The Gold Torc found at Peopil, 1909.

BY H. ST. GEORGE GRAY.

I. PLACE OF FINDING AND INQUEST.

"A golden torque, ascribed to the middle Bronze Age, was found about the 25th of May, 1909, in Mr. Chapman's garden on Hendford Hill, Yeovil, owned by Messrs, Bird & Pippard. It was found on the earth, after digging, by Henry Cole, of Yeovil, gardener. The owner thereof cannot now be known. There is no evidence that it has ever been in ancient times hidden or otherwise concealed."

SUCH was the verdict, on which the jury unanimously agreed, which resulted from a long and carefully-considered inquiry held at the Yeovil Town Hall by the Coroner for S.E. Somerset (Mr. E. Q. Louch) on August 18th, 1909, to prove and elucidate the circumstances of the finding of this gold ornament. The inquest was the outcome of communications between the solicitor to H. M. Treasury and the district coroner.

The discovery and subsequent acquisition of the torc by the Somersetshire Archæological and Natural History Society for the County Museum at Taunton Castle have excited a wide-spread interest in archæological circles, and the subject is one to which the press and scientific magazines have given much publicity, —the law of Treasure Trove not being generally

^{1.} One of the best newspaper accounts is to be found in the Western Gazette (Yeovil), Aug. 20, 1909. The author wrote on this subject in The Times, Aug. 21, 1909. Other articles and letters bearing on the subject appeared in the Som. Co. Gazette, Nov. 20 and 27, 1909, and Jan. 29, 1910, and in The Banner of Israel, Sept. 22, 1909.

understood, its interpretation presented many difficulties and difference of opinion.

Students of the subject are recommended to refer to Dr. Wm. Martin's articles in the Report of the Coroners' Society, 1903-4,² the Journal of the Royal Society of Arts,³ the South-Eastern Union of Scientific Societies,⁴ the South-Eastern Naturalist,⁵ and the Law Quarterly;⁶ "Treasure Trove, the Treasury, and the Trustees of the British Museum," by Mr. P. W. P. Carlyon-Britton, President of the British Numismatic Society;⁷ and "Treasure Trove," by Mr. C. H. Compton.⁸

The Coroner in opening the inquiry said they were there under the statutory jurisdiction of the coroner, who in ancient times, as far back as the reign of Henry III, was specially instructed to hold inquiries in connection with the finding of treasure trove. In the present case the fact of finding and the circumstances of the finding had to be put upon record. Beyond that it was unnecessary for the Court to go, as it was not within its province to determine the technical point whether or not the ornament constituted treasure trove. But the jury had no hesitation in recording their unanimous opinion that the antiquity was an isolated surface-find, and that there was no proof whatever of intentional concealment on the part of the ancient Briton who formerly owned it. The actual place of losing was not even known, for the torc was apparently hauled to the small villa-garden at Hendford Hill, where it was picked up by the man Cole; and the landlord, a builder, stated that the material under consideration was surface mould

- 2. Pages 78-96.
- 3. Vol. LVI, Feb. 21, 1908, pp. 348-359.
- 4. "The Preservation of Treasure Trove and other Relics," 1906; also Report, 1907.
- 5. "The Law of Treasure Trove as it affects Archæological Research," S. E. Naturalist, 1905.
 - 6. Jan. 1904 ("Treasure Trove and the Brit. Mus.")
 - 7. Reliquary and Illustrated Archæologist, XIV, 1908, pp. 115-123.
 - 8. Journ. Brit. Arch. Assoc., x, n.s., pp. 118-129.

recently brought from three distinct areas in the neighbour-hood. Its actual resting-place during the hundreds of years of its existence was, therefore, unknown; and seeing also that the torc did not form part of a hoard, the Somersetshire Archæological and Natural Hist. Soc., after carefully digesting the law of treasure trove, had no scruples in purchasing it for the County Museum⁹ during the time the Annual Meeting was being held at Wells in July.

II. GENERAL REMARKS ON TORCS.

No relic of antiquity is exposed to more risk of finding its way to the melting-pot than the ancient British gold tore, both on account of its great weight (from about 2 ozs. to 25 ozs. Troy) and the purity of the precious metal; several cases are on record of the bullion value having been obtained from this practice, and doubtless many other instances of melting down have never come to light. Among the finest examples remaining are those in the Gold Room of the British Museum and in the National Museum at Dublin.

Much has been written in a general way on the torcs, armillæ, and girdles of gold, of the pre-Roman, classical, and later periods, but in most of those accounts there is a great lack of detail required for comparative purposes. Among the earlier papers are two "On the Torcs of the Celts," by Samuel Birch, F.S.A.¹⁰

In the Latin language the objects under consideration were styled torquis, or torques. Torc was the name of it among the Britons and ancient Irish. Among the Persians the torc was

^{9.} All the purchase-money was subscribed by the kindness of individual members of the Society and others. Mr. E. Courtney Gardner and Mr. R. Hensleigh Walter, M.B., were extremely helpful in the acquiring of the tore for the Museum, and both these members raised small sums towards its purchase.

^{10.} Arch. Journ., II, 368-380; III, 27-38 (both published in 1846).

