

II.

NOTICE OF THE SKULL OF A LARGE BEAR (*Ursus arctos*, Linn.) FOUND IN A MOSS IN DUMFRIESSHIRE. WITH REMARKS ON RECORDED REFERENCES TO THE PRESENCE OF THE BEAR IN FORMER TIMES IN SCOTLAND. BY JOHN ALEXANDER SMITH, M.D., F.S.A. Scot.¹

When preparing, some years ago, my paper on the remains of the rein-deer found in Scotland, the late Sir William Jardine, Bart. of Applegarth, Dumfriesshire, informed me that he had in his possession a portion of a horn, which he considered to be that of a rein-deer, and of which he sent me a sketch. It was found in a peat moss on the property of Shaws, in the same county of Dumfries. This moss had been formerly a small lake, but had been partially drained, and become a morass, the peat of which had for a long time been cut and used for fuel. At the bottom of the peat, and lying on the marl, or nearly so, the bones of various animals had from time to time been discovered. Sir William examined many of these, and found them to consist of bones of the red

¹ Absence from Scotland and other causes prevented this Notice, brought before the Society on the 11th June 1877, from being printed in the "Proceedings" for that year.

deer *Cervus elephas* (abundant), the roebuck, *Cervus capreolus*, the large ox or urus, *Bos primigenius* (rare), and "that which I consider to be part of the horn of a rein-deer." This horn I have described in my paper on "The Rein-deer in Scotland," already referred to and published in our "Proceedings" (vol. viii. 1869, p. 216).

In this letter Sir William Jardine mentioned, in addition to these animal remains, that there was also found, "one very perfect skull of a black bear (*Ursus arctos*), with a rib of the same animal. This was sent to me to tell what it was, and was the first intimation I had of any remains being found. I immediately went to the spot, and found all that I mention."

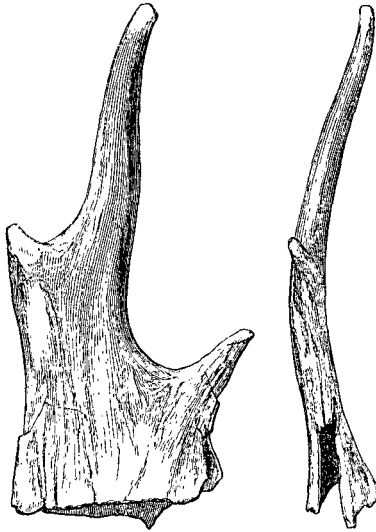


Fig. 1. Portion of Horn of Rein-deer, *Cervus tarandus*, found in a moss at Shaws, Dumfriesshire.

After Sir William's death, his various natural history collections were disposed of by his son, and a portion of the collection was sold by

auction in Edinburgh. Looking over this collection, I soon observed this cranium of the bear, which was carefully labelled as having been found at Shaws, and we were fortunate enough to secure it for our National Museum of Antiquities. The portion of the smooth, flat, and branched horn of the rein-deer, showing its three digitations, from the same locality, was, I am glad to say, purchased with other remains, at the same time, for the Museum of Science and Art, where it is now preserved; and by the courtesy of the Director of the Museum, I am able to add a careful sketch of it (fig. 1) taken by Mr John Adam.

The bear is one of our rare prehistoric and mythic animals, but, as far as I am aware, this is the only instance known of its remains having been actually found in Scotland; and, curiously enough, it has been found here

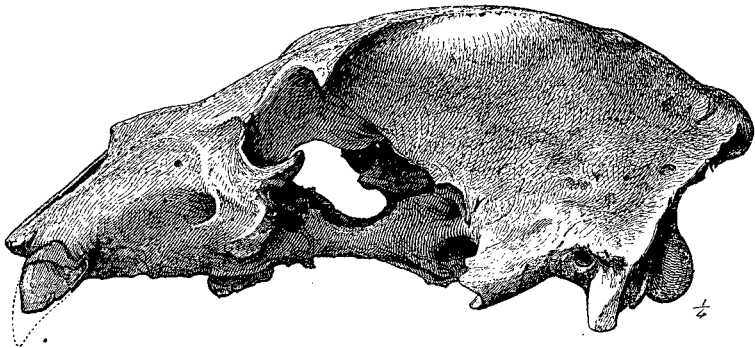


Fig. 2. Skull of Bear (*Ursus arctos*), found in a peat moss in Dumfriesshire.

