INAUGURAL ADDRESS OF LIEUT.-GENL. A. H. LANE-FOX PITT RIVERS TO THE ANNUAL MEETING OF THE INSTITUTE, HELD AT SALISBURY.[1]

It is thirty-eight years since this Society last met at Salisbury, a period which has probably been more prolific of scientific discovery than any other in the history of this country or of the world. Archæology has not fallen short of its sister sciences in the race for knowledge, and although it appears proper that on an occasion like the present my discourse should be general and retrospective, the time allotted to me is totally insufficient to enable me to deal adequately with the progress that has taken place. Indeed, when I consider that Wiltshire is classical ground for the branch of pre-historic archæology that I have undertaken to deal with, and that, amongst the practical explorers in this Wiltshire field are included the names of Aubrey, Stukeley, Hoare, Cunnington, Prestwich, Merewether, Thurnam, Warne, Blackmore, Stevens, and A. C. Smith, I almost feel that I must owe my present position to the rashness with which I have undertaken a task from which others may have shrunk. Having ascertained it to be the wish of some of your leading members that I should devote my lecture to a consideration of the particular branch of archæology to which my attention has been chiefly given I will endeavour to sketch out roughly the progress of prehistoric research since the Society last met here in 1849, not attempting to record all the discoveries that have been made, or even a large part of them, but to trace as far as possible the main lines of progress, and as I am the lecturer on this occasion I hope it will not be thought inappropriate if I refer to such of my own humble discoveries as may be applicable to the matter and show their bearing on the general

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question. In so doing I shall divide the subject under two heads.

Firstly, I shall speak of pre-historic or non-historic archæology, including in the latter the vestiges of the Romanised Britons, which, though falling within historic times, have left no written record, and, secondly, I shall refer, if I have time, to the quaternary period, or that which, preceding the pre-historic period, goes back to the very earliest traces of man. In dealing with the pre-historic age, our attention must be given chiefly to the grave mounds, as being the class of relics that archæologists have studied most carefully hitherto, but I hope I shall be able to show that valuable information is to be derived from excavations on the sites of camps and villages, and that more attention will be paid to them in future. As early as the beginning of the seventeenth century Camden seems to have distinguished two kinds of barrows, which he described as the round, and those with sharp tops, which were probably the long barrows, and he supposed them to be the graves of soldiers, for bones he says, are found in them. But Stukeley classified them more carefully and gave them various kinds of fanciful names, which with some modification, have attached to them ever since. Thurnam does full justice to Stukeley's work, although it must be admitted that, viewed by the light of modern discovery, his name has been handed down to us chiefly as an example of what to avoid in archæology. A characteristic specimen of Stukeley's quaint and imaginative way of dealing with the subject of his studies may be seen in his account of the origin of the Sarsen Stones, which cover the surface of the Wiltshire Downs. "As the chalky matter of the earth hardened at creation," he says, "it spewed out the most solid body of the stones of greater specific gravity than itself, and, assisted by the centrifuge power owing to the rotation of the earth upon its axis, threw them upon its surface where they now lie." "This," he adds, "is my opinion concerning this appearance which I have often attentively considered." We are not without our Stukeleys at the present time, when the progress of science has lessened the excuse for us, and we ought therefore to be lenient to our predecessors. "Two things we ought to learn from history," says Dr.

Arnold, in his lectures on Modern History, published in 1841, "one, that we are not ourselves superior to our fathers; another, that we are shamefully and monstrously inferior to them if we do not advance beyond them." And this, if it is not borne out by an extended view of human nature, or by the light of recent discovery, is, nevertheless, sufficiently true to prevent our exulting over our ancestors in consequence of our superior knowledge.