^{11.} Smith's "Dictionary of Greek and Roman Antiquities," 1873, p. 1140. One of the Lakes of Killarney is called the "Torc Lake;" into it falls the "Torc Cascade," to the west of which is the "Torc Mountain."

worn round the neck of men of distinction.¹² In Roman times torcs were among the rewards for valour bestowed after an engagement upon those who had distinguished themselves.¹³ Monuments erected to commemorate Roman warriors and to enumerate the honours which they had obtained often mention the number of torcs conferred upon them.¹⁴

"Among the ancient Gauls gold torques appear to have been abundant, and to have formed an important part of the spoils acquired from them by their Roman conquerors. About 223 B.C. 15 when Flaminius Nepos gained his victory over the Gauls on the Addua, it is related that instead of the Gauls dedicating, as they had intended, a torque made from the spoils of the Roman soldiers to their god of war, Flaminius erected to Jupiter a golden trophy made from the Gaulish torques. The name of the Torquati, a family of the Manlia Gens, was derived from their ancestor, T. Manlius,16 having in B.C. 361 slain a gigantic Gaul in single combat, whose torque he took from the dead body after cutting off the head, and placed it around his own neck. On some of the denarii of the Manlia family 17 the torque forms a circle round the head of Rome on the obverse."18 From Quintilian19 we learn that the Gauls presented the Emperor Augustus with a heavy torc of gold.

"In B.C. 196 Publius Cornelius²⁰ had 1470 torques which he had taken from the Bocan Gauls, carried in triumph before him; hence he received the appellation of Torquatus, and the

^{12.} See illustration of Persian warrior, Arch. Journ., II, 370; Smith's "Dict. of G. & R. Ants." p. 1140.

^{13.} Juv. xvi. 60; Plin. H. N. xxxiii, 2 s. 10; etc.

^{14.} Maffei, Mus. Veron., p. 218.

^{15.} Florus, lib. ii, c. 4.

^{16.} Aulus Gellius, lib. ix, c. 13.

^{17.} Cohen, "Méd. Cons.," pl. xxví, 5.

^{18.} Evans's "Bronze Implements," 374.

^{19.} Institut. Orat., lib. v. c. 3.

^{20.} Liv. xxxvi, 40. Dec. iv. lib. iv. cap. xl.

torque became the badge of his family for succeeding generations. At a later period Dio Cassius notices a torque as ornamenting the person of the British Queen Boadicea, and in less remote times a Welsh Prince was called 'Llewellyn aur dorchag,' or Llewellyn of the golden torque."²¹

III. PREVIOUS FINDS OF TORCS IN SOMERSET.

In the late Sir John Evans's collection was a bronze palstave from Winterhay Green, near Ilminster, found with a plain bronze bracelet and what from the description must have been a *small ribbon-like gold torc*.²² This is the only record known to the writer of a gold torc having previously been found in Somerset;^{22a} but twisted torcs of bronze, not composite, assignable to the latter half of the Bronze Age, appear to have been found more frequently in Somerset than in any other county.

In the Proceedings of the Society of Antiquaries of London,²³ the writer placed on record all the Somerset specimens of solid twisted bronze torcs of the Bronze Age then known to him, five of which (Taunton [2], Chillington, Edington Burtle and Pen Pits) are exhibited in Taunton Castle Museum. They are as follows:—

- (1) A fine specimen, found whilst draining a field called "Summerleaze," on Chillington Downs, about 3½ miles due
 - 21. Journ. Hist. and Archaol. Assoc. Ireland, XVI, 1883-4, 183.
 - 22. Evans's "Bronze Implements," 90.

²²a. Ancient gold objects have rarely been found in Somerset. It has just come to the writer's knowledge (through Mr. Spencer Weare, jeweller, of Wincanton) that several small wedge-shaped ingots of gold are said to have been found at North Cadbury some years ago. It appears that a woman of that village brought one to Mr. Weare's father (also a jeweller) and stated that several were found about the same (or just the same) size, and that her children had them to play with. Someone observing that they might be gold caused the woman to put one by until she had occasion to go to Wincanton; in the meantime the others had disappeared. Unfortunately, too, the treasured one has since been melted down, its value as bullion being about 30 shillings. There was no hole or other mark on the solid ingot.

^{23.} Vol. XXI, 137-8.

west of Crewkerne and close to Chillington and Cudworth.²⁴ Weight 10½ ozs. (avoirdupois).

- (2) Large complete torc discovered in a shop at Taunton, where it had been used for many years for stringing on discs of leather used in umbrella-making. Presented by the Rev. T. Luck, 1882.
- (3) Complete but smaller torc, 25 found with the great bronze hoard from the Taunton Union Workhouse, consisting of palstaves (flanged celts), spear-head, razor, two sickles, various ornaments, etc.
- (4) Torc of slender make, fastenings missing, found at Edington Burtle.²⁶
 - (5) Part of a torc found near the Pen Pits, S.-E. Somerset.27
- (6) Three torcs found near Heath House, Wedmore, two being of the funicular variety, the other a ribbon torc.²⁸
- (7) Torc in good condition, found in association with an ornamented bracelet and a two-looped palstave, at West Buckland, four miles S.W. of Taunton.²⁹
- (8) Two fine torcs were found in the parish of Spaxton, north side of the Quantock Hills. Within each ring a palstave had been placed.³⁰

Two twisted bronze torcs were also found in Gloucestershire, just over the Somerset border, during excavations in 1894 for the extension of the Bath waterworks in St. Catherine's Valley at Monkswood, about six miles N.E. of

^{24.} Figured in Proc. Som. Arch. Soc., LI, pt. ii, plate facing p. 144, fig. 1 (Norris Collection).