in the peat moss lying on marl, among the most recent of all our formations, associated, moreover, with the red-deer, the roebuck, the urus, and, as might perhaps have been expected, with the rein-deer; the skull being that of a large adult animal of great size and strength. The brown colour of the bones shows its relation to the peat; and on examining it carefully I picked out a portion of the peat from which it had been taken, which still remained in the brain cavity of the skull.

Unfortunately, the lower jaw has not been preserved, nor the rib, the

latter of which, from its less distinct individuality, had probably been allowed to fall aside and be lost.

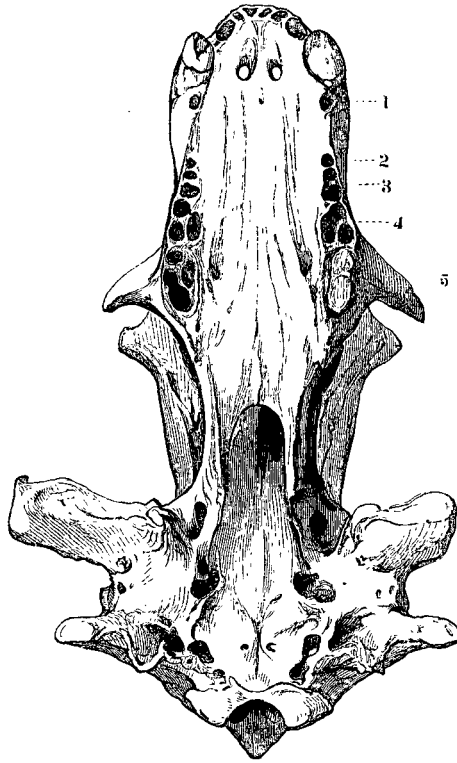


Fig. 3. Base of Skull of Bear (*Ursus arctos*), found in a peat moss, Dumfriesshire.

The *Skull* is large and strongly developed, and evidently belonged to a very old animal, as most of the sutures are entirely obliterated. It measures along its upper surface, from the posterior extremity of the occipital crest to the front of the intermaxillary bone, $18\frac{1}{2}$ inches—the occipital crest measuring $4\frac{1}{4}$ inches in length (fig. 1). Along the base

of the skull from the front of the occipital foramen magnum to the front of the sockets of the incisor teeth it measures $14\frac{1}{4}$ inches. See the careful drawings (figs. 2 and 3) by Mr John Adams.

Professor Owen, in his "Fossil British Mammals," says :—"The upper jaw of the Fen Bear differs from a similar sized one of the great Cave Bear in the much shorter interval between the canine tooth and the third molar tooth, counting from behind forwards ; it differs likewise in having this interspace occupied by two small and simple-fanged premolars," p. 79. These characters are all present in this skull of the bear found at Shaws. The sockets for the teeth show six incisors, the external ones on each side being much larger than the others. The two canine teeth are both present, and measure rather more than 1 inch across at the margin of the alveolar sockets, and $2\frac{3}{4}$ inches in circumference. Next, there is a small premolar at the internal base of each canine tooth (fig. 3, No. 1) ; then at an edentulous interval of no less than $\frac{3}{4}$ of an inch, there is another socket of a second single-fanged small premolar tooth (No. 2), and immediately behind it are the range of sockets for the premolar (No. 3) and two large molar teeth (Nos. 4, 5), the first showing two sockets for the fangs of the tooth, the second three sockets, being about $\frac{1}{8}$ th of an inch longer than broad, and the third and last tooth three sockets, the largest of which is to the back of the alveolar sockets. This last molar tooth is present on the left side of the jaw ; it is much worn on the surface, and shows an anterior and posterior lobe or facet ; it measures $1\frac{3}{8}$ in length by $\frac{5}{8}$ across the anterior lobe, and $\frac{4}{8}$ in breadth across the posterior lobe of the tooth. The whole length of the alveolar sockets of the molar teeth, including the second or premolar, is $3\frac{1}{4}$ inches, and the mouth measures $3\frac{7}{8}$ inches in breadth across the palate in front of the last molar teeth.