It would be a profitless task to recount the opinions of our predecessors if we did not find fault with their methods and their conclusions, but, in doing so, we must not be taken to condemn them personally because they do not represent the uppermost rungs of the ladder that we are climbing. Sir Richard Colt Hoare was the first to apply himself to the study of our Wiltshire Tumuli by the only satisfactory method, viz., by excavation in them. Taking for his motto "We speak from facts not theory" he opened 379 barrows and recorded their contents in two folio volumes with ample illustrations. He differentiated the long from the round barrows, and showed that the former contained no metal implements, and none but the rudest kinds of pottery and that they were probably the earliest, but he did not thoroughly establish a stone age, and it is a question whether those most valuable items of evidence, the flint flake and the scraper, did not entirely escape his notice. When we consider the time that he devoted to his excavations, and the number of them that must have passed under his eyes, we may well ask what evidence we ourselves are failing to notice through ignorance of its bearing upon our investigations. Hoare speaks of Wiltshire, in his preface, as a county little known and hitherto undescribed, and there can be no doubt that as a topographer he fulfilled his task admirably. He was sound in principle, and where he failed was through not applying his principles more thoroughly. He correctly established the sequence of the different modes of interment, pronouncing inhumation in a contracted position to be the earliest, after which inhumation was practised conjointly with cremation, and inhumation in an extended position he proved to be the latest mode of interment, but he failed to distinguish in some cases between Saxon and late Celtic burials. He distinguished

primary from secondary in the same tumulus, and he correctly classified the three kinds of urns found in the graves as funeral urns, drinking vessels, and incense cups, but he described bronze dagger blades as lance heads, and by that means led Sir Samuel Meyrick into error in his work on the weapons and costume of the Ancient Britons published in 1815. He claims with justice to be the first, with Mr. Cunnington, to take notice of the sites of the British villages, and he attempted to classify the camps and earthworks by the size of their ramparts and external appearance, but his examination of them was cursory and insufficient for his conclusions. But where he failed totally was in neglecting to take any notice of the skeletons found in the graves. The scientific study of human osteology had not commenced in his time and his mind was a blank upon all anthropological subjects. He thought right to re-inter them quickly without measuring them. Here and there we find them spoken of only as the "skeleton of a stout person" or "a tall person," and in only one instance he describes a skeleton, saying that it "grinned horribly a ghastly smile," a "singularity that I have never before noticed." No doubt the skeleton must have been laughing at him for his unscientific method of dealing with it, and when we think of the large amount of racial evidence that he destroyed in this way and the comparatively small number of skeletons that have remained in the barrows to be examined since, it is almost enough to give any lover of antiquity a ghastly smile.

Sir Richard Hoare's researches were followed by those of Dean Merewether, which were published in the Salisbury volume of the Institute in 1849. He improved somewhat upon Sir Richard's method by measuring the thigh bones of some of the skeletons but without arriving at any results as to race or stature. He also roughly measured two skulls of oxen found in the tumuli, which was also an advance upon Sir Richard, who did no more in the way of describing one or two of those he found than by saying that in the opinion of a butcher of his acquaintance some of them were the largest of the kind he had seen. No systematic measurements of the bones of animals with a view to the

comparison of the domesticated breeds appears to have been made until Professor Rolleston and Professor Boyd-Dawkins applied their biological knowledge to the inquiry. In my most recent investigations into the Romano-British villages near Rushmore I have endeavoured to improve upon this by establishing, with the approval of Professor Moseley, F.R.S., and Dr. Garson, of the Royal College of Surgeons, a regular scale of measurements by means of which we shall be able from a single bone or fragment of skull to ascertain approximately the size and some of the peculiarities of the domesticated breeds in use by the Ancient Britons.

But an entirely new era in pre-historic archæology was to be inaugurated by methods imported from other sciences. Whilst geology was to carry us back to periods that had not before been thought of in the history of man, anthropology was to teach us how to estimate the stature and physical peculiarities of the skeletons found in the graves, and ethnology was to enable us to appreciate the social and material condition of the aborigines of our country by a comparison of their relics with the arts of modern savages. All these branches have now become indispensable for the pre-historian.

