-shaped barrow, 107 feet in diameter, and 6 in elevation. On the floor a skeleton (which had been originally interred from north to south) with a more recent interment of burnt bones deposited near its feet. Two small earthen cups, a ring or bracelet of bone or ivory, two oblong beads made from bone, and two whetstones and a bronze pin, were found near.

26. A fine bowl-shaped barrow, 97 feet in diameter, and 9½ in elevation. In an oblong cist, a skeleton lying from north to south, within a shallow case of wood, of a boat-like form. Round its neck were found a great variety of amber and jet beads, a lance-head and pin of bronze, with a little urn of a very neat form, which was broken to pieces.

27. About 90 feet in base diameter, and 7 in height. On the

¹ Dr. Thurnam opened No. 23, and found a simple deposit of burnt bones, in a shallow cist, in the chalk, a little to the S.E. of the centre. He opened No. 24, but found it unproductive.

floor of the barrow was a large oblong cist, 5 feet long, 4 feet wide, and $2\frac{1}{4}$ deep, neatly cut in the chalk, and in it a skeleton, with an inverted urn containing burnt bones, in its lap. "On removing the urn and the skeleton, we found five more skeletons lying almost side by side, two of which were young persons; and when we reached the floor of the cist we found, what I consider to be the primary interment, viz., two skeletons lying by the side of each other, with their heads to the north, and both extremely well-preserved. One of them was a tall and stout man. At their head was placed a drinking cup. We had here positive proof that the two different modes of burial had been practised in this barrow at different periods, and that the urn was deposited at a period subsequent to all the other interments, and was the third deposit."

To the north of this group are two very small mounds, scarcely elevated above the surface, which produced nothing worthy of notice.

The first barrow that occurs on leaving the British villages, and which is No. 1 on Sir Richard Hoare's map of "Stonehenge and its environs," contained a very large interment of burnt bones. No. 2 had been previously opened. No. 3 is a long or rather triangular barrow, east and west, the broad end towards the east; it measures 104 feet in length, 64 in width at the large end, 45 at the small end, and does not exceed 3 or 4 feet in elevation. Shepherds had excavated the eastern end by making huts for shelter. A second section at the west end produced two or three fragments of burnt bones. "We next observed a rude conical pile of large flints, imbedded in a kind of mortar made of the marly chalk dug near the spot. This rude pile was 4 or 5 feet in the base, and about 2 feet high, and was raised upon a floor, on which had been an intense fire, so as to make it red like brick. At first we conceived that this pile might have been raised over an interment, but after much labour in removing the greater part of it, we very unexpectedly found the remains of the Briton below, and were much astonished at seeing several pieces of burnt bones intermixed with the great masses of mortar." Sir R. Hoare left some of the mortar containing the burnt bones near the top of the barrow, to satisfy the curiosity of any person who might wish to examine it. On exploring this barrow farther to the east,

two deep cists were found, containing an immense quantity of wood ashes, and large pieces of charred wood, but no other signs of interment. No. 4 had been opened before. No. 5 is 5 feet high, and 110 feet in base diameter. The primary interment in the large cist consisted of the head of a skeleton, but no vertebræ or ribs; further on were the thigh-bones, legs, etc. At the feet a little rude drinking cup, and two pieces of a dark-coloured slaty kind of stone. (Pl. xiv.) Above the primary interment, was, at the depth of 2 feet on the south side of the cist, the skeleton of an infant; and at a foot above the floor of the barrow was found the skeleton of a young person, and upon the same level on the south side, was an interment of burnt bones. This tumulus, Sir R. Hoare thought, might prove yet more productive, if more carefully examined. No 6 had been previously explored. In No. 7, a fine bell-shaped barrow, 122 feet in diameter, and 9 feet high, the interment was missed, but the fragment of a very large urn and a few burnt bones led Sir R. Hoare to think that the barrow might have been opened before. No. 8. This barrow, rather inclined to the bell-shape, is 82 feet in diameter, and 7½ in elevation. It contained within a shallow oblong cist the burnt bones (as conceived) of two persons, piled together, but without arms or trinkets. A whetstone and a piece of squared stone were also found in it. No. 9, 16 inches high, produced between the horns of two stags, a rudely-made, yet in outline an elegant, urn, inverted over a pile of burnt bones. (Pl. xvi.) Beneath was the skeleton of an adult, and at a depth of 4 feet below, was another skeleton with its head placed towards the north. No. 10. In this small tumulus was an oblong cist, and in the further part of it a few fragments of burnt bones, and a large glass bead, which has two circular lines of opaque sky-blue and white, which seem to represent a serpent intertwined round a centre which is perforated. "This was certainly one of the Glain Neidyr of the Britons, derived from Glain, what is pure and holy, and neidyr, a snake." This is engraved in "Tumuli," pl. xiv. No. 11 is a "pond barrow."

Leaving the Winterbourn Stoke group, and proceeding in a line towards Stonehenge, we find but few barrows, until we approach the precincts of that monument.

No. 12. A group of small tumuli, in one of which was a very rude urn, badly baked, and containing ashes, burnt bones, and two pieces of twisted bronze wire, which probably once formed a ring; this urn was not inverted.

13. A simple interment of bones. 14. A group consisting of eight barrows of different sizes, and close to the road leading to Amesbury. "The tumulus nearest that place produced the largest sepulchral urn we have ever yet found, measuring 15 inches in diameter at the top, and being $22\frac{1}{2}$ inches high. It contained an interment of burnt bones, which was protected by a large triangular stone placed over the mouth of the urn." (Pl. xvi.) This is the urn, called, *par excellence*, the "Stonehenge Urn." Two of this group of barrows are large; that nearest the road is bowl-shaped, 80 feet in base diameter and $8\frac{1}{2}$ in elevation. The interment was met with at $8\frac{1}{2}$ feet, in a shallow oblong cist, where the burnt bones had been interred in a box of wood. In the adjoining large tumulus was an interment by cremation, which had in former times been disturbed by rabbits. Of the others two had been opened before; in one other was found a bronze spear-head, and in this and the remainder were deposits of burnt bones.¹ In No. 15 was a deposit of burnt bones within a cist. Some scattered fragments of bone led to the belief that a skeleton had been found when it had been opened before. No. 16. A mutilated flat barrow, 76 feet in diameter, and only 3 in elevation. In this barrow were found chippings of the Stonehenge stones. (See pp. 64, 65.) No. 17. A long barrow, in which nothing was discovered. No. 18. Is injured by rabbits. No. 19. Seems to have been one of those opened either by Lord Pembroke or Dr. Stukeley, who had found the interment in an oblong cist. No. 20. Had been opened before and contained the interment of a skeleton. Nos. 21 and 22 were unproductive. No. 23 had been opened without result by Mr.

¹ The smaller barrows in this group have been nearly obliterated by a farmer, who has ploughed up this part of the down nearly to the stone circles. The large tumulus nearest to the road has been deliberately degraded to its present low condition. All traces of the group adjoining Stonehenge (Nos. 15 to 22 inclusive) have disappeared. A slight elevation above the surrounding soil just indicates where the highest of them had been.

Cunnington, but just below where he had left off Sir R. Hoare discovered a large rude sepulchral urn inverted over a pile of burnt bones, amongst which was an elegant pair of ivory tweezers. No. 24 is a very flat barrow, and contained the skeletons of an adult and a child in a very shallow cist. It had been previously disturbed. No. 25. A wide bowl-shaped barrow, contained, within a narrow cist, a skeleton with its head towards the north, with a drinking cup by its right side, and near it a neatly-formed pin or needle of bone. No. 26, produced a large interment of burnt bones on the floor, with a cone of jet, two oblong beads of the same substance, eighteen of amber, and a very small cone of the same. No. 27. Previously opened, appeared to have contained originally the skeletons of two adults and two children. Round the arm of one of the adults was an ornamented bracelet of bronze, now in the Stourhead Museum. On approaching the *Cursus*, we find a numerous continuation of barrows, flanking the southern side of it; the first of these, No. 28, was opened by Lord Pembroke, in the year 1722; as well as No. 29, in 1723. Stukeley gives a description of the opening of the latter. An urn, full of burnt bones, of unbaked clay, was found. The collar bone, and one side of the under jaw, make it likely that they had belonged to a girl about 14 years of age. A great number of female ornaments were mixed with the bones. They consisted of beads of glass, yellow, blue, and black; many of amber, of all shapes and sizes, and many of earth, of different shapes, size, and colour. One of the button sort was covered with a thin film of pure gold. (See Stukeley's "Stonehenge," p. 44, or "Ancient Wilts," i., 161, 162.) "Then we opened the next barrow to it, enclosed in the same ditch, and found at 14 inches deep the skeleton of a man." Convinced by experience that all interments found near the surface were subsequent deposits, Mr. Cunnington, in 1803, explored the second tumulus. At the depth of 6 feet he came to the floor of the barrow, which was covered with ashes; and on digging still further to the south, he found a fine oblong cist, 18 inches deep, 15 inches wide, and 2 feet long; and in it a complete interment of burnt bones, and with them six beads, apparently of horn, two of which were circular and four perforated. No. 30. A beautiful bell-shaped barrow, and the largest of

this group. It measures from ditch to ditch 131 feet, and is 15 feet high. At the depth of 15 feet was found only a simple interment of burnt bones. No. 31, a bowl-shaped barrow, 104 feet in base diameter, had on its floor an interment of burnt bones, with a small spear-head. No. 32, a fine bell-shaped barrow, contained only a simple interment of burnt bones. No. 33. Seventy-eight feet in diameter, surrounded by a fine vallum without the ditch, but having no elevation, as usual, in the centre. At the depth of 2 feet was a circular cist containing a deposit of burnt bones, together with beads of glass, amber, and stone, with one of a horn-like substance. No. 34 had been opened before, and No. 35 was not successfully explored. No. 36, produced three skeletons, one over the other; the first about 2 feet deep; the second on a level with the adjoining soil. Close to the right side of the head of this last skeleton was a drinking cup, and with it a considerable quantity of something that appeared like decayed leather. Six feet lower lay the third, with which was found a drinking cup. Sir Richard Hoare was surprised to find the bones and teeth so well preserved when deposited deep in the chalk, but "the most remarkable circumstance," he says, was finding a piece of the skull, about 5 inches broad, that had been apparently sawn off, for he did not think that any knife could have cut it off in the manner in which this was done. No. 37 contained a large oblong cist, full of black ashes, and a few burnt bones. In No. 38, after much labour, the interment was missed. No. 39 is described as a bowl-shaped tumulus, adjoining the south side of the Cursus, 78 feet in diameter, and nearly 7 high, although it had been some years under tillage. A skeleton, with a drinking cup, had been previously found. Another skeleton was found on the floor, of a female, with a large quantity of beads near the neck. Close to the head was a kind of bason, broken, but neatly ornamented round the edge. "On removing the head, we were much surprised to find that it rested upon a drinking cup, that had been placed at the feet of another skeleton, and which was interred in an oblong cist 2 feet deep, and lying also from north to south. With the drinking cup was a spear-head of flint, and a singular stone." (Plate xvii.) This stone is very neatly polished, feels silky, and, at first sight, looks something

like fossil wood. (See plate xvii., "Ancient Wilts," vol. i.) No. 40 "may be called 'the monarch of the plain,' being the largest barrow upon it." On the floor were perceived symptoms of cremation, in charred wood, etc., yet "we could not discover the primary interment." No. 41. An interment of burnt bones. No. 42, sixty-six feet in diameter, and 6 feet high, was opened in 1803, and produced, within a circular cist, an interment of burnt bones, and a bronze pin with part of its handle, deposited in a neat and perfect urn. (Plate xvi.) Nos. 43 and 44 are included within the boundaries of the *Cursus*, and very near the western end of it. In the first of these, at the depth of 3 feet, was the skeleton of an adult, with a drinking cup, and on the floor of the barrow, another of a child. We afterwards, in a shallow cist, found the third skeleton, of a man, with a curious pebble of a sea-green colour when dipped in water, and under the left hand a dagger of bronze. No. 44 contained only a simple interment of burnt bones. Nos. 45 and 47 yielded simple interments of burnt bones; No. 46, a rude urn with cremation. No. 48 an interment of burnt bones with a bronze pin. No. 49 is a long barrow.¹ No. 50. Under a regular stratum of flints, intermixed