The posterior palatal foramina in this skull are situated opposite the middle of the last molar tooth (see fig. 3), as they are stated by Professor Owen to be also in the white bear. The base of the zygomatic arches behind the glenoid cavity are also nearly horizontal in character.

The great size of the skull is due at once to its age and the abundance of its food supply, living as it did in a rich district of the south of Scotland, where food was doubtless very plentiful.

In England this bear has also been found: a fine specimen of a nearly perfect skull now in the Woodwardian Museum, Cambridge, is figured and described by Professor Owen in his valuable "British Fossil Mammals." It was discovered in Manea Fen, Cambridgeshire. Professor Owen also describes portions of another skull found in the same locality. Remains of other bears described however as different species, under the names of *Ursus priscus*, and another, the great *Ursus spelæus*, have been found in bone caves on the Continent and also in England, but have not been observed as yet in Scotland: these are believed to be altogether extinct; if the specific distinctions that have been described can be trusted, as sufficient to form distinct and different species.

The great size, however, of this species (*Ursus arctos*), at once from the abundance of food, and the great age to which individuals might live, may perhaps cast some little doubt on some of these supposed specific differences. Accordingly some naturalists are now somewhat doubtful as to these more ancient fossil bears being really specifically distinct from the later or even the existing species of bears.

Remains of the bear have been found in bogs and in caves in England. They are also found under similar circumstances on different parts of the continent of Europe; and a smaller variety, but similar species of brown and black bear, still lives in different parts of the Continent, mostly in hilly and wooded districts, and principally now in the more northern parts of Europe. In Asia it is still more widely spread over large districts of country.

Mr Boyd Dawkins, in his interesting volume on "Cave Hunting," London, 1874, in describing the animals found in Brit-Welsh Caves, which he says "are identical with those which I have tabulated from refuse-heaps of Roman age," also states—"that the brown bear is absent. The brown bear was probably at this time very rare in Britain, since its remains have been met with in but two out of the many Roman refuse heaps in

the country, at London and Colchester. The well known lines of Martial imply that it was exported from Britain to Rome in his time. The brown bear inhabiting Britain during the time of the Roman occupation, was extirpated probably before the tenth century." He refers also to the statement of its occurrence in Scotland in 1057, but says that it is unsupported by any documentary evidence "he has been able to discover." At page 78 of his book, he gives a table of "Animals Extinct." His reference to the bear being: "Brown Bear *circa* 500 to 1000." "On the Continent, however," he says, "the brown bear is still to be met with in the Pyrenees, the Vosges, and in the wilder and more inaccessible portions of northern, middle, and southern Europe."

Sir John Lubbock tells us in his "Prehistoric Times," that the bear still occurs in the Jura and Grisons, whence it occasionally visits the Valais and the south-eastern parts of Switzerland, while its remains have been found in the pile-dwellings at Moossedorf and Wauwyl, Robenhäuser, Wangen, and Concise.