Dr. Thurnam was the first to apply anthropology to the elucidation of the Wiltshire barrows, and his papers are included amongst the earliest contributions to the newly-established Anthropological Society in 1865-7. Profiting by the contemporary researches of Professors Thomson and Wilson in Scandinavia, and Canon Greenwell in the Yorkshire Wolds, he systematised the results of Sir Richard Hoare's investigations, and separated them more definitely into those of the Stone, Bronze, and Iron Ages, which began to be finally accepted by archæologists; and about the same time the volume on "Prehistoric Times," by Sir John Lubbock, published in 1865, the excavations of Messrs. Lartet and Christy in the bone caves of France, and the treatises on the stone and bronze implements of Great Britain by Dr. Evans, contributed to establish what had only been lightly touched upon by the earlier writers. Thurnam re-opened some of the barrows which had been examined by Hoare, and added greatly to

the number by his own excavations. Sir Richard had abandoned his excavations in the long barrows as being very unproductive of relics of human workmanship, and taking no notice of skeletons, he confessed himself unable to derive any satisfactory information from them, or to determine the purpose for which they were constructed. Thurnam now showed that besides relics of the Stone Age, the long barrows contained the bones of a particular race, small in stature, averaging not more than 5ft. 5·4 inches in height as computed by the measurements of the long bones of twenty-five individuals. They had also the peculiarity of very long heads, the average breadth of which was in proportion to their length as seventy-one to a hundred, a much longer head than that of any race now inhabiting Europe. On the other hand the skeletons found in the Round barrows he showed, by a computation from the long bones of twenty-seven individuals measured by himself and others, were those of people of large stature, averaging 5ft. 8·4 inches in height or three inches taller than the long barrow people, and having heads rounder than those of any people now inhabiting Europe, the proportion of breadth being as eighty-one to a hundred. Here, then, we have undoubtedly one of the most important pre-historic discoveries of our time. By a comparison of the results of his excavations with the scanty notices of aborigines by ancient authors and the investigations of anthropologists into the physical characteristics of the existing races of man Dr. Thurnam was able to show that these two kinds of skeletons represented two great primitive races of mankind. The tall round-headed skeletons were those of the Celts, a branch of the great nomadic race of the north, which all history records under various names and in innumerable tribes and nations as having been constantly drifting westward from their original home in Northern Asia, where their representative round-headed people still exist, retaining all their pristine indiosyncracies. These were the people whom Cæsar speaks of as the Belgæ and whom he describes as a recent importation from the Continent. The short long-headed people were the Iberians, a race about whose origin less can be said with certainty. Whilst some have been so bold as to endeavour to trace them

across the Atlantic, Professor Huxley brings them by way of Egypt from the Melanesian people of Australia and the Asiatic Isles. It seems likely both from their stature and head form, as well as from the scanty evidence of their colour in ancient histories, that they must have had affinity for some or other of the dark races of mankind which now occupy the Southern Hemisphere. This much at any rate may be said without drawing too largely on our imaginative faculties that the round-head and light complexion is a northern, whilst the long-head and dark-skin is a southern peculiarity of the races which occupy the world at the present time, and that the two classes of skeletons found in the barrows may be those of branches of these two great primitive races which met and contended for the mastery in the British Isles at the time we are speaking of.[1]

Thus far, the evidence derived from archæological sources is in complete harmony with tradition and with ethnology, but as we approach non-historic times and attempt to deal with the unrecorded life of the Britons, who were contemporaneous with our earliest histories, we find ourself involved in some obscurity. The extension of the Roman Empire to Britain checked for more than three centuries the westerly drifting of Nomads into Britain and turned the current of migration northward into Scotland and round to Ireland, so that at the end of that time the Britons found their Scandinavian enemies upon them from the north as well as from the east. One

[1] Since writing this, Professor Sayce, in his valuable address to the Anthropological Section of the British Association at Manchester, has thrown fresh light, from a philological stand-point, on the distribution of the Aryan language and hypothetically of the Aryan race, shewing it to have spread originally from the neighbourhood of Finland in Europe rather than from Northern Asia, as generally supposed, and to have fanned out south-east and west from that region, and he has also given some linguistic evidence to prove that this distribution took place originally as early as palæolithic times. He has, however, judiciously guarded his remarks by the observation, that the distribution of race and language is not necessarily or even in all cases probably identical. If the spread of the Aryans to Britain as early as palæolithic times should come to be accepted, this will not account for the now well established immigration of the round-headed, round barrow people into this country, who cannot have been connected with the long-headed Swede and Finn. These round-headed, bronze age people must necessarily have been related to the Mongols of Northern Asia, and the line of their migration into Britain on this hypothesis, must have crossed the area already occupied by the Aryans. The identification of the earliest known inhabitants of the British Isles with the Swedes and Finns, must I think be received with doubt, for although both were of the long-headed type, the evidence of their being a short dark-haired people cannot be altogether overlooked.

of the last acts of the Roman Emperors was to post a force on the east coast of England which was called the Saxon shore, to repel these invaders, but no sooner was that force withdrawn than the full tide of westerly migration set in again direct upon Southern Britain with results that are well known to us all.