¹No. 49 is *not* a long barrow. It is an oval barrow, coeval with the round barrows of the bronze period, and differing from the long barrow in having the ditch all round it and being much smaller. These oval barrows cover interments sometimes by simple inhumation, but more generally after cremation. Dr. Thurnam opened this barrow on May 5th, 1864. Near to the east end, at the depth of about 1½ feet, was the skeleton of a person of middle stature, closely doubled up, and with the head to the north. Close to the back of the skull was a small drinking cup of richly decorated red pottery, such as is found with skeletons in the later round barrows. Like the brachycephalic skeleton with which it was found, it was much decayed and broken. The centre of the mound was searched for a second interment, but unsuccessfully, although a small cup of coarse thick pottery was found. A third opening was made near the west end of the barrow, and at a depth of from 1 to 2 feet, was the skeleton of a tall man, of a stature of 6 feet. This was likewise doubled up, but the head was directed to the west. Close to the remains of the skull were four very beautiful *javelin* heads of flint. They were close together, and had probably been deposited with their shafts entire. These are the only objects of this description which have been found in the Wiltshire barrows, but four of the same kind, but smaller, were found in an oval barrow on Pistle Down, Dorset, near the junction of the three counties of Wilts, Dorset and Hants.—See engravings of them in "Archæologia," 1873; "Proceedings of Soc. Ant.,"

with black vegetable mould, at the depth of 5 feet, was the cist, at the floor of the barrow containing a skeleton, lying from north to south; and near it, a large branch of a stag's horn. No. 51. A fine bell-shaped barrow, 95 feet in diameter, and 7 feet in elevation. At the depth of $4\frac{1}{2}$ feet in the native soil, viz., $11\frac{1}{2}$ from the summit, were found two skeletons, with their heads laid towards the north; the one, an adult, the other, a young person of about twelve years of age. No. 52. In this was perceived earth, quite black, and some burnt to a brick-colour. In 53, near the centre, was found a circular cist containing only ashes, with a quantity of small bones, probably of birds, dispersed about the barrow. No. 54. A fine bell-shaped barrow, 80 feet in diameter, and 7 in height, produced, on the floor, and near the centre, a circular cist, 18 inches wide, and 1 foot deep, full of wood ashes, and a few fragments of burnt bones. About 2 feet to the north of the above was another cist, of an oblong form much larger and deeper than the other, which contained an interment of burnt bones, piled up in a heap in the centre of the cist. No. 55 produced only a simple interment of burnt bones. In No. 56 a cist was discovered, which had been previously investigated, but, on opening it, the workmen found an arrow-head of flint near the top.¹ The barrows numbered from 57 to 65 were opened by Mr. Cunnington.² Five of them are circular, and four disc-shaped, barrows. The latter had been partially opened; in one he found an interment, with a broken dart or lance of bronze, and in another the

2 S., ii., 427; Evans' "Ancient Stone Implements," figs 273—275; "Wilts Arch. Mag.," xi., 40. "The repeated discovery of simple leaf-shaped flint arrow-heads in the long barrows;" is regarded by Dr. Thurnam, as "something more than a coincidence." "It seems to indicate the concurrence of the earliest type of finished flint weapon with probably the earliest form of sepulchral tumulus in this part of the world. The more advanced and complex barbed flint arrow-heads, which are not unfrequently found in the circular barrows of the age of bronze and of burning the dead, have never been found, in the long barrows." (Wilts Arch., Mag., xi., 48.)

¹ "Adjoining this group of barrows there are evident remains of another cursus, apparently unfinished, which has not been noticed by the former writers on Stonehenge." (Tumuli Wiltunenses, p. 26.)

² "No regular account was kept of these discoveries."—Sir R. C. Hoare.

scattered fragments of burnt bones, a few small amber rings, beads of the same, and of jet, with the point of a bronze dart. In the large barrow, No. 57, he found, in a cist, at the depth of 12 feet from the surface, the remainder, as he thought of the brass dart, and with it a curious whetstone, some ivory tweezers, and some decayed articles of bone. No. 66 is a low barrow, in which were fragments of a human skull, of a large sepulchral urn, and a drinking cup. No. 67 appeared to have been previously opened. No. 68 is what Sir R. Hoare calls a "pond barrow." No. 69 had been previously opened by Mr. Cunnington. No. 70 had an interment of burnt bones, deposited in an irregular cist. No. 71 produced the skeleton of a child, near the surface, and lower down, two rude sepulchral urns, the one above the other, each containing burnt bones. No. 72 had been opened by Mr. Cunnington, and produced a sepulchral urn. No. 73 had, near the surface, a skeleton, with four wooden beads near its neck; and it appeared that another interment of burnt bones had been taken out. No. 74 produced a cinerarium, and ashes in a cist. Nos. 75, 76, 77, 78, and 79 had been opened before, and appear to have been robbed of their contents. No. 80 is not sepulchral. In No. 81 was a large rude urn, containing an interment of burnt bones. No. 82 had a cinerarium, and two simple interments of burnt bones, just under the surface. No. 83 contained a sepulchral urn, with a small bronze pin. To the south of No. 80, on the opposite hill, is a disc-barrow, not inserted in the plan, which produced a rude urn without an interment. No. 84, the largest barrow in this group, had been ploughed over. In making our section, we found pieces of stags' horns, pottery, and the remains of a skeleton and drinking cup and two knives; but the primary interment was a skeleton, with its legs gathered up, and hands placed under its head. No. 85 contained originally an interment of burnt bones, within a cist, but had been opened. No. 86 had also been opened; it had a circular cist and a cinerarium. No. 87 contained fragments of an urn and burnt bones, in a shallow circular cist. No. 88 produced, just under the turf, fragments of a rude urn and burnt bones, and lower down, a sepulchral urn reversed over a deposit of burnt bones. No. 89 had been in tillage; it contained a skeleton

in a cist, with its head towards the north. No. 90, in tillage, produced a large urn rudely ornamented, and inverted over a deposit of burnt bones. No. 91 contained an interment of burnt bones, deposited on the floor of the barrow: and beneath it was a deep cist containing abundance of ashes and charred wood, intermixed with particles of bone. No. 92. On the floor of this barrow were found the remains of a skeleton, with fragments of a funeral urn, burnt bones, and some enormous pieces of stags' horns. Within a cist, excavated beneath the floor, lay a skeleton with its legs gathered up, and head placed towards the north. No. 93 had, near the top, an interment of burnt bones, in a rude broken urn, with a small cup; also the remains of a skeleton, charred wood, stags' horns, and flint apparently prepared for warlike purposes. The primary deposit was a skeleton, with its head placed towards the south-east, accompanied by a fine drinking cup, richly ornamented, and in the highest state of preservation.¹ (Plate xviii.) No. 94 was not investigated. Nos. 95, 96, 97, 98, and 99 contained chiefly interments of burnt bones. No. 100 contained a simple interment of burnt bones within a circular cist. No. 101 a similar interment accompanied with two black rings of some bituminous substance, and one pully (?) bead. No. 102. An interment of burnt bones in a cist, with remnants of the cloth in which they had been enveloped. No. 103. A deep circular cist, with ashes. No. 104. A large flat circular barrow, had been previously opened, but yielded the bones of several skeletons, fragments of urns, and a rude instrument made from a stag's horn; there was also a large and deep cist. Nos. 105 and 106 had been opened by others. No. 107 produced a small interment of burnt bones, with a pin of bone at top, and under it a pile of ashes in a cist. No. 108. A "pond" barrow. Nos. 109, 110, and 111 had been investigated. No. 112 is a double barrow, rising towards the east, and somewhat resembling a long barrow, but ditched all round.

¹ In nearly all the barrows described in *Ancient Wilts*, i., 123 (19), 125 (25), 125 (27), 168 (93), 211 (24), 238 (9), the burnt bones and associated skeletons, formed secondary interments, with primary interments of unburnt bodies below. But, though secondary, the later interments seem in every instance to have belonged to nearly the same epoch as the primary ones.

The lowest part had been opened, and contained an interment of burnt bones. In the other mound was an interment of burnt bones, secured by a linen cloth under a rude urn. No. 113, although previously examined, yielded fragments of an urn and skeleton. No. 114 contained a deposit of burnt bones and ashes, in a deep cist. No. 115 the same, but had been opened before. No. 116 had been opened. No. 117 contained a small rude urn, with an interment of burnt bones. No. 118. A small long barrow, and produced a deposit of burnt bones and black ashes in a neat circular cist. No. 119 had an interment of burnt bones in a small cist. No. 120 is a "pond" barrow. No. 121 produced a rude urn reversed over a deposit of burnt bones. On the south side of Durrington Walls is an elevated mound, having the appearance of a barrow, No. 122, but, after digging to the depth of 11 feet, no sepulchral traces were found. No. 123, mutilated. No. 124, appearing like three barrows rising from one large base, but certainly a long barrow. It stands from south-west to north-east, and has its wide end towards the west. On the small end, and also on the centre, are mounds resembling two circular barrows. Sir Richard opened that on the small end, and found only a few ashes and charred wood; but in the central mound we discovered, near the top, a skeleton and a drinking cup, both of which had been disturbed. On reaching the floor of the long barrow we found a circular cist like a little well, but it contained no interment. From this well-like cist, a tunnel, like a chimney, ascended nearly to the top. "I imagine that, as in most of our long barrows, the primary interment would be at the broad end. In this tumulus we have rather a singular instance of a circular barrow being raised upon a long barrow." Nos. 125, 126, and 127 being in tillage, were not opened. Nos. 128 and 129 had been previously opened, but the cist of the latter, containing an interment of burnt bones, with a lance-head of bronze,¹ had escaped unnoticed. No. 130 had

¹ "The bronze blades from the barrows are by Hoare variously described as those of daggers, spears, lances, and arrows. The great majority were probably daggers or knives for hunting, or for every day purposes. No other tumuli have been so productive in such implements as those of Wiltshire; nor have so many of such large proportions and beautiful workmanship been found in any other district." (Thurnam's *Anc. Brit. Barrows*, "Archæol.," xliii., 448.)