M. Valerius Martialis, in his Epigram "On Laureolus," in "The Exhibitions of Domitian," has been often quoted to prove the existence of the bear in Britain, or more particularly Scotland, in the Roman time:—

" *Pœna Laureoli.*

"Qualiter in Scythica religatus rupe Prometheus,
 Assiduum nimio pectore pavit avem,
 Nuda Caledonio sic pectora præbuit urso,
 Non falsa pendens in cruce Laureolus.
 Vivebant laceri membris stillantibus artus,
 Inque omni nusquam corpore corpus erat,
 Denique supplicium dederat necis ille paternæ,
 Vel domini jugulum foderat ense nocens.
 Tempa vel arcano demens spoliaverat auro;
 Subdiderat sævas vel tibi, Roma, faces.
 Vicerat antiquæ sceleratus crimina famæ,
 In quo, quæ fuerat fabula, pœna fuit."—(vii.)

Martial flourished in the first century of our era (being born A.D. 43), and as it was only in the latter half of that century that the Romans first visited Britain,—Agricola invading Scotland in the year A.D. 80,—it is not very easy to believe that bears were at that early time brought from Scotland for exhibition in the circus at Rome. Perhaps the interest and the novelty of the accounts of the recent invasion of Britain and of the still more distant Caledonia, suggested to the author a poetical allusion of this kind. The bears at that time being really brought from Gaul or northern Europe; the more wild, little known, and barbarous the country was believed to be, the more savage, doubtless, and therefore interesting would the wild animals also be which were brought from it.

Camden, in his "Britannia," quotes from Plutarch, who was born about A.D. 50, "that bears were brought from Britain to Rome, where they were beheld with amazement;" Camden adds, "Yet Britain has produced none for many centuries." Richard Gough, however, in his edition of Camden, adds the following note to this statement:—"I cannot find the passage, nor could Mr Pennant" ("Brit. Zool." i. 64). Gough also adds: "The figures of beasts on some of the carved stones in Scotland are at least as like *bears* as boars" (2d ed. vol. iv. p. 107).

This reference to the Sculptured Stones of Scotland is interesting, but as Mr Joseph Anderson has shown us, we now are inclined to believe that these stones are generally sculptured simply with rude illustrations, not of natural but of scriptural subjects. On one of the sculptured stones at Meigle there is an animal like a bear apparently devouring a prostrate man. We cannot, therefore, consider these sculptured stones as being at all intended to give any illustrations of the wild animals then existing in Scotland.

The discoveries of the remains of the bear in the peat mosses of England and this of Scotland, however, prove beyond a doubt the former existence of the animal in this country at a comparatively late period.

Tertullian, in his "*Apologeticus*," in the third century of our era, refers specially to the presence of bears as an animal probably frequently exhibited in the circus and in the gladiatorial combats of Rome. At

that time doubtless bears were not uncommon over a great part of Europe ; in some parts of which, as I have said, they are still to be found in the present day.

Tertullian, replying to the pagan accusation that the Christians held feasts of blood, says :—

“At this day, among ourselves, blood consecrated to Bellona, blood drawn from a punctured thigh and then partaken of, seals initiation into the rites of that goddess. Those, too, who at the gladiator shows, for the cure of epilepsy, quaff with greedy thirst the blood of criminals slain in the arena, as it flows fresh from the wound, and then rush off—to whom do they belong? those, also, who make meals on the flesh of wild beasts at the place of combat—who have keen appetites for bear and stag? That bear in the struggle was bedewed with the blood of the man whom it lacerated; that stag rolled itself in the gladiator’s gore. The entrails of the very bears, loaded with as yet undigested human viscera, are in great request. And you have men rifting up man-fed flesh! If you partake of food like this, how do your repasts differ from those you accuse us Christians of?”¹

The “Welsh Triads,” which are supposed to have been compiled in the seventh century, say that “the Kymri, a Celtic tribe, first inhabited Britain; before them were no men there, but only bears, wolves, beavers, and oxen with high prominences.” I quote this passage from Gosse’s “Romance of Natural History,” 1861, p. 68.