During the comparative blank in history that follows that period we almost lose sight of the Britons. Whilst some believe them to have been nearly exterminated or driven west-ward into Brittany, others—and amongst them Professor Huxley—consider that the amount of Celtic blood in the veins of the modern Englishman is considerably in excess of what has hitherto been supposed. The investigations of Dr. Beddoe in England and of Drs. Broca and Topinard in France tend to confirm this view and to show that in the existing population of Europe, and in the West of England and in Wales in particular, a small dark race may still be seen, such as would correspond to the survivors of the aboriginal long barrow Britons. If, as seems probable from this, the Britons continued to exist in considerable numbers during the Saxon epoch, what became of the two distinct races, the long-headed short dark people, and the tall round-headed fair people revealed to us by the investigations in the barrows? Did they mix, and in mixing blend their physical peculiarities, or did they maintain an independent existence retaining the stature, colour, and head form that belonged to their respective stocks? In the investigation of this matter we are met with difficulties in the way of determining the nationality of skeletons belonging to the Roman age. The Romans did not invade this country alone, but brought with them auxiliaries from all parts of the world, who afterwards colonized the country, so that, as Mr. Wright has pointed out in his "Celt, Roman, and Saxon," a skeleton of this period may be of any nationality. It may be that of a Fortensian, a Tungrian, a Vetasian, a Dalmatian, a Crispian, a Spaniard, or a Dacian. These colonists, however, appear to have settled more frequently in the east and north of Britain. In the west of England, and especially in spots that are remote from the centres of Roman occupation, the probability of coming upon the skeletons of Britons is very much greater. Dr.

Thurnam was of opinion that the Durotriges and Dobuni of Gloucestershire were aboriginal races whose territory may have been encroached upon by the Belgæ, but was never entirely overrun by them. He also draws a distinction between the unchambered long barrows of Wiltshire and the chambered long barrows of Gloucestershire, for, whilst twenty-seven skulls from the unchambered long barrows of Wiltshire had a breadth index as low as sixty-nine, forty skulls from the chambered long barrows of Gloucestershire had the somewhat higher index of seventy-one, and these he considered afforded evidence of a mixture of tribes, although seventy-one is a longer skull than that of any existing European people. He thought the chambered long barrows showed by their contents that they continued to be used by the original tribes up to and within the Roman era, and the plain bowl-barrow also he believed to belong to the aboriginal tribes, whilst the bell-shaped and disc-shaped barrows were the graves of the Belgæ. It is evident, therefore, that we must not lose sight of these two distinct races in our investigations into the relics of the Romanised Britons, and the district immediately to the west of where we are now assembled, appears to be that which is likely to be most fruitful in evidence relating to that period.

As we go westward from Salisbury to Blandford we pass over a region which on two separate lines of evidence may be regarded as an ancient ethnical frontier. Here by the investigations of Dr. Beddoe and others into the physical condition of the existing population, we begin to come upon traces of the short, dark-haired people, whom he believes to be the survivors of the earliest wave of Britons. My own measurements confirm this opinion. Here also in the neighbourhood of Woodyates we cross the western boundary of the region of bell and disc-shaped barrows which Dr. Thurnam believed to be the graves of the Belgæ and pass over to the region of the bowl-shaped barrow containing inferior relics which he conjectures to have belonged to the original Durotriges, and the twenty-one barrows which I have opened at Rushmore, to the west of this boundary line, have all been found to be bowl-barrows, or boul-barrows with a ditch round them, which Thurnam thought to be a later combination