been partially opened, but some of the interments remained perfect, and were attended with some novel and singular circumstances. At the depth of about a foot and a half from the surface was a skeleton with a drinking cup, and lower down a deposit of burnt bones. On the east side of the barrow lay the skeletons of two infants, one with its head towards the east, the other towards the west, each placed over the head of a cow, which from fragments of the horns, appeared to have been of small size. We afterwards found a cist nearly four feet deep in the chalk, which contained the primary interment, viz., the skeleton of a man; but these relics had been disturbed, and some bronze articles, with which the bones were tinged, had been removed. No. 131 had been opened. No. 132. In a deep cist were found an unusually large quantity of burnt bones, two drinking cups, two incense cups, and two bronze pins. The quantity of bones and the duplicate articles led Sir R. Hoare to suppose that this mound had been raised over two persons. (Plate xxiv.) No. 133 is a very high barrow, but the plough had made very considerable encroachments round its base. It contained, within a deep cist, a pile of burnt bones, and a very beautiful and perfect grape cup (engraved in plate xxiv. of "Ancient Wilts"). Nos. 134, 135, 136, and 137 bore marks of prior openings. No. 138 had been opened. No. 139, a mean barrow, composed entirely of vegetable earth, produced, within a shallow cist, a pile of burnt bones, and with them two fine daggers of bronze, a long pin of the same metal in the form of a crutch, a whetstone, and a small pipe of bone, about 7 or 8 inches long, and more than a quarter of an inch in diameter at the small, and half an inch at the large end (plate xxiv); it is thin, and neatly polished, and has a perforation near the centre. Nos. 140, 141, 142, 143, previously explored by the neighbouring farmers. No. 144, a wide bowl-shaped barrow, composed entirely of vegetable earth, contained the remains of a skeleton within an oblong cist, with head towards the north and with a small lance-head of bronze. No. 145, previously explored, but in the cist was discovered a piece of ivory resembling the handle of a cup, and a large black pebble. No. 146 appears to have been the barrow opened by Dr. Stukeley, and marked B. in table ix., of his work. No. 147. One of these barrows,

enclosed within the same ditch, was opened by the Earl of Pembroke, in the year 1722, and is marked A. in table ix., of Stukeley, and described at page 44 of his "Stonehenge." He had found the deposit of a skeleton three feet under the surface, with its head placed in a northerly direction towards Stonehenge. Sir R. Hoare found the cist, which contained an interment of burnt bones, and with it two articles of ivory in high preservation. The one resembled a small lance-head, the other is like the handle of a cup. (See Hoare's *Ancient Wilts*, plate xxiv.) Dr. Stukeley had cleared a part of the floor of the small barrow, and left two half-pence covered with stones. Mr. Cunnington, however, continuing his researches, soon perceived the well-known line of chalk which led them to a cist at the east end of the barrow, and to an interment of burnt bones, with which were deposited four amber beads, two of jet with convoluted stripes, and a little broken cup. No. 148 was unproductive. No. 149 had been opened. In No. 150 the interment was missed. No. 151 is a small long barrow; and Nos. 152, 153 and 154 had been opened before. No. 155, a fine bell-shaped barrow, 92 feet in diameter, and 11 high. On the floor was found a large quantity of burned bones, and with them an earthen cup of a peculiar pattern, a cone of gold similar to that discovered in the golden barrow at Upton Lovel, five other articles of gold and several curious ornaments of amber. (See plate xxv., of *Ancient Wilts*, vol. i.) The cone of gold is ornamented at intervals with four circular indentations, which are all dotted with a pointed instrument in the same manner as the lines on British pottery. The base of the cone is covered with a plate, which is also ornamented with indented circular lines, and is made to overlap the lower edge of the cone to which it is fastened; it is perforated at bottom in two places for the purpose of suspension. The two circular trinkets are extremely beautiful, and in high preservation; they are composed of red amber set round with gold, and are also perforated for suspension. They resemble the articles found by Dr. Stukeley in a barrow, of which there is an engraving in his *Tab. xxxii.* "No barrow that we have yet opened has ever produced such a variety of singular and elegant articles, for except the cone of gold, all are novelties, both

in pattern and design." No. 156, a fine bell-shaped barrow, 102 feet in base diameter, and 10 feet in height, contained within a very shallow cist, the remains of a skeleton, and a deposit of various elegant little trinkets, the most remarkable of which are two gold beads (engraved in plate xxv.). Besides these beads of amber, jet, and stone, was a beautiful little grape cup, and at the feet of skeleton, a drinking cup. No. 157 had a prior opening. No. 158 called by Stukeley, Bush Barrow, was not opened by him. Mr. Cunnington's attempts were at first unsuccessful, but in 1808, on reaching the floor of the barrow, he and Sir R. Hoare discovered the skeleton of a stout and tall man lying from S. to N., the extreme length of his thigh bone was 20 inches. About 18 inches south of the head, we found several bronze rivets intermixed with wood, and some thin bits of bronze, nearly decomposed. These articles covered a space of 12 inches or more; it is probable therefore that they were the mouldered remains of a shield. Near the shoulders lay a fine celt (plate xxvi). Near the right arm was a large dagger of bronze, and a spear-head of the same metal, full 13 inches long, and the largest Sir R. Hoare had found. A curious article of gold had probably decorated the case of this dagger. The handle of wood belonging to this instrument (engraved in plate xxvii), had been formed, with a labour and exactness almost unaccountable, by thousands of gold rivets smaller than the smallest pin. Beneath the fingers of the right hand lay a lance-head of bronze. Immediately over the breast of the skeleton was a large plate of gold in the form of a lozenge, measuring 7 inches by 6. It was fixed to a thin piece of wood, over the edges of which the gold was lapped: it is perforated at top and bottom, for the purpose, probably, of fastening it to the dress as a breast-plate. The even surface of this noble ornament is relieved by indented lines, chequers, and zig-zags, following the shape of the outline, and forming lozenge within lozenge, diminishing gradually towards the centre. On the right side of the skeleton, was a very curious perforated stone, with some wrought articles of bone, many small rings of the same material, and another article of gold. No. 159 had been opened by Lord Pembroke or Dr. Stukeley. No. 160 produced within a small

circular cist, an interment of burnt bones, and with it a great variety of amber, jet, and glass beads. In No. 161, a low barrow, was a skeleton with a drinking cup, the head towards the south-east; and eighteen inches lower down was another, lying on its left side, with the head towards the east. Beneath this again in a cist nearly 6 feet deep, cut in the chalk, was the primary interment, a young man with a drinking cup close to his right hand, the head lying towards the north. No. 162 had been opened before. No. 163 contained an interment of burnt bones, deposited in a shallow oval cist, with the fragments of a small cup, and a bone pin. No. 164 may be considered as the most beautiful bell-shaped barrow in the plains of Stonehenge. Its base diameter is 145 feet, and its elevation $14\frac{1}{2}$ feet. It contained, within a very shallow cist, the skeleton of a man, with his head deposited towards the north-east, upon a plank of elm wood; on the left side of the head was a fine dagger of bronze, and a small lance-head of the same metal, the former of which had been guarded by a wooden case: at the feet of the skeleton was a richly-ornamented drinking cup. Some stags' horns were at the head and feet of the skeleton. Large pieces of petrified wood were found in holes extending from the top to the bottom of the barrow. No. 165¹ is a small oblong barrow, and was opened at the broad end, but the sepulchral deposit was not found. No. 166 contained the remains of a skeleton, with a drinking cup and stags' horns. No. 167 is a "pond" barrow.² No. 168 produced

¹ In "Tumuli Wiltunenses," 165 is described as a small oblong barrow, in which we found interments, as usual, at the broad end." p. 41. This was opened by Dr. Thurnam. Three skeletons were found, and secondary interments."

² "Pond barrow, a misnomer introduced by Sir R. C. Hoare, it not being a barrow at all, but a circular excavation in the surface, similar to what might be made for a pond. The name 'barrow' necessarily involves the idea of a mound or heap, and, as applied to sepulchral monuments, implies a grave-mound; it is entirely inapplicable to such hollows as are here referred to. These circular excavations are often found among or adjacent to the barrows of Wiltshire, but the area within has scarcely ever yielded traces of interment. Sir R. Hoare and the Rev. E. Duke excavated the centre of three without finding sepulchral or other remains; in a fourth, however, in a hole in the chalk, there was a deposit of burnt bones. Dean Merewether opened others in North Wilts, and the

an interment of burnt bones and No. 169 did not prove sepulchral.¹ No. 170² is a long barrow, not opened. No. 171 denotes a group of various tumuli of different sizes, the largest of which produced a rude urn, some jet beads, and a brass pin. In another, which had been opened before, was found the fragments of a large urn, and a piece of granite similar to one found in a barrow at Upton Lovel. Nearly all the smaller barrows in this group contained simple interments of burnt bones. In No. 172 was at first discovered a circular cist, containing a vast quantity of black ashes, with a few fragments of burnt bones; but the interment was placed on the floor, by the side of the cist. With the bones was a large ring and

Rev. J. H. Austen one in Purbeck, Dorset, and found nothing. I have also dug into two or three (including that marked No. 14 on Winterbourn Stoke Down) with the same negative result; save only that in one (94 or 97 'Ancient Wilts,' i., 168), a mile to the north of Stonehenge, I found the skull and bones of the right arm of a woman *in situ*. The absence of the left arm and of the lower part of the skeleton was remarkable, and showed that the body had been dismembered before burial, which was probably long subsequently to the formation of the cavity. Stukeley opened one near Stonehenge (p. 45), and found nothing but a bit of red pottery. He speaks of them as 'circular dish-like cavities dug in the chalk, like a barrow reversed;' and elsewhere calls them 'barrows inverted.' ('Abury,' p. 12.) His view of their use as 'places for sacrificing and feasting in memory of the dead' is not unlikely. The earth and chalk excavated from them would be employed, we may suppose, in the completion of one or more of the adjacent barrows." Dr. Thurnam, "Archæologia," xlii., p. 167.

¹ "The primary interments are sometimes at a not inconsiderable distance from the centre of the tumulus. Such an irregularity may be inferred to be accidental, dependent probably on the carelessness of those who raised the sepulchral mound. In one barrow near Collingbourn, the Rev. W. C. Lukis found the grave containing the principal interment as much as 12 feet to the south of the centre. As the deviation is as likely to be in one direction as the other, the difficulty of finding the interment is immensely increased. Hence may be explained the fact that of the barrows explored by Hoare and Cunnington, nearly one-fifth (eighty-six out of four hundred and sixty-five) were 'unproductive;' not that, unless in rare instances, they were mere cenotaphs, but that zeal failed in what seemed a hopeless search." Dr. Thurnam, "Archæologia," xliii., p. 330.

²No. 170 was opened by Dr. Thurnam, but not successfully. There were important secondary interments. In this barrow Dr. Thurnam obtained the piece of stone spoken of in note at p. 93 of this paper.

several beads of a dark olive brown colour, made from some bituminized substance. No. 173 is a long barrow. In making a section at the broad end, a skeleton was discovered at the depth of 18 inches from the surface, and on reaching the floor of the barrow, four other skeletons were found strangely huddled together, and yet there was no appearance of a previous disturbance of the barrow. The bones were in a high state of preservation, and one of the persons here interred seems to have had no forehead, the sockets of his eyes appearing to have been on the top of his head, and the final termination of the vertebræ turned up so much "that we almost fancied we had found the remains of one of Lord Monboddo's animals." No. 174 had been opened before. No. 175 contained a simple deposit of burnt bones, and in the small tumulus attached to it, and which had been investigated, we found fragments of another interment. In No. 176, a fine bell-shaped barrow, was found a skeleton, lying on the floor with its head towards the north, but this barrow was not very minutely investigated. No. 177 was only the base of a large circular barrow, the earth having been removed for agricultural purposes; yet the spot where the deposit of burnt bones was made was discovered, and with them a fine spear head of bronze. No. 178 contained a simple interment of burnt bones; and Nos. 179, and 180, had been opened by the neighbouring farmers. No. 181 is a group consisting of several mean barrows, which appeared to have been previously opened. No. 182 produced an interment of burnt bones, deposited within a wooden box on the floor, and with them the head of a bronze dagger, which had been secured by a sheath of wood lined with linen cloth, a small lance-head, a pair of ivory nippers, and an ivory pin. In No. 183 was an interment of burnt bones and some stag's horns.