John Ray, in his “*Synopsis Methodica Animalium Quadrupedum et Serpentina Generis*,” London, 1693, when referring to the former presence of the beaver (*Castor sive Fiber*) in Britain, states, on the authority of his most learned friend D. Edward Lhwyd, that bears had also formerly existed in Britain. I shall quote the whole passage :—

“Addit insuper idem *D. Lhwyd*. Quod et capreoli quin Cambriæ etiam incolæ seu indigenæ fuerint, apud Wallos minime dubium esset. Quinetiam suspicari se, Ursum etiam quondam in hac insula sylvestrem feram

¹ “Tertullianus *Apologeticus*,” Ante-Nicene Christian Library; “The Writings of Tertullian,” vol. i. p. 72, Edin., 1869.

fuisse, ob rationem sequentem, nimirum quod inter veteres quasdam leges et consuetudines Britannorum, Antiqua Britannica seu Cambrica lingua manu scriptas, statuta quædam et regulas in venatione observandas invenerit, in quibus continetur; *summam seu præcipuæ æstimationis ferinam esse, Ursi, Leporis et Apri*. Et alibi in eisdem constitutionibus, *E novem quæ venantur ferarum generibus [Games] tria tantum Latrabilia [baitable] esse, Ursum, scandentia [the Climers, quo nomine vermineum genus et Sciurum intelligunt] et Phasianum*. Ursus fera latrabilis [baitable] dicitur, quia cum tardigradus sit; nec velociter currere possit, canes cum facile assequuntur, contra quos deinde corpore in clunes erecto aliquandiu se defendit; canes autem initio timidi nec propius accedere ausi eum allatrant antequam aggrediantur et occidant.

“Verum Animalia hæc à Venatoribus tandem ad internectionem usque cæsa, eorumque stirps in Anglia et Wallia penitus extincta est. Aiunt tamen capreolos in Scotiæ Septentrionalibus etiamnum superesse” (p. 213).

Ray here classes as the animals in greatest esteem for the chase the bear, the hare, and the boar. Some might perhaps fancy that as Ray does not allude here to an animal well known as *baitable*, at least at a later date—the Badger—that he had confused the bear and the badger together. This, however, is not the case, as he gives a detailed description of the Badger:—

“TAXUS sive *Meles*, Angl. the *Badger, Brock, or Gray*. Septentrionalibus, *The Pate*.” . . . “In Anglia invenitur nontamen valde frequens. Vidimus in Essexia, Sussexia, et Warwicensi comitatu” (p. 187).

Ray begins and ends his account of the bear as follows:—

“URSUS, Græcis *Ἀρκτος*, a *Bear* Angl.” . . . “Hæc omnia Parisienses, apud quos plura si placet vide; nam Historiam Animalium conscribere nostri non est instituti. Inveniuntur in *Alpibus*, inque *Germania, Polonia, Lituania, Norvegia*, aliisque regionibus Septentrionalibus; colore etiam, variant; namque & nigri & albi observantur; in *Nova Zembla* maximi” (p. 172).

Thomas Pennant, in his “British Zoology” (vol. i. p. 78), tells us that

“many places in Wales still retain the name of *Pennarth*, or the Bear’s Head, another evidence of their existence in our country.”

Pennant then says—“It does not appear how long they continued in that principality, but there is proof of their infesting Scotland so late as the year 1057, when a Gordon, in reward for his valour for killing a fierce bear, was directed by the king to carry three *Bears’ heads* on his banner,” Pennant gets this information from “The History of the Ancient noble and illustrious Family of Gordon from Their first Arrival in Scotland in Malcolm III.’s Time to the year 1690,” in two volumes. By William Gordon of Old Aberdeen : Edinburgh, 1726. Gordon begins his book as follows :—

“John Ferrerius of Piedmont who lived a great part of his Time a Monk in the Abbay of *Kinloss* in *Murray*, and was esteemed a Man of no mean Learning for these Times ; He had seen (he says) many of the ancient Papers and Manuscripts then extant from which he did write a Supplement to Boethius his History of Scotland, as also a short History of the Name of Gordon, which he entitles “*Historiæ compendium de origine & incremento Gordonix familie in Scotia, apud Kinloss, Anno 1545* ; and that at the Desire of Mr *William Gordon*, Kinsman and Secretary to the then Earl of *Huntly*, faithfully collected out of the antient MSS. and Registers kept in Abbacies at that time.”