^{25.} Arch. Journ., XXXVII, 95; "The Briton and the Roman on the site of Taunton," by Dr. J. H. Pring, Taunton, 1880, p. 49.

^{26.} Proc. Som. Arch. Soc., V, pt. ii, p. 92, fig. 6.

^{27.} Proc. Som. Arch. Soc., VII, pt. i, p. 27, fig. 1.

^{28.} Evans's "Bronze Implements," figs. 466, 467 and 469; Journ. Brit. Arch. Assoc., XXI, p. 232, Pl. 12. Two of them are also figured in Archcologia, LXI, p. 134, figs. 108-9.

^{29.} Evans's "Bronze Implements," fig. 468; and Arch. Journ., XXXVII, plate facing p. 107.

^{30.} Archæologia, XIV, 94, Pl. xxxiii; LXI, Pl. xiv, fig. 92; Phelps's "History of Somerset," Vol. II (Roman period), p. 173 and Pl. xxi.

Bath. They were associated with various ornaments and implements of bronze including three unsocketed sickles and part of a spear-head with two loops on the socket.³¹

The torc found on the Polden Hills, consisting of an iron ring round which five wires of bronze are twisted, belongs to the Late-Celtic period.³² The famous ornamented torc found at Wraxall, Somerset, and now in the Bristol Museum, is also of the Late-Celtic period.³³

IV. DESCRIPTION OF THE YEOVIL GOLD TORC.34

The torc is so perfect that there can be very slight diminution from its original weight. In one place the edge of the spiral-twisting was cut by a blow from the spade with which it was found. It is of a uniform rich gold colour all over. The writer did not see its condition when found, but the finder put the torc into the acid or sal ammoniac of a battery to try to improve its appearance, and this accounts for its very slightly bleached appearance.

The three views of the torc given in the accompanying Plate show all the details of form, so that it will be necessary only to give dimensions and the method of construction here. It was found twisted into two complete coils, presenting an oval outline, the maximum external diameter (excluding the terminals) being 76 mm. (3 ins.), the minimum 68 mm. ($2\frac{11}{16}$ ins.) The maximum external depth of the two coils (excluding the terminals) is 26 mm. In the thickest part the diameter of the twists is 10 mm., but at the junction with the hook-terminals the diameter tapers off to about 7 mm.

The length of the torc inclusive of the terminals, would, if

- 31. Proc. Soc. Antiq. Lond., 2 ser., XV, 358.
- 32. Archæologia, XIV, 93, Pl. xix, fig. 6.
- 33. Op. cit., XXX, 521. Romilly Allen's "Celtic Art," plate facing p. 110.

^{34.} The writer wishes to point out that for comparative purposes he has, to a certain extent, followed the description of the gold armilla found in Grunty Fen, Cambridge, given by the Baron von Hügel in the Proc. Camb. Antiq. Soc., XII, 96-105.



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GOLD TORC, HENDFORD HILL, YEOVIL, 1909. (Three views, \(^34\) linear.)

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straightened, measure 540 mm. (21½ ins.). The solid and massive hook-terminals are of the truncated-cone pattern adapted for interlocking; length round bend 54 mm. and 51.5 mm. respectively; diameter of the neck of the terminals 4.3 mm., of ends 6.8 mm. and 7 mm. respectively. They were soldered to the twisted part of the torc.

The torc is apparently of pure gold, with probably little or no alloy. Its weight is 5 ozs. 7:5 dwts. (Troy), the Grunty Fen specimen being only 0.3 dwt. less.³⁵

This composite torc is of the funicular four-flanged variety, and is made of three flat plates of gold as nearly as possible a millimetre thick, one (in the thicker parts of the torc) being 10 mm, wide, the other two (4.5 mm, wide) being set medially and at right angles to the broader band and attached by some kind of resinous flux, or solder. 35a (See A on Plate). It was then twisted, probably without the application of heat, into the finished strand, which the ductility of the metal admitted (B on Plate), resembling a left-hand screw of four threads, with cruciform section. The left-handed spirals appear to have been the general rule.36 No doubt the twisting of the metal was to give the ornament greater brilliancy. The two famous torcs from Tara, Co. Meath, 87 were constructed in the same manner as above described: but some Irish examples appear to have been moulded in imitation of the composite make.

Baron von Hügel has shown in his paper on the Grunty Fen gold ornament³⁸ that the East Anglian torcs (for instance,

^{35.} Proc. Camb. Antiq. Soc., XII, 103. A gold girdle in the Brit. Mus. is said to be of the same length, weight, and pattern.

³⁵a. A minute piece of solder detached from the torc was kindly examined by Messrs. Johnson, Matthey & Co., of Hatton Garden, but its smallness rendered a detailed analysis impossible. Its examination however showed that the chief constituent was gold.

^{36.} The bronze torc (previously mentioned) from West Buckland shows, however, a right-handed twist.

^{37.} Wilde's "Catalogue of Antiquities of Gold in the R. Irish Acad.," 71.