BARROWS ON WILSFORD DOWN.

No. 1 is a small circular barrow, which had been explored. No. 2, a disc-shaped barrow, in it were found a lance-head of bronze, and a pin of the same metal, intermixed with a part of the interment of burnt bones. No. 3, a barrow of the same form, produced an interment by cremation, and a considerable quantity of glass, jet, and amber beads, together with a fine bronze pin. In No. 4 was

found only the cinerarium containing the ashes, but the interment was missed. No. 5, a flat bowl-shaped barrow, produced, on the floor, a single interment of burnt bones, placed by the side of a circular cist, which contained another deposit of burnt bones within a beautiful sepulchral urn (engraved in plate xxviii.). Close to this urn was another oval cist, containing a similar deposit, together with a spear-head of bronze, which appeared to have been almost melted into a rude lump by the heat of the funeral pile. No. 6 had been opened. No. 7 has three sepulchral mounds within its area; in one were found the relics of the skeleton of a youth, and fragments of a drinking cup; in the central tump was a simple interment of burnt bones, with a small bronze pin; and the third seemed to have been opened. No. 8 had also been examined. No. 9, a large and almost bowl-shaped barrow, 8 feet high. Within a cist, 2 feet deep, was a little pile of burnt bones, and with them an ivory pin, a rude ring of bone, and a small bronze celt. (Plate xxviii.) The cist was protected by a thick covering of flints, and immediately over it was the skeleton of a dog. No. 10 is a "pond" barrow. Nos. 11 and 12 adjoin each other, and are wide and low barrows. The former had been opened, and its scattered relics seem to indicate two interments having taken place within it, cremation and the skeleton. The latter proved a singular, though not a productive barrow. From the small elevation of the mound it was expected that the interment would have been soon met with, but "we were obliged to dig 10 feet below the level, when we discovered a skeleton, with its head laid towards the east." In No. 13, a large bowl-shaped barrow, was the skeleton of a young and stout man, deposited in shallow cist, with the head towards the south-east, and near it a large and rude drinking cup. (Plate xxviii.) No. 14 had been previously opened. In No. 15 no interment could be found. No. 16, a bowl-shaped barrow, produced, at a foot beneath the surface, an interment of burnt bones, and some instruments made of stags' horns, some whetstones, an arrow-head of flint, another in an unfinished state, and a small spear-head. At a greater depth was the primary interment, of a skeleton, with its head laid towards the north-west. No. 17 had been opened. No. 18 is a large bell-shaped barrow, 121 feet in

diameter, and 11 in elevation, "the monarch of this group." On the floor was the skeleton of a very tall man, lying on his right side, with his head towards the south-east. At his feet were laid a massive hammer, of a dark-coloured stone, a bronze celt, a tube of bone, a whetstone with a groove in the centre, and several other articles of bone, amongst which is the enormous tusk of a wild boar, but the most curious article found was one of twisted bronze, of which Sir Richard Hoare could not divine the use. It is engraved in plate xxix. of "Ancient Wilts," vol. i.

LAKE GROUP.

No. 1, a long barrow, not opened. The diminutive barrow, No. 2, produced, just under the surface, a rude but perfect little cup (engraved plate xxx.), which is perforated at the bottom like a colander, and has holes on the sides for suspension. This cup accompanied an interment of burnt bones. Nos. 3 and 4 had been previously opened. In No. 5 was an interment of burnt bones, with twenty or thirty small black beads, which appeared to have been composed of earth or wood, and to have passed the fire. No. 6, one of the finest barrows in this group is 13 feet 9 inches high. Within one foot of the surface a large sepulchral urn, rudely formed and baked, 15 inches high and 13 wide, had been placed with its mouth downwards over a large pile of burnt bones, amongst which was a fine ivory bodkin. At a further depth of 5 feet were the remains of two skeletons; and at the bottom of the barrow, and total depth of 13 feet 9 inches, was an oblong cist, five feet deep, and seven feet long, cut in the chalk, containing the skeleton of a child, apparently not more than two or three years old, accompanied by a drinking cup. No. 7 is a large bell-shaped barrow, composed entirely of vegetable earth. It contained, within a cist, a little pile of burnt bones, with which had been deposited a very fine bronze pin, a large stone bead which had been stained red, a bead of ivory, and a lance-head of bronze. (Pl. xxx.) No. 8, a very wide and flat barrow, about 6 feet high, and 48 in diameter, from which the French Prophets are supposed to have preached in 1710 (see Stukeley). At the depth of 2 feet a pile of marl was reached, which increased in

size as the floor was approached. On the north side of the section was found the cist from whence this marl had been thrown out; it was $8\frac{1}{2}$ feet long, and above 2 wide, and contained a pile of burnt human bones, which had been enclosed within a box of wood. Near the bones lay a fine spear-head and a whetstone. (Pl. xxviii.) No. 9, a fine bell-shaped barrow, 10 feet high, produced only a simple interment of burnt bones on the floor. In No. 10 nothing was found but the skeleton of a dog and the head of a deer.¹ Nos. 11 and 12 had been previously opened. No. 13 contained a simple interment of burnt bones. In No. 14 and 15 we see a kind of double barrow, the smallest end of which had been opened before. The floor of the larger mound was strewed with an immense quantity of wood ashes, and in a small oblong cist was an interment of burnt bones, together with four glass pully beads, one of stone, two of amber, and a bronze pin. On the north side of the adjoining inclosure, but not within it, are a few small barrows, scarcely elevated above the soil, which were more productive than their size seemed to promise. No. 21 had been opened before, but amongst the earth and scattered bones were some fragments of a fine drinking cup, some chipped flints and one perfect arrow-head of flint. No. 22 had been partially opened, but amongst the unburnt bones which had been moved were found

¹ Dr. Thurnam says (page 25 of "Ancient British Barrows," part ii.): "I have myself successfully re-opened tumuli, 'unproductive' under the hands of Hoare and Cunnington, whose explorations had yielded 'no signs of interment.' Fifty or sixty years after these unsuccessful attempts, I was, in the case of four barrows, rewarded by the discovery of interments of burnt bodies, eccentrically deposited. One was on Lake Down (Ancient Wilts, i., 211 (10), on which Cunnington had made two trials. The others were on Winterbourn Stoke Down (Ibid, i., 121 (10), 124 (23), the fourth being one of two or three very small mounds, about a quarter of a mile to the north, not distinguished by numbers. (Ibid, i., 126.) In three of the number the burnt bones were contained in shallow graves, whilst in the fourth they were collected into a large upright urn, with the rim in close proximity to the ploughed surface of the very low burial mound." Dr. Thurnam opened besides, barrows not examined by Sir R. Hoare, at Lake, Amesbury "Seven Barrows," North, "King Barrow," and Winterbourn Stoke (p. 5 of Ancient British Barrows, ii.); but, with the exception of the information that the last was unsuccessful, and that the examination of two of the five barrows at Winterbourn Stoke had been described in "Proc. Ant. Soc." 2nd series, ii., 427—429, he has not published details respecting them.

the remains of two neatly-ornamented drinking cups; and on digging towards the south-east was discovered the skeleton of a child, and over it a drinking cup. (Pl. xviii.) No. 23 contained a simple interment of burnt bones within a cist, made in the form of a cone, and No. 24 produced a similar interment, immediately under the turf, with fragments of a drinking cup. Two feet lower down was another deposit of burnt bones immediately over the head of a skeleton; and beneath this was a second skeleton, lying with its head to the north-west, and several large pieces of stags' horns by its side. The barrows, Nos. 16, 17, 18, 19, and 20, were opened by their owner, the Rev. Edward Duke, in 1806. Nos. 16, 17, and 18 had each an interment of burnt bones, and a small lance-head of bronze. No. 20, besides a lance-head contained four little articles of bone, intermixed with the ashes and burnt bones. Sir Richard Hoare thought they might have been used, like tesserae, for some kind of game. (Pl. xxxi.) No. 21, a wide and low tumulus, ploughed over for many years. The mode of interment was here varied, and the very rich and numerous trinkets discovered in this barrow seem to announce the skeleton to have been that of some very distinguished British female. The most remarkable of these was an ornament of amber, 10 inches in height, and above 3 in breadth. It is formed of eight distinct tablets, and by being strung together, formed one ornament, as may be distinctly seen by the perforations at top and bottom. Besides the above were numerous beads of amber of much larger proportions than usual, and varying in their patterns, four articles of gold perforated, perhaps for earrings, and two small earthen cups, the one about 7 or 8 inches deep, the other little above an inch. The largest of the beads, the gold ornaments and the fragment of the smallest cup are engraved of their full size in plate xxxi.

BARROWS AT WINTERBOURN STOKE.

These are situated at a short distance from the village, on a gentle eminence, and are twelve in number. Nine of them are surrounded by a ditch and vallum enclosing an area of about four acres, but certainly of a period subsequent to the barrows within it. All, but

one, were opened in 1809, with the following results: No. 1 a large and wide disc barrow, in which it appeared that the primary interment had been moved to make room for the subsequent deposit of a skeleton, which also had been disturbed at some still later period. The examination of the cist which contained the skeleton showed that the feet had not been displaced; near them was an iron knife; and at the bottom of the cist were several fragments of burnt bones, belonging to the remains of the original interment. No. 2 is much mutilated, and of large diameter, but not more than 4 feet in elevation. It contained an interment of burnt bones secured within a very large brown urn, rudely ornamented. A considerable quantity of linen cloth was perceptible among the bones. No. 3, a flat barrow, mutilated, contained, within an oval cist, a simple interment of burnt bones, and shreds of linen cloth. No. 4 afforded no sepulchral remains, and probably was not intended for a barrow. No. 5, a circular flat barrow, contained a double cist, the smallest of which produced a little dagger of bronze, and a variety of beads (about four dozen in number, neatly made of clay), amongst which were two joints of the vertebral column of petrified encrinurus. Besides, the above were a great quantity of curious little shells, in shape like the Hirlas horn used by the Britons, which were perforated lengthways, and formed probably the necklace of some female. The large cist contained only the bones of a sheep. In No. 6, a flat circular barrow, was found an oval cist, containing burnt bones, and a rude little cup, resembling a saucer. No. 7 is a small "pond" barrow. No. 8, a very irregular flat barrow, 3 feet high, produced, near the centre, a large urn, standing upright within a circular cist, and containing, amongst an interment of burnt bones, a small bronze dagger, with a bone top to it, neatly finished, with five holes on the side for so many rivets, by which it was fastened to a wooden handle. The urn was very large, and elegantly formed; it contained a few black beads that had undergone the action of fire. No. 9, a flat circular barrow, contained two small round cists, in each of which was deposited an interment of burnt bones; in one was a curious little double cup. No. 10 was opened by Mr. Cunnington, in 1804. It contained an urn inverted over the burnt bones, which had been

wrapped up in a linen cloth to protect them; and with the bones were found a small bronze pin, employed probably for fastening the cloth, five rings of a dark brown colour, one of which was perforated for suspension, a small cone of the same materials perforated also for the same purpose, and several pully beads of glass, with one of jet, and another of amber. No. 11 contained, within an oblong cist, a simple interment of burnt bones. No. 12 contained a very large rude urn, 16½ inches deep, inverted over an interment of burnt bones, and within it a smaller vase. Within them were found two dark rings, a large amber bead perforated, four pully beads and three of a black colour.