“From him we learn, that amongst these valiant Captains who assisted *Malcolm III.*, King of *Scotland* against the *English*, about the year 1057, was one *Gordon* whose Christian Name is not known. He sometime before had killed a fierce *Bear* that much wasted the Country near the Forest or Wood of *Huntly*. This Gentleman being conspicuous both for his Prudence and Valour, was much in Favour with King *Malcolm*, who generously, as a Reward of his Merit, bestowed upon him the Lands of *Gordon* and *Huntly* ; And that the Memory of so remarkable an Action, as the killing of that Bear, might be transmitted to Posterity, the King would have him Carry in his Banner three Bears’ Heads, Or, in a Field Azure” (pp. 1 and 2).

Knowing there was some little resemblance and perhaps difficulty

between the Scots words for a Boar, and a Bear, which might probably explain this statement, the former being designated *Bair*, *Bare*, *Bar* (Germ. *Baer*), a Boar; as Jamieson tells us in his Scottish dictionary,—quoting from Bellenden's "Chronicle" (Bk. xii. c. 15). "He (Alexander I.) dotat the Kirk of Sanct Andros with certane landis namit the *Bairrink*, because ane *bair* that did gret injurie to the pepyle was slain in the said field."

"What Bellenden calls the *Bairrink* is by Wyntown denominated the *Barys rayk*" or walk:—

"That land thai oysyd all
The *Barys rayk* all tyme to call,
Wes gyvyn on that condytyowne
To found there a relygyowne."—(vii. 6, 104.)

Boethius in his History refers to it as—"Apricursus ab *apros* immense magnitudinis," and Fordoun—"Cursum Apri beato Andreæ contulit" (lib. v. c. 36).

Jamieson says:—

"As our ancestors called the boar *bare*, by a curious inversion the *bear* is universally denominated by the vulgar a *boar* (S.). Shall we view this as a vestige of the ancient Northern pronunciation? Su. G. *Biorn*, Islandic *Biorn*, Ursus. Ithre observes that the inhabitants of the North alone retain the final *n* in this word" ("Etymological Dictionary of the Scottish Language," by John Jamieson, D.D., &c.).

Mr Thomas Dickson, F.S.A. Scot., Curator of the Historical Department of H.M. General Register House, tells me that the spelling of the word bear in the earlier records is generally *bere*. The Scots sound of the *c* being the same as in the Latin, it corresponds to the English letter *a*. Mr Dickson also tells me there is no early mention of bears in our records, nothing earlier than the beginning of the sixteenth century, and these only one or two in number. The earliest is a payment by the Treasurer in September 1503 of eight French crowns "to the bere ledair of England." He had been attracted hither apparently together with many minstrels and other performers by the festivities on occasion of the

marriage of James IV., which had taken place in August—gratuities were given to these merry-men on their departure, and also to the English bear-leader already referred to.

In England, however, there are many old references to trained bears, and also to bear-baiting. Joseph Strutt, in his "Sports and Pastimes of the People of England," gives us a figure from a MS. of the tenth century of an Anglo-Saxon gleeman or "joculator" with a performing bear. Another from a MS. of the fourteenth century of a woman dancing to an unmuzzled bear held by a juggler. He also gives other two figures of tutored bears from a book of prayers in the Harleian collection, written towards the close of the thirteenth century, and two from a MS. in the Bodleian Library of the fourteenth century. Strutt says, "I shall only observe that there is but one among these six drawings in which the animal is depicted with a muzzle to prevent him from biting. The dancing bears have retained their place to the present time, and they frequently perform in the public streets for the amusement of the multitude; but the miserable appearance of their masters plainly indicates the scantiness of the contributions they receive on these occasions." Strutt also says, "The training of bulls, bears, horses, and other animals, for the purpose of baiting them with dogs, was certainly practised by the jugglers; and this vicious pastime has the sanction of high antiquity. Fitzstephen,¹ who lived in the reign of Henry II., tells us that in the forenoon of every holiday during the winter season the young Londoners were amused with bears opposed to each other in battle, or with bulls and full-grown bears baited by dogs."