^{38.} Proc. Camb. Antiq. Soc., XII, 104.

those from Grunty Fen; Boyton, Suffolk; and Ashill and Bittering Common, both in Norfolk) were constructed of two ribbons of gold folded along the middle to a right angle and then attached apex to apex before twisting: thus X. In this case the solder would show only in the opposite angles, caused by the junction of the two V-pieces; whereas the Yeovil specimen shows traces of solder in all four angles, from which the method of construction is to a large extent ascertained. Some specimens are supposed to have been formed from four bands of gold united together at right angles.³⁹ This would entail more labour than the three bands (one broad, two narrow) method, and was probably not often adopted.

V. ITS USE.

In styling the Yeovil ornament a *Torc* (in spite of its coiled condition) we infer that originally it was a necklet worn by an ancient British chieftain as a symbol of rank, not only affording ornament to its owner, but also representing so much money or currency, and no doubt a considerable amount of wealth in those days. Its length, 21½ inches, greatly favours the assumption that it was originally a necklet. Some of the larger specimens which have come down to us in an uncoiled state have been regarded as girdles for the waist, 40 but the Yeovil torc would not, even in its former condition, be large enough for such a purpose.

Whatever the precise purpose of its present shape the aperture is not large enough to pass over the average hand of a female adult, although there is no difficulty in passing it over the hand of a child of ten. The popular opinion (an opinion given at first sight) of its being originally intended as an armilla (torques brachialis⁴¹) must therefore be dismissed. Some archæologists of the middle of last century and later

^{39.} The large Tara torc is described as being made of four bands.

^{40.} Others are supposed to have been worn suspended on the breast.

^{41.} Samuel Birch, Arch. Journ., III, 29.

have suggested that the larger gold torcs may have been worn in various ways by being coiled or uncoiled at the pleasure of the owner. This is undoubtedly a question open to argument. It has also been suggested on more than one occasion that these ornaments were coiled so as to be rendered more portable and more convenient for secreting or conveyance. It may have been possible to bend the slighter specimens to suit the requirements of the owner, but if those of heavier make, like the Yeovil specimen, were frequently coiled and uncoiled it is probable that the gold and solder would soon separate, and produce a spiral crack in course of time throughout the length of the torc.

VI. ITS DATE.

As recently as 1860, the late Mr. S. Birch, F.S.A., described the funicular gold torcs as belonging to the fourth or fifth century after Christ! The lapse of fifty years and the painstaking methods of comparative archæology of the present day, have, however, considerably increased our knowledge of this class of gold ornament; and it is a generally-accepted opinion that they belong to the later half of the Bronze Age. Few English archæologists, however, are prepared to allow the antiquity claimed for them by Dr. Oscar Montelius.

From the evidence before us in regard to gold and bronze torcs of the Bronze Age found in Britain (assuming that the torcs of gold and bronze were contemporaneous), we have arrived at a fixed point in relative chronology which it may be possible some day to estimate in years. That date is represented by the manufacture of bronze palstaves and the earlier forms of socketed celts.⁴²

Three bronze palstaves, each with a single loop, were found in Grunty Fen several inches above the gold torc. 43 With the

^{42.} Mr. G. Coffey regards the gold Lunulæ, found more frequently in Ireland than elsewhere, as referable to the Early Bronze Age. The only lunulæ known to have been found with an associated object, are the two discovered at Padstow, Cornwall, with a bronze celt of early type. (Archæologia, XXII, 277; Proc. R. Irish Acad., XXVII, sect. C, 252.)

^{43.} Figured in Proc. Camb. Antiq. Soc., XII, Pl. iii, facing p. 103.

ribbon-like gold tore from Winterhay Green, near Ilminster, a bronze palstave was also found. The bronze tores from Spaxton, Quantock Hills, both encircled bronze palstaves. The Edington Burtle tore was found with four palstaves and part of a ribbon-like tore. The bronze tore from the Union Workhouse hoard, Taunton, was found associated with nine palstaves with a single loop, three without loop, and a socketed celt of elongated form (of rare type, perhaps of Gaulish derivation, and possibly of early date). With the bronze tore from West Buckland was found a specimen of the extremely rare two-looped palstave. It is on record that two "celts" were found with the Wedmore tores. Another bronze tore was found at Hollingbury Hill, Brighton, in association with a broken palstave without loops, etc. 50

It is seen, then, that bronze palstaves are frequently found in England with bronze torcs, and in two recorded cases with gold ones. ^{50a} In one case only is a socketed celt included, and that of a rare variety. Still we cannot arrive at a nearer date for these gold torcs than from 400 to 800 B.C.

The Count Olivier Costa de Beauregard, the French antiquary, prepared a map showing the distribution of French torcs of gold,⁵¹ and by a study of the bronze implements found

- 44. See ante, p. 70.
- 45. See ante, p. 71.
- 46. The ribbon-torc is figured in Proc. Som. Arch. Soc., V, pt. ii, p. 93, fig. 5.
 - 47. See ante, p. 71.
 - 48. H. St. G. Gray in Proc. Soc. Antiq. Lond., XXI, 138.
 - 49. Arch. Journ., VI, 81.
- 50. Arch. Journ., V, 323; Archæologia, XXIX, 372; Sussex Arch. Coll., 1I, 267. See also V. C. History, Sussex, I, 219. This torc has no hook-terminals; strung on it are three spiral bronze rings; the broken palstave was encircled by the torc. There were also four massive objects of bronze, regarded by some as bracelets.
- 50a. A plain gold bracelet on which six pieces of ring-money hang, was found with a bronze rapier in Granta Fen, Streatham, near Ely, Cambs., 1850. In the British Museum. (Proc. Soc. Antiq. Lond., 1 ser., II, 103; Bronze Age Guide, Brit. Mus., 1904, fig. 150.)
- 51. "Le Torque d'or de Saint-Leu d'Esserent (Oise)." Congrès Archéologique de France, Caen, 1906. (72nd Congress held at Beauvais, 1905.)

associated with the gold ornaments he was able to date the French-found torcs as belonging to the second half of the Bronze Age, viz., that of socketed celts.