On the eastern side of the valley, and nearly opposite to the cluster of barrows just described, is another group situated on the southern declivity of a projecting point of the downs. They are enclosed in an area of about seven acres, within an oval earthen work, surrounded by a bank and ditch of slight elevation, and are eleven in number. Cremation had been practised in Nos. 1 and 2. Nos. 3 and 4 had been opened by shepherds, and contained interments of burnt bones. In the former was a little cup, which Mr. Cunnington purchased. No. 5 contained an urn very imperfectly baked, and within it an interment of burnt bones, and a very small arrow-head of bone. In No. 6 cremation had been adopted. No. 7, a large barrow, produced three interments. At the depth of 4½ feet was the skeleton of an infant; and immediately beneath it a deposit of burnt bones, and a drinking cup. At the depth of 8 feet, and in the native bed of chalk, was the primary interment, viz., the skeleton of a man, lying from north to south, with his legs gathered up according to the primitive custom. On his right side, and about a foot or more above the bones was an enormous stag's horn. No. 8, a large old-fashioned bowl-shaped barrow, with a base diameter of nearly 100 feet, contained a skeleton lying on the floor with its head to the north. The other three barrows, 9, 10, and 11, afforded, on opening, no one appearance of sepulchral remains.

Addenda and Notes.

(pp. 14 and 20.)

FROM Dr. Philemon Holland's translation of Camden's "Britannia," 1610, p. 253 :—

"Our countrey-men reckon this for one of our wonders and miracles. And much they marvaile from whence such huge stones were brought, considering that in all those quarters bordering thereupon, there is hardly to be found any common stone at all for building; as also by what meanes they were set up. For mine own part, about these points I am not curiously to argue and dispute, but rather to lament with much grieffe that the authors of so notable a monument are thus buried in oblivion. Yet some there are, that thinke them to be no naturall stones heauen out of the rocke, but artificially made of pure sand, and by some glewie and unctuous matter knit and incorporate together, like as those ancient trophees or monuments of victorie which I have seene in Yorkshire. And what marvaile? Read we not I pray you in Plinie, that the sand or dust of Puteoli being covered over with water, becometh forthwith a very stone: that the cesterne in Rome of sand digged out of the ground, and the strongest kind of lime wrought together grow so hard, that they seeme stones indeed? and that statues and images of marble chippings and small grit grow together so compact and firme, that they are deemed entier and solide marble. The common saying is that Ambrosius Aurelianus, or his brother Uther did reare them up by the art of Merline that great mathematician, in memorie of those Britons who by the treachery of Saxons were there slaine at a parley. Whereupon Alexander Necham, a poet of no great antiquitie, in a poeticall fit, but with no speciall grace and favour of Apollo, having his instructions out Geffrey's British historie, come out of these verses :—

•

“The Giants’ Daunce, a famous stone-worke stands,
 Art did her best in bringing it to passe,
 Vaine prating fame, reports by Merlin’s hand,
 In maner strange this work effected was.

The stones (men say) in that land first did lie
 Whence *Cranes † in flockes so many use to fie. † Palamedis aves.

* scythia.

From thence conveyed, as things of charie price,
 The Irish soil received them with joy.

For why? their vertue in a wondrous wise,
 Oft cures the grieffe that doth sicke folke annoy.

For waters cast and sprinkled on these stones
 Their vertue take, and heale the grieved ones.

The noble Uther that Pendragon hight,
 Them over seas to Ambresburie brought;
 Returning thence, where he by martiall might
 Had quel’d his foes in battell fiercely fought.

O worthy wights, how many on that plaine,
 Of you lie dead by Hengist’s treason slaine!

The Britons brave, that race of noble blood,
 Entrapt by little heed and too much trust,
 Were kild alas, in parley as they stood,
 Through faithless fraud of enemies unjust.

But Eldol Earle his manhood excellent
 Then shewed, to death who seventie persons sent.

AUBREY’S “*Monumenta Britannica*.”

(Page 32.)

Aubrey’s sketch of Stonehenge in the “*Monumenta Britannica*” is interesting, but not worth the expense of reproduction. So much of the “*Templa Druidum*” (the more important portion of the work) has now been printed by the Society that it might be desirable, in some future number or numbers of the *Magazine*, to print the remaining portion, together with a selection of the more interesting notices from the other portions of the “*Monumenta*.”

By the courtesy of Mr. Allnutt, of the Bodleian Library, the writer was shown the printed prospectus for the publication of the “*Monumenta*.” It is amongst Antony à Wood’s collections (658 f. 811). It is as follows:—

“PROPOSALS for PRINTING *Monumenta Britannica*, written by Mr. JOHN AUBREY, Fellow of the ROYAL SOCIETY, Containing FOUR PARTS, viz.

“I. 1. *Templa Druidum.* 2. *A Review.* 3. *Religion and Manners of the Druids.* II. 1. *Camps.* 2. *Castles.* 3. *Military Architecture of the Old Times.* 4. *Roman Towns.* 5. *Pits.* 6. *Horns.* III. 1. *Barrows.* 2. *Vrnes.* 3. *Sepulchres.* 4. *Ditches.* 5. *Highways.* 6. *Roman Pavements.* 7. *Coins.* 8. *Embanking and Draining.*

“To which is Annexed, Στρώματα, sive MISCELLANEA.

“Containing Discourses Chronological, *e.g.*, 1. *Architectonical.* 2. *Of Scutcheons.* 3. *Hand-writings.* 4. *Habits.* Also 5. *Of Weights.* 6. *Prices of Corn.* 7. *Of Diversities of Standards,* and the *Value of Money.* 8. *Nouuelles.* 9. *The Proportion of the Languages, Ingredients of our present English.*

“The whole Work will consist of about 160 Sheets, and will be Printed in *Folio* with abundance of Cuts.

“The Book to be Printed on a very good Paper. Every Subscriber to pay Eighteen Shillings in Quires, that is to say, Nine Shillings down in hand at the time of the Subscription, and the other Nine at the delivery of it.

“That the price to any other than a Subscriber to be One Pound Four Shillings in Sheets: And there are so few Printed, that care will be taken that none shall be under-sold.

“That the Books will be printed by *Candlemas* next, and will be delivered at the Shops of these Booksellers following, *viz.*, Mr. *Clavel* at the *Peacock* in *St. Paul's* Church-yard, Mr. *Smith* at the *Feathers* in *St. Paul's* Church-yard, Mr. *Bennet* at the *Half-Moon* in *St. Paul's* Church-yard. Mr. *Nott* in the *Pall-Mall.* Mr. *Hensman* in *Westminster-Hall.* Mr. *Hindmarsh* at the *Black Bull* in *Cornhill.* Mr. *Sam. Crouch* over against the *Royal Exchange.* Mr. *Horne* at the entrance into the *Royal Exchange.* Mr. *Wilkinson* at the *Black Boy* in *Fleet-street.* Mr. *Henry Clements* Bookseller in *Oxford.* Mr. *Henry Dickenson* Bookseller in *Cambridge.*

“All Gentlemen who subscribe, will have their Names, Titles, and Places of Abode Printed in a sheet.

“*Monumenta Britannica.* [Specimen page.] 25.

“*Templa Druidum.*

“In the Declension of the *Roman* Empire the *Britains* being

drawn away to defend other Provinces, their own country lay open to the Incursion of the Invaders: In that miserable state of things, the Learned Men fled for Refuge into *Ireland*; upon which occasion Learning did flourish there a long time; but the Memory of things *here* became obliterated. Books perish'd, and Tradition was forgot. The *Saxon* Conquerors ascribed Works great and strange to the Devil, or some Giants, and handed down to us only Fables. This Incursion of the *Goths* puts Monsieur *Balzac* into a Choleric Rhetorication. *Sc. Toutee qui s'escrit mesme, nes pas assuré de demeurer, Et les Liures perissent, comme la Tradition s'oublie. Le temps qui vient à bout du fer Et des marbres, ne manque pas de force contra des matieres plus fragiles: Et les Peuples du Septentrion, qui sembloient estre venus pour haster le Temps, Et pour precipiter le fin du Monde, declarerent une guerre si particuliere aux choses escrites, qui n'a pas tenu à eux que l'Alphabet mesme ne soit aboly.* 'The Northern People who seemed to come to hasten Time, and precipitate the end of the World, declared so particular a War to written things, that it was not wanting in them, but that even the Alphabet had been abolished.' 'Twas in that Deluge of History, the Account of these *British* Monuments utterly perished; the Discovery whereof I do here endeavour (for want of written Record) to work out and restore after a kind of Algebraical Method, by comparing them that I have seen, one with another, and reducing them to a kind of *Æquation*: so (being but an ill Orator my self) to make the Stones give Evidence for themselves.

"I shall proceed gradually, *a notioribus ad minùs nota*; that is to say, from the Remains of Antiquity less imperfect, to the more imperfect and ruinated; wherefore I must first touch at that vast and ancient Monument called *Aubury*, in Wiltshire.

" AUBURY.

"*Aubury* is Four Miles West from *Marlborough* in *Wiltshire*, and is peradventure the most eminent and most entire Monument of this kind in the Isle of *Great Britain*. It is very strange, that so eminent an Antiquity should lie so long unregarded by our Chorographers. Mr. *Camden* only names it.

“ It is environed with an extraordinary great *Vallum* [or Rampart] as great and as high as that at *Winchester*, (which is the greatest Bulwark that I have seen), *within which* is a Graffe of a Depth and Breadth proportionable to it: Wherefore it could not be designed for a Fortification, for then the Graffe would have been on the out-side of the Rampart.

“ From the Port *a*, to the Port *β*, is sixty Perches. From the Port *γ*, to that of *δ* the same distance, and the breadth of the Rampart is Four Perches, and the breadth of the Graffe the same distance. Round about the Graffe (*scil.* on the edge or border of it) are pitched on end huge Stones, as big, or rather bigger than those at *Stoneheng*; but rude and unhewn

DRAWING OF STONEHENGE IN THE “SCALA MUNDI.”

(Page 46.)

Through the intervention of his friend, the Rev. Prebendary Scarth, the writer has been able to procure a further account of the plan of Stonehenge in the library of Corpus Christi College (formerly Benet College), Cambridge. The Rev. S. S. Lewis, F.S.A., a Fellow and Librarian of the College, has most kindly sent him a *fac-simile* of the drawing in “*Scala Mundi*.” This “*Scala Mundi*” is in the Parker MS. (No. 194). At the end of it is written, in a style not much later than the time of Edward II., “*Hospitium beate Marie extra bishopsgate hunc vendicat librum.*” “It is a Chronological Table or *Fasti* from Anno Mundi I., down to 1338, in handwriting of the time of Edward I., thence to the year 1451, in a somewhat later hand: the skeleton is complete to the year 1619. The lunar cycles of nineteen years and the solar cycles of twenty-eight years are duly marked, but there are fifty lines (*i.e.*, fifty years) in each page instead of one clear cycle of nineteen only, as is the case when twenty-eight leaves of such pages complete a combination of the lunar and solar cycles. The manuscript is a small folio 11¼ inches long by 7¾ wide.” The notice of Stonehenge occurs on page 57. In the quadrangular space between the stones is written “*Stonehenges juxta Ambresbury in Anglia sita*” in red ink. A.D. 491 is the year to which the notice of Stonehenge is

appended, and the British King then reigning is Aurelius Ambrosius. The print in Gough's Camden, from which the woodcut at page 46 was taken, is not faithfully copied; but as the generally rude and inaccurate character of the original sketch is sufficiently shown, it seems to be hardly worth while to have it re-engraved.