of the bowl and bell-shaped forms. It is a position which, probably owing to the extent of dense forest to the west and south in pre-historic times, has always afforded a standing point for the earliest races in resisting the encroachments of succeeding waves of migration from the east. Here, or hereabouts, Professor Rhys has shown that the Goidels or first wave of the Celts for some time contended against the Brythons or second Celtic invasion. Here also Mr. Green, in his "Making of England," proves that the West Welsh withstood the Saxons for some time after the latter had penetrated as far as Wilton. Across this region also, but a little to the east of the boundary defined by the barrows, runs the Great Bockerly Dyke, about which much has been written but nothing known. Its direction and position show it to have been a line of boundary defence thrown up by a western people against invaders from the north and east, and a proper examination of it hereafter will be of much interest. On the whole the district is one which is especially worthy of the attention of anthropologists and archæologists. The evidence to be derived from the tumuli is now nearly exhausted, for although more remain to be opened, the majority have already been rifled, and it is to the vestiges of the Romanised Britons that we must now turn for information.

Happily the antiquities of this hitherto almost unexplored period present themselves here in great abundance. All over the hilly district, Sir Richard Hoare describes the villages of the Romanised Britons. He did not examine them carefully as I have already said, but he made plans of a number of them which are to be seen in his great work. Two of these villages are on my property close to Rushmore, and during the last six years I have thoroughly excavated them, trenching over every foot of ground and bringing to light all the pits, ditches and relics of the inhabitants which were to be found beneath the surface.

The results of the first of these villages, viz., that on Woodcuts Common, have been put together in the quarto volume containing seventy-four plates which I am now issuing privately on the occasion of this meeting, and I hope to have the pleasure of conducting, on Tuesday, some of the members of the Society over the villages themselves and

the Museum at Farnham, which contains the models of them and the relics found in them. On this account I do not propose to describe the villages now, but merely to mention the main anthropological results which have a bearing on the subject of this address. They are satisfactorily proved by the coins and all the contents to be of the Roman age but of British construction. Contrary to all expectation it was found that they were in the habit of burying their dead in their villages in pits, which had been previously made for other purposes such as store-houses or refuse pits, and of these pits 191 have been dug out in two villages. Twenty-eight skeletons were found in positions to prove that they were those of the inhabitants of the two villages. By a calculation from all the long bones it has been found that their average stature for the males was five feet two inches, and for the females four feet ten inches. This unexpected result shows that they were a remarkably short race, shorter by three inches than the short people of the long barrows, whose average height, as already mentioned, was five feet five inches. The average cephalic or breadth index for the males and females together was found to be seventy-four, which, by a comparison with the seventy-one of the long barrows and the eighty-one of the round barrows, shows that in head form, no less than in stature, they approach the long barrow people more closely than those of the round barrows, and the bodies being mostly crouched near the tops of the pits showed that they had retained their ancient form of burial, although the extended bodies of a few of them implies a partial introduction of more recent customs. The tibiæ of some of these skeletons were also decidedly platycnemic or flat-boned, more so than those of any existing European race, which is an additional link of connection with the earliest inhabitants of this country. But whilst the breadth index of the head stands intermediate between that of the long and round barrow people one or two of the skulls were markedly brachycephalic or round-headed, reaching to eighty-two, whilst one or two were hyper-dolichocephalic or markedly long-headed, reaching to sixty-eight, which exceptional extremes, according to the laws of heredity, are precisely what we

should expect, on the supposition of a mixture of the two races. We may, therefore, assume as a working hypothesis, until some more reasonable theory is devised, that these people were a tribe of the Durotriges, partially mixed with the Belgæ, and also perhaps with the Romans, of which race, in the opinion of Drs. Beddoe and Garson who have examined the skulls, some trace may be seen in one or two of them. Unlike skulls of the earlier Britons, their teeth showed traces of decay and they were afflicted to some extent with rheumatoid arthritis, or "Poor Man's Gout." Whether the exceptionally short stature of this Rushmore tribe of Britons was accentuated by evils attendant upon slavery or by some of their largest men being drafted into the Roman legions abroad, is a point upon which we can only speculate. I shall not dogmatize or attempt to fix with precision the ethnical position of this diminutive race, for it is evident that we are only on the threshold of the inquiry. The tribe of Roman Britons at Frilford examined by Professor Rolleston, if they were really Roman Britons, had an average stature of 5ft. 8in. for the males, so that a marked difference may have existed between the different tribes, as might reasonably be expected. I have another village close by to explore, after which other villages on my property remain to be examined. If it is thought that twenty-eight skeletons is a small number on which to base a calculation of stature it must be remembered that the skeletons of Ancient Britons are scarce, but, in the opinion of good physical anthropologists, the number is sufficient to form a good approximate idea of the height. Dr. Thurnam based his important conclusions upon no more than twenty-five long barrow and twenty-seven round barrow people, so that my evidence is fully equal to his in respect to the number of cases computed from.