Dr. Montelius in his paper on "The Chronology of the British Bronze Age" includes the gold torcs from Boyton (Suffolk) and that from Grunty Fen (Cambs.), 52—of the same type as the Yeovil specimen,—in his Period 3, which according to the chronology set forth in his paper dates from 1650 to 1400 B.C. It is much more likely however that they belong to Period 4 of his classification, a period he dates at from 1400 to 1150 B.C.

Dr. A. J. Evans, among others, gives his opinion that the general succession of Dr. Montelius's five Periods of the Bronze Age may be conditionally accepted. At the same time we must bear in mind that he sets back the Bronze Age in Britain to a much earlier period than other antiquaries, beginning with 2500 B.C. and bringing it to a close at so early a date as B.C. 800, whereas the writer is not aware that the end of the Bronze Age and beginning of the Iron Age has previously been placed at an earlier date than B.C. 400.

In discussing Dr. Montelius's paper,⁵³ Dr. Evans remarks, "It is also somewhat surprising to find Montelius referring to this Third Period (a negative feature of which is the non-existence of socketed spear-heads) certain fine gold torcs which occur on both sides of the Channel. But on the Gaulish side, at any rate, they occur in association with socketed spear-heads; witness the magnificent torc from Fresné-la-Mère, near Falaise, Calvados, from my father's (Sir John Evans) collection."⁵⁴

VII. BRITISH GOLD.

It is not easy to say with any degree of certainty where the British gold from which these torcs were made came from; it

^{52.} Archæologia, LXI, figs. 93, 95, p. 131.

^{53.} Proc. Soc. Antiq. Lond., XXII, 122.

^{54.} Evans's "Bronze Implements," pp. 180, 209, 375. For associated relics see Proc. Soc. Antiq. Lond., 2 ser., V, 433.

was evidently fairly plentiful, judging from various finds of gold in the second half of the Bronze Age, for not only did the rich satisfy their own needs, but warriors sometimes decorated their horses with the precious metal, as the famous gold peytrel in the British Museum, from Mold, Flintshire, bears witness.⁵⁵

Gold was certainly obtainable in Wales, Cornwall and Ireland, in early times. The Wicklow Hills, including the river Dodder, are supposed still to be rich in gold. From the river-workings there a nugget weighing 22 ozs. is known (having 6 per cent. of silver in its composition). It was found in 1796, when in six weeks, 800 ozs. of gold were found, realizing £3000 at £3 15s. per oz.

In a paper by Mr. Gerrard Kinahan, "On the Occurrence and Winning of Gold in Ireland," the history of the Wicklow gold mines and auriferous streams is given. He thought that the richest deposits are in the deep gravels of the Ovoca and Aughrim river-valleys. See also a valuable paper by Dr. W. Frazer on "Gold Lunulæ; and on the source of the Gold employed to make Irish Gold Ornaments." 57

The best known Welsh source of the metal is the valley of the Mawddach, below Dolgelly, where numerous ancient surface workings are still visible. The working of these veins was resumed at the end of last century.

VIII. DISTRIBUTION OF ANCIENT BRITISH GOLD TORCS, WITH A LIST OF LOCALITIES AND REFERENCES.

The funicular gold torcs which we have been considering are characteristic of the British Isles, and of England in particular; on the Continent the form appears to be limited to the N. W. extremity of France; and the gold lunulæ of Irish type

^{55.} Bronze Age Guide, Brit. Mus., 1904, Pl. x; Boyd Dawkins's "Early Man in Britain," 432.

^{56.} Journ. Ryl. Geol. Soc. of Ireland, VI, pt. ii.

^{57.} Journ. Ryl. Soc. Antiq. Ireland, XXVII, 53-66. Some details with regard to Irish gold will be found in Wood-Martin's "Pagan Ireland," and in the Count O. C. de Beauregard's paper on the gold torc from Saint-Leu d'Esserent, mentioned elsewhere.

found abroad, are, with very few exceptions, confined to that area.58 It is the opinion of the Count Olivier Costa de Beauregard that all French gold torcs of the funicular type were probably directly derived from our Islands.59 He gives a map showing their distribution in Northern France. I am not doing the same for the British Isles, but I purpose to append a list of all the gold funicular tores at present known to me from Great Britain, together with many of those derived from Ireland.60

ENGLAND.

CAMBRIDGESHIRE. - Gold torc-armilla found in Grunty Fen, 12 miles N.E. of Cambridge, parish of Haddenham, 1844; associated with three bronze palstaves; length, uncoiled, 41ins.; weight 5ozs. 7.2dwts. In the University Museum of Archæology and Ethnology, Cambridge. Fully described by Baron von Hügel in Proc. Camb. Antig. Soc., XII, 96-105.