There were several places in the vicinity of the metropolis set apart for the baiting of beasts, and especially in the district of Saint Saviour's parish in Southwark, called "Paris Garden," which place contained two bear gardens, said to have been the first that were made in London; and in them, according to Stow, were scaffolds for the spectators to stand upon.

In the time of Elizabeth bear-baiting and bull-baiting were fashionable,

¹ "Description of London."

and considered as proper pastimes for the amusement of even ladies of the highest rank. Bull- and bear-baiting are also mentioned in Stow's "Survey of London" (1720), but are then classed among the modern sports of the lower classes.

It would, however, be a strange explanation to assume that the remains of the bears found in our bogs, and more abundantly in bogs and caves in England, belonged to this introduced class of dancing bears; when we find them, as in this and other instances, associated with rein-deer and urus (*Bos primigenius*), and other wild animals also long since extinct in these localities.

As I found that some of the MSS. of John Ferrerius were still preserved in the Advocates' Library here, I thought it would be as well to examine the original authority for this statement of Gordon's about the bear killed in the time of Malcolm III. Accordingly, by the kindness of the Librarian of the Advocates' Library, I was able to examine a MS. in Latin entitled "*Historiæ Compendium de origine et incremento Gordoniæ familia.*" The MS. being a copy from the original of Johannes Ferrerius Piedmontanus, S. P. D., from which I extract the following:—

"In eorum principum virorum numero qui Malcolmum inarunt fuerat quidam vir fortissimus Gordonius genere cuius nunc nomen proprium non satis tenetur qui paulo ante apud Huntileæ silvam immanem aprum omnia populantem interfecit; ubi nunc sacellam vigitur cantorium Huntilæum nuncupatum, quod uxor Adami Gordonii Equitis aurati a fundamentis ipsis erexit. Ille idem Gordonius cum prudentia tum viribus insignis (quo tandem nomine censeri lubeat) valde charus erat Malcolmno regi: a quo Dominus Gordonius creatus est et ab interfecto apro Dominium Huntileæ per Malcolmum accepit, atque ut ipsum factum facinus præclarum in posteros quoque peruerit voluit Malcolmus ut Huntileæ Dominus in insignibus suis tria aprorum capita aurea in campo levio depicta possideret—cæruleo," &c.

A note at the end of the MS. states that it was copied for Sir Robert Gordon by Constantinus d'Aulbigny, CIOCCCCCXIII.

The result of my inquiries is therefore simply to make an end of this

statement so often repeated, from the time of Gordon and Pennant down to our own day; that the last instance of a Bear being killed in Scotland was in Malcolm III.'s time, about 1057! The word bear being now shown to be either a simple misprint, or perhaps a peculiar spelling for the more likely Boar which, like that quoted as connected with the origin of the church of St Andrews, had been we may suppose a very formidable animal indeed! The fact also is a patent one, that the family of Gordon carry three Boars' heads, and certainly not Bears' heads on their shield of arms, as indeed was noted long ago by John Fleming, D.D., when referring to this statement of Gordon's about the Bear, in his "History of British Animals," published in Edinburgh, 1828.