I have now occupied so much time with the barrows that I must defer what I had to say about the drift period. No one now requires to be reminded of the great advance of knowledge that has been brought about by the study of the drift gravels, which, at the lowest computation has quadrupled the time during which we are enabled to investigate the works of man. No longer

confined to the last 3000 or 4000 years, the archæologist has been carried back far into geological time and has been brought in view of the earliest struggles of our ape-like ancestors to become men. No individual amongst those who assembled here in 1849 had the least idea that beneath his very feet were to be found the relics of man's workmanship at a time when he was contemporaneous with the elephant, and other extinct animals. But the discoveries of M. Boucher de Perthes, in the valley of the Somme, were going on at that time, although they were not recognised by men of science until ten years later, when our countrymen, Mr. Evans and Mr. Prestwich, confirmed the opinions of the French savant. The valley of the Avon, near Salisbury, was one of the first places examined by Mr. Prestwich, after his return from France in 1859, but although the gravels had been well looked over by him, and their fauna duly recorded, no palæolithic implements were discovered until later by Dr. Blackmore and Mr. Stevens, in the drift beds at Fisherton and elsewhere, where they were found in beds that had been deposited before the valley had worked its way down to the level on which Salisbury now stands. Since then, through the munificence of Mr. W. Blackmore, the Museum, which bears his name, has made Salisbury a place of reference for information on the antiquities of this period. Similar discoveries were soon made in the valley of the Thames, in which I had the privilege of taking part.

Although not the first discoverer of palæolithic implements in the Thames valley, as they had previously been found by Mr. Leech, Mr. Prestwich, and Dr. Evans on the seashore near Reculver, I believe I may claim priority for the part of the river near London. Having carefully watched for the space of a year or more excavations in the drift gravel at Acton, I was able in 1872 to show by means of plans and sections, published in the quarterly journal of the Geological Society, the exact analogy of the palæolithic site there with that of the valley of the Somme, near Amiens and Abbeville.[1] Other similar discoveries have since been made in the valley of the Exe and elsewhere in this country.

[1] Quarterly *Journal* of the Geological Society, vol. xxviii, No. cxii, Nov. 1872.

The nature of the implements found in these gravels was such as to fully bear out the doctrine of evolution, being characterised by extreme simplicity as compared with the stone implements of a later date, and they introduce us to a condition of the arts of man, in which a simple flake or a flint held in the hand at one end and trimmed to a point at the other, appears to have afforded the most advanced idea of a general tool for all the purposes of life, so that the palæolithic or earliest form of implements can be everywhere distinguished by their simplicity from the neolithic or stone implements of a later date, and they are more or less the same in all the localities in which they have been found. As regards the time necessary for the erosion of the valleys and the deposition of the beds belonging to this period it is generally admitted that it cannot be computed in years. At first geologists were inclined to demand an enormous time for it, but recently, in consequence of observations on the erosion of glaciers, less time has been thought necessary, and Mr. Prestwich in a paper read lately before the Geological Society has given his reasons for believing that the time estimated since the termination of the last glacial epoch may be greatly curtailed.