CHESHIRE. -Two funicular gold torcs were found at Malpas, near Egerton Hall, on the estate of Sir Philip Egerton, 1831 (and passed into his possession). One was imperfect; the other is figured in Archaelogia, XXVII, 401; Arch. Journ., V, 342; and in Smith's "Dict. of Greek and Roman Antiquities," 1873, p. 137; see also

Arch. Journ., III, 29.

CUMBERLAND .- Three large rings of gold (? type) were found, about 1790, in a tumulus, Hayton, Brampton, Netherton. (Hutchinson's "History of Cumberland," I, 151). These were sold to a silversmith, but from their incomplete description do not appear to have been torcs.

58. See Geo. Coffey's map showing the distribution of lunulæ, Proc. Ryl. Irish Acad., XXVII, sect. C, p. 256.

59. See "Le Torque d'or de Saint-Leu d'Esserent (Oise)," Congrès Archéologique de France, Caen, 1906. It was found in 1843 and is preserved in the Bibliothèque Impériale, Paris. Weight 10 ozs. 420 grs.; length 39 ins.; stated to have been found folded up.

Another, found at Cesson, Ille-et-Vilaine, is to be seen in the Musée de l'Hôtel de Cluny, Paris. It was discovered in a spiral form; weight 12½ ozs.; length 52 ins. (Archæologia, XXXIX, 507).

In the Count O. C. de Beauregard's paper other specimens are recorded from

Fresné-la-Mère (Calvados) - previously mentioned; one and part of another from Jaligny (Allier); and a fragment of a torc from the River Seine; also a gold tore from Augan (Morbihan), and another from Kerdrin, near Plonguin (Finistère). There are four others of uncertain origin or of unknown localities (one said to have been found in the environs af Carcassonne, two in the Louvre, and one in the Musée de Saint-Germain).

60. The writer, not having seen all the gold torcs mentioned below, and owing to inadequate printed descriptions, is not sure in all cases that they are of the funicular four-flanged type. Occasionally some are mentioned which are certainly not of the funicular type. Hampshire.—A twisted gold tore, very thin, was found in 1860, in or near the river Test, at Romsey. Length 3ft. 9ins.; weight

Ioz. 332grs. (Figured in Archaeologia, XXXIX, Pl. xxiii.)

Another funicular torc with recurved terminals was discovered in the parish of Ropley in 1843⁶¹; weight about 5ozs. 17dwts. 11grs. (Archael. Inst., Winchester vol., 1845, p. xli; Proc. Soc. Antiq. Lond., 2 ser., II, 370.)

Part of another was found near Christchurch. (Archaelogia,

XXXIX, 507.)

HERTFORDSHIRE.—A gold torc was found in 1787 near Ware. It appears not to have been twisted, but it was melted down. (Gentleman's Mag., Sept. 1800; Archaelogia, XIV, 96).

Lincolnshire.—A long funicular tore, narrow strand, having three banded rings of gold strung on it was found in Lincolnshire, and presented to the British Museum by Sir A. W. Franks. (Evans's "Bronze Implements," 390; Bronze Age Guide, Brit. Mus., 1904, p. 151).

Kent.—A gold torc of from four to five coils was found at Castle Mount, Dover, 1878. It has solid terminals of the same design as the Yeovil specimen. "It seems to be formed from four plates of gold twisted together into a screw-like appearance." The use of four bands of gold is improbable when one broad band and two about half the width would answer the purpose better. Length, obtained by measuring the outside edge of the successive coils, 4ft. Sins.; weight 13ozs. avoirdupois. In the British Museum. Figured in Archæologia Cantiana, XII, 317; see also Proc. Soc. Antiq. Lond., 2 ser., VII, 353.

Another gold tore was found at Dover in the eighteenth century. (Gentleman's Mag., XLII, 1772, 266; Archæologia Cantiana, IX, 1).

Fragment of a twisted gold torc was found near Canterbury, 1860. (Arch. Cant., V, 44; IX, 1. Proc. Soc. Antiq. Lond., 2 ser., VII, 92).

Parts of two torcs from Kent are figured in Arch. Cant., IX, Pl. A.,

figs. 1, 3.

Norfolk.—A similar gold tore to that found in Grunty Fen was discovered on Bittering Common, Foulsham, 1840 (when it passed into Lord Hastings' Collection). Length 3ft. 6ins.; weight 5½ozs. It was figured and described by the Rev. J. Bulwer in Norfolk Archaeology, I, 233.

Another, imperfect and of slender make, was found in a gravel-pit at Ashill, near Watton; coiled in a spiral, one terminal missing. Length 2ft. 9ins.; weight, in present condition, 4ozs. 12dwts. In

the British Museum (Norfolk Archaeology, V, 193).

Somerset.—The Yeovil torc, above described; also the ribbon-torc

found near Ilminster.

STAFFORDSHIRE.—Funicular gold torc found on Fantley Hill, parish of Pattingham, 1700; length about 4ft.; weight 3lbs. 2ozs. Accord-

61. Date obtained from the Rev. C. J. Hume's letter dated Nov. 14, 1844, in the "Devizes Gazette."

ing to the Journ. Brit. Arch. Assoc., XXIX, 25, it was melted down. (Archæologia XIV, 96; XXXIII, 176; XXXIX, 507. Shaw's "Staffordshire," Gen. Hist., 32. Leigh's "Nat. Hist. of Lancs. and Cheshire," 64).