THE STONES OF THE INNER CIRCLE AND INNER ELLIPSE.

(Page 59.)

The great puzzle about Stonehenge is in connection with these smaller stones, which are foreign to the neighbourhood. We cannot be far wrong in believing that the entire structure was intended to serve as a temple for religious worship; and we know whence the large stones came, and how "with much ado and pains" they could be set up; but we are in perplexity about these primitive stones from Wales or Cornwall. Were they brought here, in the first instance, in ignorance of the existence of the sarsen stones in the neighbourhood? This is not likely. Were they brought here to decorate the interior of the temple, as we should employ rare and costly marble from a distance to adorn the interior of a church? This again is not likely, as although by shaping and polishing they might be rendered more comely, they are at present in no way ornamental.

For the merely structural purposes of making a circle and ellipse, sarsen stones of the same height and size would have been equally serviceable.

We are forced to believe that some special *religious* value was attached to stones of this particular kind, and that no other stones could have supplied their place in a building of this character.

That medicinal and other virtues were believed to be the property of particular stones we know from Pliny (Book xxxvi.) and others; and Aubrey tells us (p. 35) that pieces of these stones were put into wells "to drive away the Toades." It is not unlikely that enquiries into the superstitious value, which has at different times and in different places, become associated with particular stones, will render it almost certain to us that these smaller Stonehenge stones were held in such high regard as to make the trouble of bringing them from a great

distance a matter of no concern in comparison with the importance of having them there, as an integral portion of the sacred fane.

THE WORD "SARRASIN."

(Page 69.)

Dr. Stukeley says (p. 63 of reprint) that: "the Cornish men universally suppose that the Jews are the people who first work't in their rocks for tin; and in old neglected tin-works they find some of their tools. The workmen call them *attal sarazin*, the Jews' cast off works in their Hebrew speech, says Norden." On the Jews in Cornwall, see Mr. Max Müller's "Chips from a German Workshop," vol. iii.

DESTRUCTION OF STONES AT STONEHENGE.

(Page 77.)

Lord Herbert (then the Right Hon. Sidney Herbert) stated in his speech at the Society's meeting, at Salisbury, in 1855, that he believed "that some years ago, a portion of Stonehenge was consumed in the reparation of the roads." (See "*Wilts Arch. & Nat. Hist. Mag.*" ii., 6.) This can hardly have been the case since 1812, as the plans of Stonehenge which served for the illustration of Sir Richard Hoare's description of it in "Ancient Wilts," require no alteration for the illustration of the present paper, although at an interval of sixty years.

There must have been some misapprehension about the stone from which West Amesbury House was built (see page 76), as Mr. Edwards, of Amesbury, in a letter which he has kindly communicated to the writer (dated April 8th, 1876), says, "I have been to West Amesbury, and have carefully examined the stones used in building the house as well as the garden wall, but have not discovered any stones similar to those at Stonehenge. . . . I likewise examined the walls of the old farm-house, on which there is a date of 1680, the old portion of which is partly built with similar stones to that of the house before mentioned." Mr. Edwards mentions the curious fact that the Stonehenge circles and the Friar's Heel are in different Hundreds, the former being in the Hundred of Underditch, and the latter in the Hundred of Amesbury.

RE-ERECTION OF THE TRILITHON WHICH FELL IN 1797.

(Page 81.)

For more than twenty years there has been discussion about the propriety of re-erecting the stones of the trilithon which last fell down. It appears, however, that at a very early period in the present century the same idea had been entertained, but had come to nought. Mr. Britton, in his memoir of Mr. Hatcher, says "that a sum of fifty pounds, which had been subscribed to raise the fallen trilithon at Stonehenge, was, in 1802, employed in exploring some of the numerous barrows of Salisbury Plain."

DIGGING AROUND THE "SLAUGHTERING STONE."

(Page 85.)

There seems to have been some confusion in Sir R. Hoare's mind about this digging around the "Slaughtering Stone," as it appears that it was done by Mr. Cunnington, in 1802, two or three years before his connection with Sir Richard commenced. For "*he*," in the next line, *read* "Sir R. Hoare."

THE CURSUS.

(Page 90.)

Any one who would visit the west end of the Cursus should go along the road to Shrewton, as far as barrow No. 42, and then cross the road. At a distance of about 300 yards he will come upon this end of the Cursus. One of the barrows upon it is on the down, the other inside the plantation. It will be useless to attempt to trace its boundaries through the plantation.

ABSENCE OF ANGLO-SAXON BARROWS FROM THE NEIGHBOURHOOD OF
STONEHENGE.

(Page 99.)

"It is further to be remarked that the few Anglo-Saxon tumuli which have been found in Wiltshire were in the outlying districts and valleys, and not one of them on the barrow-covered hills and

plains around Avebury and Stonehenge, the sacred places of an elder race."—Dr. Thurnam, "*Archæologia*," vol. xliii., p. 287.¹

THE BELGIC DITCHES,

as described by Dr. T. Wharton, in his "*History of Kiddington*," pp. 72, 73, 74. [1815.]

(Page 103.)

"Petty barbarian states, intent only on repelling their neighbours or enlarging their territories, unfurnished with arts or letters, and from their natural ferocity cherishing the most violent jealousies, and destitute of the principles of mutual confidence, possessed no other mode of adjusting their differences and securing their frontiers, than to construct these inartificial bulwarks, serving at once for division and defence, planned on the simplest mechanism, and executed by the mere strength of tumultuary multitudes.

"They must be esteemed stupendous operations, not only if we consider their solidity and extent, but the inconveniencies of ground, and impracticabilities of country, over which they were conducted, with a sort of blind but un baffled perseverance, by the devious and eccentric hand of savage conquest. There is often a kind of barbaric capriciousness even in the irregularities of their course. It frequently happened, that a boundary raised with infinite labour, soon became superfluous, and as new spaces of country gradually fell a prey to the progression of prosperous arms, was included by another on a more comprehensive scale and wider compass. A straight line drawn northward, from the southern coast of England about Dorsetshire and Hampshire, only thirty miles into land, would cut through the curve of no fewer than seven of these boundaries, successively circulating one beyond the other, and which I believe to have been reared by the Belgæ, a formidable colony of the Celts from Gaul, as they gradually extended their victories, and propagated their

¹The six grave-mounds belonging to Ancient Wiltshire, which have been proved upon examination to be Anglo-Saxon, are described in Hoare's "*Ancient Wilts*," i., 46, 48, 174 (barrow levelled), 234, 235; vol. ii. "*Roman Æra*," p. 26. The five secondary Anglo-Saxon interments are described in i., 79, 100, 113, 194, 236.

acquisitions, over Dorsetshire, Wiltshire, and Hampshire. All these seven valla describe the most desultory track, but proceed in windings nearly parallel—a proof of their reference to each other, and that the aboriginal Britons did not suffer the invaders to advance with any degree of precipitation.

“The most perfect is that near Woodyates, in Dorsetshire: and which originating, as I presume, from the river Stour, or the sea-shore, about Christchurch, in Hampshire, appears conspicuous, like the elliptic on one of the hemispheres of a globe, over the long and broad declivity of Bladon Hill, above Marton, in Wiltshire, and intersecting, with a prodigious ridge and foss in almost original preservation, the Roman road called the Ikenild Street, within a furlong of Woodyates, pushes through the woody tracts of Cranbourne Chase, and seems to terminate at Grovely Wood, within five miles of Salisbury. This very remarkable rampart is unquestionably Celtic, being evidently antecedent to the Romans; for at the intersection above-mentioned, the substance of the Ikenild, that most dubious and unintelligible of the Pretorian ways, yet here retaining the genuine and massy remains of a pebbly and flinty stratum cemented with chalk, is continued in a line across or through it, as was plainly perceptible when the London turnpike-road was lately made. Had the rampart and dyke been posterior, the Roman materials would have been torn up and destroyed. And I must add that near Woodyates Lane the Roman road penetrates the centre of a barrow, one of a numerous group. These barrows, apparently connected with the rampart, are as indisputably Celtic, and not Roman; because the Romans, more pious than modern Christians, would not have suffered such a profanation to have been committed on a sepulchre of their ancestors. Nor, in after times, would the Saxons or Danes have formed a barrow on a public way. Wansdyke or Gwhahan-Dyke, the ditch of division, which also interferes with a probable Roman road at Hedington, and in the midst of which is situated the town of Devizes, anciently a Celtic station, is the last frontier of the encroachments of the Belgæ northward. Here a stand was made between the contending barbarians: and as Wansdyke runs between Stonehenge and Abury, probably those two mysterious monuments,

if not sepulchral, were intended to perpetuate the final triumph of the Southern Britons, and the limitation of the Belgic dominion. . . . The boundaries of which I am now speaking, are for the most part extant on the steeper and northern sides of hills, the foss, or excavation, lying on the North, because people, pressing forward from the south, were opposing the resistance of a northern adversary."

THE BUSTARD.

(Page 140.)

The re-appearance of several bustards in Wiltshire in the winter of 1871, when the two, which, as stuffed specimens, are to be seen in the Salisbury Museum, were killed, would seem to indicate that if this bird had a chance of living a quiet life on the downs, it would again be found occupying its former haunts. The rapid conversion of the downs into corn and root-producing land would, however, effectually prevent any re-settlement of this bird near Stonehenge, even if it could ensure an unmolested existence.

THE OSSUARY THEORY.

(Page 152.)

Dr. Thurnam did not think that the provisional interment of bodies during the formation of the mound which was to be their ultimate destination would satisfactorily account for the remarkable appearance presented by so many of these bodies when discovered in the long barrows. He says "It is highly probable that, during the time the large and honorary grave-mound was in process of formation, the bodies of the dead and of those slaughtered in their honour were deposited in some temporary grave, and subsequently disinterred for final interment in the complete, or nearly complete, long barrow. I am, however, satisfied, by repeated and minute examinations of the bones, that the very peculiar appearances which they present cannot be entirely explained in this way; but that they are due to the manner in which those who were sacrificed in the course of the funeral ceremonies were slaughtered, and who seem to have been literally 'brained' by the blows of a club or stone axe." "Archæologia," xlii., p. 191.

CREMATION IN WILTSHIRE LONG BARROWS.

(Page 153.)