In the old "Statistical Account of Scotland" by Sir John Sinclair (1796), the Rev. Mr John Grant in his account of the Parish of Kirk-michael, Banffshire, gives in a footnote a reference to the former existence of the bear in Scotland—"In an ancient Gallic poem ascribed to Ossian, the hero M'Diarmid is said to have been killed by a Bear on Beinn Ghielleinn in Perthshire" (vol. xii. p. 449). This statement is also referred to by John Fleming, D.D., in his "British Animals." It is however only the well known story of Diarmid being killed by the wild boar, as described in Ossian's "Lay of Dhiarmaid," or Diarmid killed by a Boar on Bein Goolban. Diarmid was the supposed progenitor of the Clan Campbell, and according to some authorities this legend is said to be the origin of the boar's head being the crest of some of the families of Campbells. J. F. Campbell in his "Popular Tales of the West Highlands," Edinburgh, 1862, says:—"The Lay of Diarmid can be traced for a period of 300 years, and its story is known among the whole Celtic population from the south of Ireland to the north of Scotland" (vol. iii. p. 54).

Mr Campbell also gives in his book from several reciters a tale designated "The Brown Bear of the Green Glen" (*Math-ghamhain* or *Ma-ghamhuimean* being the Gaelic for bear). He however makes no references to the presence of the bear in Scotland in ancient times (vol. i. pp. 164-170).

Geological History of the Bear.—Professor Owen in his “British Fossil Mammals” says—“The oldest fossil referable to the genus *Ursus* from British strata, is the crown of a molar tooth which was found associated with the teeth of a hog, and of a species of *Felis* as large as a leopard, at Newbourn near Woodbridge, Suffolk.” According to this view, it belongs to the Miocene strata. Professor Owen, however, considered “that the nature of the stratum rendered the age of the fossils doubtful” (“Table or Conspectus of British Fossils according to their Geological Position,” “Brit. Foss. Mammals,” p. xlvi.). Sir Charles Lyell inclines to the belief that they came from the Red Crag, see Lyell’s paper, “Annals Nat. Hist.,” No. 23, 187, 188, 1839. Owen also says—“On the evidence at present acquired, that the period of the existence of the Ursine genus in this island extended from the Middle or Miocene Tertiary formations, through the older and newer Pliocene, and that the genus surviving, or under a new specific form reappearing, after the epoch of the deposition and dispersion of those enormous, unstratified, superficial accumulations of marine and fresh-water shingle and gravel, called drift and diluvium, has been continued during the formation of vast fens and turbaries upon the present surface of the island, and until the multiplication and advancement of the human race introduced a new cause of extermination, under the powerful influence of which the Bear was finally swept away from the indigenous fauna of Great Britain.”

“The latest Ursine remains having a claim to be British fossils are those found at Manea Fen in Cambridgeshire.” The previous ones have been considered to belong to fossil species of the Bear; these last “belong to the existing European variety of the *Ursus arctos*.”

In the valuable introduction to the paper on the “British Pleistocene Mammalia” of the Palæontographical Society, volume 1866, by W. Boyd Dawkins and W. Ayshford Sandford, they state:—

“*Ursus arctos*, Linn. The living European Bear. It is differentiated from the *U. spelæus* by the persistence of the small monofanged pre-molar, one immediately behind the canine, and many other points to be discussed in the article *Ursidae*. It occurs in Wookey Hole, Oreston,

Durdam Down, Hutton, Llandebie, Kent's Hole, and several Welsh caverns, and in the deposits of the Thames Valley at Gray's Thurrock in Essex, and Crayford in Kent" (p. xxiii.). They also remark:—"We are obliged to acknowledge that the evidence afforded by the remains of the fossil bears is most conflicting, and that we consider it by no means impossible that at some future time the interval between the *U. spelceus* on the one hand and *U. arctos* on the other may be bridged over, and both turn out to be, as M. de Blainville has suggested, the extremes of a series; but at present it is safer to consider them two closely allied species than as varieties of one and the same" (p. xxiv.).

In Scotland no remains of the bear have as yet been found, as far as I am aware, except these now described, which were discovered in this peat moss at Shaws, Dumfriesshire, and are believed to belong to the same recent species (*Ursus arctos*), the common brown or black bear.