Another of funicular type, formed of two pieces each bent at a right angle and having solid terminals, was discovered at Stanton, near Ashbourne, 1853; length 3ft. 9½ins.; weight 5ozs. 18dwts. 5½grs. (Arch. Journ., XI, 54; Proc. Soc. Antiq. Lond., 2 ser., V, 339).

A torc of a different character, composed of several twisted strings of gold, was found in Needwood Forest, 1848; weight 13ozs. 7dwts. 10 grs. (Archæologia, XXXIII, 175; Proc. Soc. Antiq. Lond., 1 ser.,

I, 270; 2 ser., IV, 514).

Suffolk.—Twisted gold torc found in 1835 at Boyton, $1\frac{1}{2}$ miles from the sea; length $17\frac{1}{2}$ ins.; weight 2028. 79grs. In the British Museum, and figured in the Bronze Age Guide, 1904, fig. 144; also in Archæologia, XXVI, 471. It has a piece of ring-money at the

junction of the ends (originally there were two pieces).

Sussex.—Included among a large number of objects of gold found at Mountfield, near Battle, 1863, was what appears to have been a torc. "It is more than probable that the twisted object, a yard long with trumpets at each end, was a gold torquis of the usual type." The hoard was melted down. (Sussex Archeol. Collections, XV, 238-240; Proc. Soc. Antiq. Lond., 2 ser., II, 247).

WILTSHIRE.—On Tan Hill, Allington Down, north side of the Vale of Pewsey, a large portion of a funicular torc, having one terminal remaining, was found on Oct. 11, 1844, by a labourer digging for flints, at a depth of 18ins.; weight 20zs. 10dwts. 11grs.; length



Portion of a Gold Tore, found on Allington Down, N. Wilts, 1844.

(From a Drawing by Mr. Ernest Sprankling).

93 ins. 1t belongs to the Earl of Ilchester (Melbury, near Dorchester), through whose kindness the relic has been lent for illustration and examination. The fragment is in excellent condition. The main point of difference between it and the Yeovil specimen is that the Wilts example is more closely twisted, having in the thickest part five spiral turns to the inch as compared with three-and-a-half turns in the Yeovil tore. The writer will describe it more fully in the Wilts. Arch. and N. II. Mag., XXXVI, no. exiii, June 1910. It is figured in the accompanying illustration, 3 linear. There is a most inaccurate drawing of this tore in the Archwol. Inst., Salisbury vol., 1849, p. 111, fig. 31; see also Archwologia, XXXIX, 507; Proc. Soc. Antiq. Lond., 1 ser., I, 226; Wilts Arch. Mag., xi, 10.

YORKSHIRE.—A twisted gold torc was found in a barrow at Com-Boots, Hackness, 1843; circumference, exclusive of the terminals (each 1½ins. long), 35ins.; weight 2½ozs. 1dwt. (Archæologia, XXX, 459; Arch. Journ., II, 389; Proc. Soc. Antig. Lond., 1 ser., I, 16).

At Guisley in the West Riding, a torc was found about 1780, "of pure and flexible gold, perfectly plain, and consisting of two rods, not quite cylindrical, but growing thicker towards the extremities, and twisted together. Its intrinsic value was £18 sterling." (Whitaker, "Loidis and Elmete," 1816, p. 211.)

WALES.

Brecknockshire.—A gold torc, the twist about 9 mm. in diameter, was found in this county, and is preserved in the British Museum. (Figured in Smith's "Dict. of Greek and Roman Antiquities," 1873,

p. 1140).

FLINTSHIRE.—A funicular gold torc with terminals interlocked, found in a limestone quarry at Bryn Shon, Eskeivog (Ysceiviog), near Holywell, is to be seen at Eaton Hall, near Chester (Marquess of Westminster's); circumference, exclusive of the terminals (each nearly 3ins. long), 44ins.; weight nearly 28ozs. (Archæologia, XVIII, 448; XXXIX, 506. Figured in Journ. Brit. Arch. Assoc., V, 333. See also Arch. Journ., 1II, 27).

GLAMORGANSHIRE.—A twisted gold torc of about $3\frac{3}{4}$ coils was found on the borders of this county, and is preserved in the British Museum (purchased 1838); length 4ft. $3\frac{1}{2}$ ins.; weight 7ozs. 214grs.

(Archæologia, XXVI, 464; XXXIX, 506).

MERIONETHSHIRE.—One similar to the last-mentioned and described in Camden's "Britannia" was dug up near Harlech Castle, 1692; length about 4ft. 6ins.; weight about 9½ozs. (Archæologia, XIV, 95; XXVI, 464; XXXIX, 506. Pennant's "Tour in Wales," 1784, vol. II, 133).

Another was found on the margin of Llyn Gwernan, or the Aldertree Pool, on Cader Idris, 1823. (Archæologia, XXI, 557; Arch. Journ., III, 27; a similar Irish torc figured in Vetusta Monumenta,

V, Pl. xxix, fig. 2).

SCOTLAND.

In North Britain the ribbon-torcs predominate, and I am unable to quote a single occurrence of a funicular torc with cruciform section. A twisted gold torc-armlet, about 4ft. long, was found at Slateford, near Edinburgh, 1846, during the construction of the Caledonian Railway, which however was subsequently melted down. The Edinburgh Mus. catalogue states that it consists of two thick wires, spirally twisted, with long recurved and solid ends. The Proc. Soc. Antiq. Scot., XVIII, 239, says that "the twisted part consists of three rods twisted spirally round a common centre." It has terminals similar to the Yeovil specimen. (Anderson's "Scotland in Pagan Times," Bronze Age vol., 221; Wilson's "Prehistoric Annals of Scotland," I, 470; Catalogue Nat. Mus., Edinburgh, 1892, FE 45).