Dr. Thurnam saw reason, subsequently, to add to this list of three long barrows presenting imperfect cremation, two, which he had previously considered to be oval barrows. They are "Kill-Barrow," near Tilshead, and No. 3 on Shrewton Down (p. 196). "Both, when excavated at the east and broader end, yielded deposits of burnt bones, covered and intermixed with a substance resembling mortar, many of the bones being tinged of a green colour. . . . In both the skirts of the mounds are more or less mutilated, so that the lateral ditches of the true long barrow are not apparent." ("Archæologia," xliii., 297, *note*.) The three long barrows, described in "Archæologia, xlii., 191, in which the remains of the dead found in them had been burnt, were Knook Long Barrow, Tilshead Old Ditch Barrow, and that in the centre of Bratton Camp. In Knook Long Barrow, in the year 1801, in the usual situation, and instead of the usual pile of skeletons, Mr. Cunnington found a "large quantity of burnt bones." This barrow was re-opened by Dr. Thurnam, in 1806, "when, in digging at the north-east end of the barrow we came to traces of the burnt bones and many scattered brittle flints, some of a red and others of a blackish-grey colour, as if scorched by heat. Though no pains were spared in clearing out the base of the barrow, no trace whatever was met with of any unburnt skeleton or skeletons." In 1865 Dr. Thurnam opened the Tilshead Ditch Barrow (perhaps the largest long barrow of Wiltshire), and found beneath a pile of large flints, and on a sort of pavement of similar flints, a large pile of burnt bones, being those apparently of one full-grown adult individual. It was observed that the fragments of bone were much larger than those so common in the circular barrows, and that they were far from being so completely incinerated. The skeleton of a small female was found about two feet to the north-west of the burnt bones, closely doubled up, and crouched. The skull presented indisputable marks of having been violently cleft before burial, and no doubt during life. "In this instance the skeleton appears clearly to have been that of a slaughtered female victim, and the burnt bones those probably of the chief in

whose honour the barrow was erected." In August, 1866, Dr. Thurnam opened the barrow at Bratton Castle, and in the more westerly of two large openings made at the extreme east end, he found, on the natural level, at a depth of 8½ feet, a heap of imperfectly-burnt, or rather charred, human bones, as many, perhaps, as would be left by the incineration of one or two adult bodies. Careful search was made for an entire unburnt skeleton or skeletons, but without success. Dr. Thurnam gathered from the results of the examination of some long barrows in Yorkshire by Canon Greenwell that in that part of the north of England "cremation was the rule of the long barrows, but cremation after a singular and imperfect fashion."

POSTURE OF BODIES IN CASES OF INHUMATION.

(Page 165.)

Had Dr. Thurnam lived to write his paper on Stonehenge, he would doubtless have condensed for it his two valuable papers in vols. xlii. and xliii. of the "Archæologia," and have done it in a more systematic manner than the writer has done. The latter, anxious not to extend his paper to an undue length, has touched very lightly on some very interesting matters connected with the barrow-burial around Stonehenge, and amongst others, upon the position of bodies in cases of inhumation. He gladly takes advantage of this printing of "Addenda" to give some more information upon this subject than the slight mention of it made at page 165. Sir R. Hoare says "Ancient Wilts," i., 24) :—

"The second mode of burying the body *entire* is evidently proved to be of a much later period, by the position of the head and body, and by the articles deposited with them. In this case we find the body extended *at full length*, the heads placed at random in a variety of directions, and instruments of iron accompanying them.

"Two modes of *cremation* seem also to have been adopted; at first the body was burnt, the ashes and bones collected, and deposited on the floor of the barrow, or in a cist excavated in the native chalk. This being the most simple, was probably the most primitive custom practised by the Ancient Britons. The funeral urn, in which

the ashes of the dead were secured, was the refinement of a later age. The bones, when burnt, were collected and placed within the urn, which was deposited with its mouth *downwards*, in a cist cut in the chalk. Sometimes we have found them with their mouth *upwards*, but these instances are not very common: we have also found remains of the linen cloth which enveloped the bones, and a little brass pin which secured them.

“Of these different modes of interment, I am of opinion that the one of burying the body entire, with the legs gathered up, was the most ancient: that the custom of cremation succeeded, and prevailed with the former; and that the mode of burying the body entire, and extended at full length, was of the latest adoption.”

“The crouched position of the skeleton,” says Dr. Thurnam, “with the knees drawn up more or less closely to the breast, is not confined to the long barrows, or to tombs of the stone age; but is also observed, almost, if not quite, to the exclusion of the extended posture, in the circular barrows of the bronze age. It is a very singular, though well-known circumstance, that this contracted or crouched position of the remains is by no means peculiar to ancient British tombs, but is found to have been and still to be very generally resorted to by primitive and barbarous peoples in both hemispheres and in all the quarters of the globe. The earliest notice of it seems to be in Herodotus, who tells us (iv., 190) that the Nasamones of Lybia buried their dead in a sitting posture, watching when one is about to expire, that they may set him up, that he may not die supine.” The secondary interments found by Mr. W. Cunnington, Sir R. C. Hoare, and Dr. Thurnam, near the summits of barrows, with iron weapons accompanying them of an Anglo-Saxon character, were all in an extended position. In a barrow opened in 1802 by Mr. Cunnington, the contracted position is described more specifically as the “sitting posture.” Such a posture, and more rarely a kneeling and standing one, have occasionally been pointed out in other British barrows. Most of the deviations, however, from a simple crouched position are probably the result of accidental circumstances. We may infer, from the example of numerous barbarous and savage peoples at the present day amongst

whom American Indians, Esquimaux, Australians, New Zealanders, Feejeeans, and Andaman Islanders may all be named, that the custom which obtained with the ancient Britons was the same as now practised, viz., that of swathing the body more or less closely in skins or cloth, in a posture sometimes described as a sitting one, and sometimes as simply doubled up. When a corpse is thus prepared and deposited, for burial, it is obvious that it must be very uncertain, whether, in filling up the grave, the body shall ultimately lie on the right or the left side; or be somewhat tilted up and left in the sitting or squatting posture. . . . What may have been, and what may still be, the reason for this practice has been much argued. It must be remembered that death usually leaves the body with the limbs more or less bent and contracted, or in the condition known as *rigor mortis*. Hence, in laying out the corpse it is generally needful to employ slight force, in order to extend, and as it is said, compose the limbs. In rude states of society we may readily understand that superstitious feelings may operate so as to prevent any interference with nature, whose apparent indications in such a matter would be likely to be carried further rather than contravened. It may likewise have been the object to inter the dead as much as possible in the same posture, as that which the living were accustomed to occupy when at rest, crouching rather than sitting round the fire or low table, with the elbows on the knees, and the hands resting against the cheek. . . . According to M. Troyon, this doubled-up posture, none other than that of the unborn infant, was imposed on the body of the dead, when about to re-enter the bosom of the universal mother, as the symbol of a belief, not only in a life to come, but likewise in that of the resurrection of the body. The bodies of the Britons of this period, and in this part of the island were, for the most part, deposited in the meridian line, with the head to the north, and consequently with a south aspect. This was found to be the general practice by Sir R. Hoare, Mr. Cunnington, and Dr. Thurnam.

Stonehenge Notes made in April, 1876.

ON the 7th of April, 1876, the writer, with his son, Captain Long, Mr. William Cunnington, and Mr. Edwards of Amesbury, visited Stonehenge, with the view of making a careful examination of the circles and ellipses. Mr. Cunnington found that the small stone in the outer circle, opposite to Nos. 5 and 6 on Sir R. Hoare's plan, is not a sarsen, but a syenite, and that it had, probably, been originally a portion of No. 6. This stone should therefore, have been coloured *green*, instead of *yellow*. The stone numbered 3 in Hoare's plan has also been incorrectly coloured *blue* instead of *green* in the chromolithograph. These alterations can easily be made by hand.

The writer observed a stone which appears hitherto to have escaped notice. It is the stump of that stone of the inner ellipse (behind the altar-stone), which the large upright D 1 in falling, struck; and, by striking, became broken into two parts. It is under the south corner of the upper fragment, 3 feet from No. 25, as No. 25 is 3 feet from No. 24.

It has, hitherto, been the general opinion that the stones of the inner *circle* had been unhewn; and Mr. Henry Browne, who must have been very familiar with their appearance, describes them in his little work as being "wholly unhewn;" but it is difficult to believe that Nos. 7 and 4 (for instance) have never been touched by flint or metal. The opinion arrived at by the party was, that the syenites had been more or less wrought, but that the horn-stones (so-called) 17, 19, 9, and 11, had not been worked. It is, however, not easy to form a judgment upon this matter, for these stones, being much more brittle than the syenites, would be more subject to the wanton injury of visitors, and having been more sought after for "toade charms," etc. (p. 35), may, perhaps, have been more injured than any of the others.

Mr. Henry Browne was of opinion that the transverse stones of the outer circle "had been fitted together, at their extremities, by corresponding projections and hollows." It was evident to all the party that the ends of those stones which are "in situ" had not been cut down straight as is the case with the transom stones of the trilithons, but that they had had vertical ridges and corresponding grooves, and that some system of dovetailing had been adopted by the builders of Stonehenge. That these projections and grooves should have been considerably "weathered" away is not to be wondered at.

The two stones in front of the stone marked F 1 are evidently fragments of that stone. The remains of the tenon are still visible on the innermost fragment. The three fragments adjoining are, doubtless, those of the transom stone to F 1 and F 2.

The following measurements may be of use and interest. The width of the entrance between A 1 and A 2 is 4 feet 4 inches. The interval between them widens considerably towards the top. Between A 2 and the adjoining stone the width is 3 feet 1 inch; between the latter and the stone next to it, 3 feet 3 inches; and between the two next standing stones, 2 feet 4 inches. On the other side of A 1 the first interval is 3 feet in width; the second, 3 feet 6 inches; the third, 4 feet; the fourth, 3 feet; the fifth, 3 feet 9 inches; and the sixth and last, 2 feet 8 inches. The interval between No. 7 and the nearest corner of C 2 is 7 feet; between No. 5 and C 1, 13 feet 4 inches; between B 1 and No. 4 (which is 5 feet 4 inches high and 1 foot wide) the interval is 10 feet 5 inches; and between No. 4 and the stone on the opposite side the interval is 9 feet. The large unnumbered prostrate stone next to No. 7 is 17 feet 2 inches long, 5 feet 7 inches wide, and 1 foot in depth above ground; No. 12 is 7 feet 6 inches long; No. 27 is 9 feet 6 inches high; No. 28 is 8 feet 10 inches high; and No. 29 is 7 feet 9 inches high. No. 23 is 7 feet high; No. 22 is 6 feet 9 inches high, and the interval between them is 3 feet 4 inches. The "Altar-stone" was carefully measured both on the inner and outer edges. Its length on the inside is 15 feet 5 inches, and on the outside is 16 feet 2 inches. The space between No. 3 and No. 1 measures 14 feet, and between No.

1 and No. 20, 5 feet. These two stones (each about 6 feet in height) form the inner entrance. The extra distance between these two stones, their peculiar flattened forms and rounded tops, so different from those of the other obelisks, would seem to indicate the regard for effect which those who erected these stones had in this particular portion of the smaller circle. The distance between No. 20 and No. 19 is 2 feet 4 inches; between No. 19 and No. 18, 2 feet 4 inches; and between Nos. 18 and 17 the same. The syenite stone, No. 15, which is of very fine grain, is 7 feet long; the interval between the syenites, Nos. 13 and 14, is 9 feet 8 inches, and between Nos. 14 and 16, 11 feet. The stone of the outer circle, opposite to the small syenite transom (7 feet 6 inches long), next to No. 3, is, on the inside, 13 feet 4 inches high, 5 feet 10 inches wide, and 4 feet in thickness. The upright stone of the outer circle, opposite to No. 6, and adjoining the fragment of syenite belonging to that stone, is 12 feet 6 inches high. The standing stone of the outer circle behind No. 11, (upon which the broad arrow has been cut), is 14 feet high, 7 feet wide, and 4 feet 5 inches thick. The measurements taken of stone F 2, by the writer and his son, in the autumn of 1875, were: height, 16 feet 8 inches; breadth, 7 feet 6 inches; and thickness, 3 feet 10 inches. From the difference between these measurements of that stone and those of Sir Henry James, it may be seen how difficult it is to make the most careful measurements tally. The allowance made by some persons for loss by the rounding off of edges (which weather or violence may have occasioned) will often make a difference of 2 or 3 inches.