But, although the sequence of palæolithic, neolithic, and bronze implements had been firmly established in the north and west of Europe, it had not been proved that the same sequence took place in Egypt, Assyria, and those countries in which civilization dates back to a very much earlier time, for it seemed certain that the stone age of the North and West of Europe was contemporaneous with a very much more advanced civilization in the south and east. The attention of archæologists had therefore been turned for some time to the question of a stone age in Egypt. The valley of the Nile, it was found, was covered with flint implements which correspond in form to those of the palæolithic type of Europe, but this coincidence of form alone, though highly suggestive for the reasons I have given, was not in itself sufficient to determine sequence because they had been found only on the surface, and in order to prove them anterior to Egyptian civilization, it would be necessary to adduce the same kind of evidence of their antiquity that had

been shown in Europe, by finding them in the gravels in the sides of the valley and in places which could be proved to have been undisturbed since Egyptian civilization commenced, and this was the more necessary because it was known that flints were used for embalming purposes in Egyptian times.

Here I may be permitted again to refer to a discovery of my own, although in introducing it into so brief and condensed an account of the history of the subject, I must again claim your indulgence as a lecturer. Being in Egypt in 1881 and having devoted particular attention to this point, I was fortunate enough to find flint flakes and an implement in parts of the gravel of the Nile near Thebes, into which gravel, after it had become nearly as hard as rock by exposure, the Egyptians had cut the square topped chambers of their tombs, and I chiselled several of these implements out of the gravel beneath stratified seams of sand and loam in the sides of the Egyptian tombs themselves. These flints, I believe, afforded the first absolute evidence of the priority of the use of flint implements to the time of the building of Thebes and to a time before the valley of the tombs of the kings had been completely eroded. At any rate it was the first discovery of the kind which had been recorded.[1] I exhibit a section of these gravels showing the position of the flints and of the tombs and the seams of the gravel, and the implements themselves are also exhibited. I have not been able to go to Egypt since, but I believe that by further search upon that site it may be possible to determine when flint implements were first introduced there, for I could not, after careful search, find them deeper in the gravel than a certain level. If this should prove to be the case it will be an important additional item of evidence.

As regards the osteology of the human skeletons discovered in the drift, our knowledge of them appears to develope slowly. If, as I have said, the skeletons of the Ancient Britons are rare, still less frequent must be those of quaternary man, our knowledge of which must depend on the accidental washing of them into drift deposits, or the discovery of them in the floors of

[1] *Journal* of the Anthropological Institute, vol. xi, p. 382. 1882.

caves belonging to that period. For some time it was contended that no approach towards lower forms of life could be recognised in the skeletons of this period and that the one or two abnormal skulls that had been brought to light were either those of idiots or were the result of disease. But in the presence of additional discoveries of similar skulls and skeletons that have since been made in different parts of the world, and more particularly in Belgium, this position can no longer be maintained. Within the last year two additional skeletons have been discovered in the quaternary deposits of a cave at Spy, in the province of Namur, and have been reported upon by M. Fraipont in the *Bulletin de L'Academie Royale des Sciences* in Belgium. The following are reported by M. Fraipont to be the peculiarities in which these skeletons depart from the human form and approach that of the anthropoid apes. The superciliary ridges are more developed and the forehead more shelving than those of any existing race of men, in which respect they resemble the orang, gorilla, and chimpanzee. The chin is more receding than those of any existing race of men. The forward curve of the femur is also greater than that of any existing race of men, and the angle and size of the articular surface of this bone and the tibia is such as to show that the individuals must have walked with their legs slightly bent. In other respects the skeletons are pronounced strictly human. These appear to be the latest facts revealed to us by the earliest specimens of our race. If they militate against some cherished dogmas, we have, nevertheless, no alternative but to accept them if they are established on sufficient evidence. I cannot myself see how human conduct is likely to be affected disadvantageously by recognising the humble origin of mankind. If it teaches us to take less pride in our ancestry, and to place more reliance on ourselves, this cannot fail to serve as an additional incentive to industry and respectability. Nor are our relations with the Supreme Power presented to us in an unfavourable light by this discovery, for if man was created originally in the image of God, it is obvious that the very best of us have greatly degenerated. But if on the other hand we recognise that we have sprung from

inferior beings, then there is no cause for anxiety on account of the occasional backsliding observable amongst men, and we are encouraged to hope that with the help of Providence, notwithstanding frequent relapses towards the primitive condition of our remote forefathers, we may continue to improve in the long run as we have done hitherto.