Over thirty neck-rings and armlets formed of thin bands of gold, spirally twisted, with recurved ends, were found in 1857 near a tumulus at Urquhart, Elginshire. (Journ. Hist. and Arch. Assoc. Ireland, XVI, 1883-4, p. 184; Wilson's "Preh. Annals," I, 470). Three other tore-armlets of this character were found at Lower Largo. (Proc. Soc. Antiq. Scot., XVIII, 234-5; Wilson's "Preh. Annals," I, 467-9; Arch. Journ., VI, 53). For Scotland, see also "Catalogue of the Museum of Antiquities of Scotland," 1892, p. 211.

IRELAND.

In Ireland gold torcs of several varieties have been found, and the funicular type is not the commonest. Some of the Irish funicular torcs are described in Wilde's "Catalogue of the Antiquities of Gold in the Museum of the Royal Irish Academy," 1862, pp. 70-81.

Two twisted gold torcs, one being the largest on record, were found in 1810 in the side of one of the clay raths at Tara, Co. Meath. One is 5ft. 7ins. long and weighs 27ozs. 7dwts. 20grs. (Wilde, no. 192); the other is 5ft. 6ins. long, weighing 12ozs. 7dwts. 13grs. (Wilde, no. 173). They are figured by Wilde, p. 71; also by Geo. Petrie in Proc. Ryl. Irish Acad., I, 1836-7, 274-6; Transactions, ditto, XVIII, 181-2; see also Archæologia, XXXIX, 506. The two gold torcs mentioned in Archæologia, XXVIII, 437, are probably the same.

Another specimen in the Nat. Mus., Dublin, is 3ft. $8\frac{1}{2}$ ins. long, weighing 3ozs. 3dwts. 15grs. (Wilde, no. 179). Another funicular torc, $5\frac{1}{8}$ ins. in diam., with conical terminals, weighs 12dwts. 14grs. (Wilde, no. 189). There are also several fragmentary specimens in the Nat. Mus., Dublin.

Another, 25 ins. long and $5\frac{3}{4}$ ins. in diam., weighing 12 ozs. 10 dwts. 7 grs., has the terminals as in the Yeovil specimen, but "the roping resembles a coil of several wires." (Wilde, no. 174). It was found in 1841, 3ft. deep, near Aughrim, Co. Galway.

Other torcs of gold and fragments, but for the most part not of the funicular type, are listed in Wilde's Gold catalogue, 1862, pp. 79-81.

Two Irish specimens are engraved in Vetusta Monumenta, V, Pl. XXIX, weighing 15ozs. 17dwts and 10ozs. 5dwts. respectively. Another was found at Tipper, near Nass, Co. Kildare, length 4ft. 7ins. A smaller specimen, in the British Museum, weighs 4ozs. 11grs., and is 3ft. 2ins. long. (Archæologia, XXXIX, 506).

A gold tore of twelve coils was found at Carrickfergus, 1846, which does not appear to have been twisted. It was melted down, but its weight was preserved, viz., 6ozs. 15dwts. 6grs. (Journ. Brit. Arch.

Assoc., II, 357).

One was discovered close to a cromlech in the Island of Magee, Co.

Antrim, 1817. (Arch. Journ., II, 380).

A gold torc formed of a flat band loosely twisted, with small books as terminals, was found at Swincford, Co. Sligo, 1868; length 2ft. 3ins.; weight 3ozs. 420grs. In the British Museum. (*Proc. Soc. Antiq. Lond.*, 2 ser., V, 340).

Fourteen ribbon-torcs of hammered gold were found near Inishowen, Co. Donegal (figured and described in *Journ. Hist. and Archæol. Assoc. Ireland*, XVI, 1883-4, p. 182); and several others are mentioned in

Wilde's "Catalogue of Antiquities of Gold."

Through the kindness of Mr. Geo. Coffey, Curator of the National Museum, Dublin, I am able to give the following list of gold torcs in the museum under his charge, the details of which have never been published:—

(R 1668). Twisted gold torc found at Gorey, Co. Wexford; weight

12ozs. 10dwts.

(R 1680). Composite gold torc found in Co. Down.

(R 4029). Composite gold tore, locality unrecorded; diam. 87 ins.; weight 802s. 5dwts. 12grs.

(1878-30). Plain gold torc (necklet), found in Co. Antrim.

(R 2605). Composite gold torc found in Co. Mayo; weight 6ozs.

lgr.

(1884-6). Gold torc formed of four slender bars spirally twisted; length 4ft. 8½ins.; weight 10ozs. 16dwts. Found near Mullingar, Co. Westmeath.

(1893-6). Twisted gold torc with recurved extremities, found near

Athlone; weight loz. 7dwts.

(1896-16). Twisted torc found at Coppeen, near Dunmanway, Co. Cork; weight 8dwts. 1gr.

(1881-84). Twisted portion of torc found in Co. Mayo.

NOTE.—The writer would be glad to hear of the discovery of other funicular gold torcs not mentioned in this paper, and especially of any others known to have been found in England, Wales and Scotland.