The stone on the north-west portion of the vallum is 4 feet high, and 3 feet 6 inches wide at the broadest part.

On the occasion of our visit on the 7th of April last, Mr. Cunnington found, in the ruts of a waggon-track close to Stonehenge, splinters of the syenite-like stone, of the horn-stone (so-called), and of the sarsen stone; and also a small but well-formed chipped flint celt. These specimens were all picked out of the earth just below the turf, where it had been cut through by the wheels. He also picked up, under the large stone resting on No. 9, and under the great sloping stone of the large central trilith, as many as nine

fragments of various stones of the inner circle. These had probably been broken off by visitors.

The writer was under the impression that exposure to the weather on the north side had produced the peculiar appearance of decay on that side in stone F 2 (page 59), but Mr. Cunnington considers that the decayed portions must have been originally of a softer character than that of the body of the stone.

On the arable land adjoining Stonehenge, where the group of barrows 16—22 had been, two chips of sarsen stone were picked up. The site of the "barrow-like" mounds (note, p. 65) was not ascertained.

Mr. Edwards, of Amesbury, has given the following interesting information. In reply to the writer's wish to know how much of the *Cursus* on the Amesbury side is under cultivation, and when it was first ploughed up, he says: "The piece of down land which was broken up, commencing at the top of the hill, where the *Cursus* terminates, towards Amesbury, and which extends from thence into the bottom, is fifty acres, and was ploughed up about twenty-five or twenty-six years ago. It commences at the top of the hill, in a line with the two Seven Barrows, and consists of the hanging or slope of the hill down into the bottom called Stonehenge Bottom, and full in our view when we were returning along the line of the *Cursus*."

To the writer's enquiry when the barrows 15 to 22 (inclusive) were levelled, Mr. Edwards answers: "This was done 28 years ago, and my informant stated that, after it was done, when ploughing there, it was his aim, as well as that of others, to see which could pick up the most chippings. Some of them were granite and others sand stone. Of the granite no use whatever could be made when they took them home, but the sand stone they used for whetting or sharpening reaping-hooks. As to when the farm building adjoining the field in question were erected? That was built 29 years ago."

Mr. Edwards has also most kindly gathered for the writer the following information respecting the successive owners of Stonehenge during the last 250 years:—

OWNERS OF STONEHENGE.

1. In 1620. Mr. Newdick.
2. In ——— Dawbony.
3. In 1639. Sir Laurence Washington, knight.
4. In 1643. Laurence Washington, Esq.
5. In 1655. Robert Lord Ferrars, of Chartley.
6. In 1723. Thomas Hayward, Esq.
7. In 1724. Rev. Mr. Hayward.
8. In 1771. Charles Duke of Queensberry and Dover.
9. In 1778. William Duke of Queensberry.
10. In 1810. Archibald Lord Douglas.
11. In 1824. Sir Edmund Antrobus, Bart.
12. In 1826. Sir Edmund Antrobus, Bart.
13. In 1870. Sir Edmund Antrobus, Bart.

Authorities for the above.

1. In 1620. Mr. Newdick—Refer to Sir Richard Colt Hoare's "History of Ancient Wiltshire," vol. i., pp. 153, 154, and 155. As George Duke of Buckingham made his researches at Stonehenge in the year 1620 and from the information Mr. Aubrey received from Mrs. Trotman that the Duke of Buckingham would have given to Mr. Newdick (the owner of this place) "any rate for it, but he would not accept it," it might be presumed that it belonged to him at the time when the Duke of Buckingham made those researches.

2. In——— Dawbony or Dowbeny.—In the printed particulars of the Amesbury Estate, drawn up when it was for sale in 1824, mention is made of the Manor of Dawbneys, and from the following it will appear that West Amesbury Estate is the manor that bore that name, on which Stonehenge stands. The name of Dowbeny still exists in the name of a meadow in the parish of Amesbury, situated on the West Amesbury Estate, commonly called Bony Mead, meaning no doubt Dawbony's Mead. In the following remarks there is still further evidence to prove that West Amesbury belonged to Mr. Dawbony.

3. In 1639. Sir Laurence Washington, knight.—In the boundaries of the Manor of Amesbury Earls examined on Monday, the

5th day of August, in the fifteenth year of the reign of King Charles, 1539, mention is made of the several fishings of Sir Laurence Washington lately called Mr. Dawbony's Mill Pond. And further on mention is made of Stonage down, parcell of West Amesbury, Sir Laurence Washington's Hold. In the boundaries of the Manor of Amesbury Priory mention is again made of the Mill Pond or several water called now Sir Laurence Washington's (late Mr. Dowbeny's Mill Pond). The foregoing goes to prove two things, that the West Amesbury Estate did belong to Sir Laurence Washington; and, lastly, that it belonged to M. Dawbony, previous to Sir Laurence Washington. The said Sir Laurence Washington, knight, was Chief Register of the Chancery, ancestor of the first President of the United States of America. He died at Oxford, May 4th, 1643, aged 64, and was buried in the church of Garsdon, Wilts, where there is a monument to his memory. Refer to Britton's "Beauties of Wiltshire," vol. iii., p. 66. The Manor of Garsdon, which belonged to him, passed to his son of the same name, and West Amesbury, with Stonehenge, descended in the same way.

4. In 1643. Laurence Washington, Esq., who is mentioned by Inigo Jones, in his work, entitled "The most notable Antiquity of Great Britain, vulgarly called Stonehenge, on Salisbury Plain, 1665," as being at that time proprietor of the site of that ancient monument. Page 107 speaks of him "as his honored Friend Laurence Washington, Esq., on whose demesnes this antiquity stands."

5. In 1665 Stonehenge is spoken of by Aubrey in his "Monumenta Britannica," as being part of the inheritance of the wife of Lord Ferrars of Chartley, who was daughter of Laurence Washington, Esq., and which is referred to in Sir Richard Colt Hoare's "History of Ancient Wiltshire," vol. i., pp. 153 and 154.

6. In 1723. Thomas Hayward, Esq.—Refer to the "Wiltshire Archæological and Natural History Magazine," vol. xiv., p. 229: "Thomas Hayward gen: owner of Stonehenge 4 Jul. 1723." It appears that he died in 1724. The above in the autograph of Dr. Stukeley and written in a copy of his work "Stonehenge and Abury."

7. In 1724. Rev. Mr. Hayward—Refer to the "Wiltshire Archæological and Natural History Magazine," vol. xiv., No. 41, page

228: "The precise spot of ground where Stonehenge stands is in the lordship of West or Little Ambresbury the possession of the Rev. Mr. Hayward who at present may be called the Arch-Druid of the Island." The above likewise written in the same book "Stonehenge and Abury," by the Rev. Dr. Stukeley.

8. In 1771. Charles, Duke of Queensberry and Dover. The writer is not at all aware as to when Stonehenge came into the possession of His Grace, nor from whom, but it certainly was his property at the time when Dr. John Smith wrote his work in 1771, entitled "Choir Gaur, the Grand Orrery of the Ancient Druids, commonly called Stonehenge, on Salisbury Plain," as the said work is dedicated to him as the owner of Stonehenge.

9. In 1778. William, Duke of Queensberry, on the death of his cousin, succeeded him as the owner of the estate, consequently of Stonehenge.

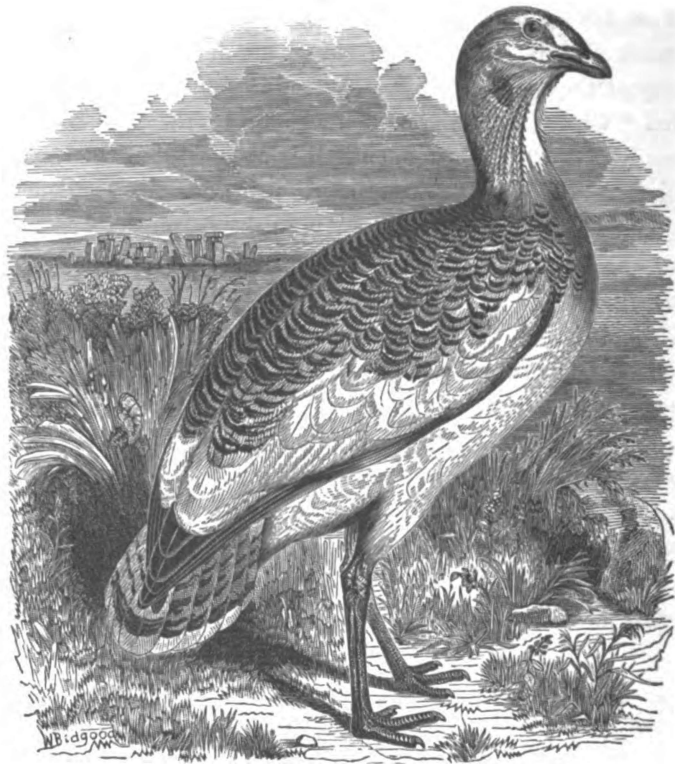
10. In 1810, Archibald, Lord Douglas, next became the owner of Stonehenge and the Amesbury property, on the death of William, Duke of Queensberry.

11. In 1824 Sir Edmund Antrobus, Bart., purchased the said property, of Archibald Lord Douglas. He died, February, 6th, 1826.

12. In 1826 Sir Edmund Antrobus, Bart., nephew of the above, succeeded him in the Amesbury property. He died, May 4th, 1870.

13. In 1870 Sir Edmund Antrobus, Bart., son of the above, succeeded his father in the estate and baronetcy, as third baronet.





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ERRATA.

- Page 4, note, for "Proceedings of Society of Antiquaries," read "the 'Archæologia' of the Society of Antiquaries."
- „ 29, for "Virtruvius," read "Vitruvius."
- „ 34, note, for "Encomum," read "Encomium."
- „ 60, line 3, for "15," read "16."
- „ 72, line 11, for "tertaries," read "tertiaries."
- „ 85, line 2, for "he," read "Sir R. Hoare."
- „ 149, for "Whittaker," read "Whitaker."
- „ 157, for "ago," read "age."
- „ 158, for "Priscan," read "Priscian."
- „ 162, for "appears," read "appear."
- „ 196 for "teseræ," read "tesseræ."



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every receipt, invoice, and bill should be properly filed and indexed for easy retrieval. This is particularly crucial for businesses that operate in highly regulated industries where compliance is a top priority.

In addition, the document outlines the various methods used to collect and analyze data. It describes how modern software solutions can automatically track sales, expenses, and inventory levels, providing real-time insights into the company's financial health. This data-driven approach allows management to identify trends, forecast future performance, and make informed decisions based on concrete evidence.

Furthermore, the document addresses the challenges of data security and privacy. With the increasing reliance on digital systems, it is essential to implement robust security protocols to protect sensitive information from unauthorized access and cyber threats. Regular audits and updates to security measures are necessary to ensure the integrity and confidentiality of the data.

Finally, the document concludes by highlighting the role of human resources in the data management process. While technology provides powerful tools, it is the skillful use of these tools by trained personnel that truly maximizes their effectiveness. Continuous training and development programs are essential to keep the workforce up-to-date with the latest technologies and best practices in data management.