HAVE you ever thought that the period of human history in this part of the country stretches back something like six times as far as the time from the withdrawal of the Romans from Britain to the present day? The first men to use our Pennine hills belong to a remote time to which, if we want to attach a date, we would have to say 8000 or 9000 B.C. Occupying that very long time there is a story of the progress from small unorganised bands of hunters and fishers with very primitive stone tools to the kingdom of the Brigantes, with tools and weapons of iron, a gold coinage, a queen, and an organisation which could meet and defy the Roman armies. This period is long enough for there to have been some changes in the climate, in the trees making up the forests, and in the animals inhabiting the countryside, so that when we try to picture prehistoric man we have to bear in mind the conditions in which he was living as possibly being very different from those we know today.

To make a complete picture we ought to go back to the end of the Ice Age, when the last of the ice had disappeared from these parts, though there may still be a few small glaciers in the higher Scottish mountains, and a fairly heavy snow cover on our own fells in winter. The country would be the same shape as now, but would be very much of a stony, rocky wilderness. The scouring of the ice had removed soil and vegetation and, on the lower ground, left heaps of gravel and clay on which plants began to recolonise the areas. Most of the valleys had lakes in them, held up by glacial moraines, and there was probably a lake still in the Vale of York above the York and Escrick moraines, in the Vale of Pickering, and probably in the lower Humber. These lakes gradually filled up and formed great swamps many of which were not drained until well within historic time.

Perhaps the most startling difference from today would be seen in the North Sea basin. From about Hull to Jutland was the southern shore of this sea. There was no English Channel, and all the southern part was swampy forest and peat bogs. The land stood a little higher above the sea than it does today, and round much of the coast there was a wide shelf of peat and trees. Remnants of many of these (now) "submerged forests" are to be seen round the coast, at very low tides when winter storms have scoured away the sand, and a comparable bed of peat with tree stumps lies on the bed of the very shallow southern part of the North Sea.

Until sea levels changed so much that all the forest area was submerged and the English Channel was broken through, England was part of the Continent and men and animals could wander across these swampy forests and hunt and fish in this country. Among these peats
when, as occasionally happens, lumps are caught up in the trawl nets, or torn up and cast ashore by storms, tools and implements of the men who formerly hunted in the forests are found. The teeth and bones of the animals and the stumps of trees help us to make a picture of the life of those remote times. The peat, like that which covers many of our hills, also contains and preserves bits of plants, seed and pollen and it is now a matter of everyday technique to extract these from a sample and so learn from the actual material what trees, plants and grasses made up the vegetation from the time at which the earliest peat began to form, right into historic time for which we have written records.

It is this study of peat and its contents during the last 40 years or so, which has given us accurate information of the ways in which from time to time the climate has changed. It also tells us that the trees did not come back all at once after the Ice Age, but in a definite order governed by the temperature and the wetness of the climate. It would be tedious to go step by step through all these changes, so perhaps we can save time and maybe make a complex story a little plainer if we set out the more important facts as a table. The periods of different climate were given names by the early workers, which have become so widely used that it is easier to keep them than to try to invent new ones. The English workers use "zone" numbers, so these are given with the names. Opposite is the table in a simplified form.

We must not forget that the pre-Boreal is the first period after the real end of glacial time and that it had been preceded in the North of England by a climate which was Arctic, so the "cold and dry" was in fact much colder than today. The forest trees were just spreading over the country but only the birch was hardy enough to become established though before long it was joined by hazel. These must have formed a very open scrub rather than true forest, and in among the trees there was a thin sward of grass, some juniper, and heath plants. Among the pollen there are traces of nettle and plantain and very occasionally small pieces of charcoal, in peats belonging to the pre-Boreal. As nettle and plantain are weeds most closely associated with man it may be that this is evidence of the first men to visit the moorlands and to make any stay there. There is other evidence that very different climates were prevalent in times long before the peats began to form or the forest cover to creep back, and this is preserved in some of the cave deposits in which the bones of extinct animals have been found. At the beginning of the Ice Age, and we may now be speaking of nearly a million years ago, the land-sea level was a little different, and as ice spread across the coasts from off the North Sea area, coming partly from Scandinavia, it covered the beaches and banked up against a sea cliff at Sewerby, near Bridlington. In the beach deposit thus covered by glacial debris, the bones, teeth and traces of many animals were found,
including those of the hippopotamus, rhinoceros and the straight tusked elephant, all closely related to the animals still living in the hot lands of Africa. Above these and separated from them by the glacial rubble, were the bones of a very different group, mammoth, giant deer, urus (a species of wild cattle) and bison.

At Victoria Cave near Settle (SD838650) and at Kirkdale Cave in North Yorkshire (SE677856) animal bones were very abundant. Each cave had been a hyaena den— at Kirkdale there were the remains of more than two hundred hyaenas and bones of many other animals, some gnawed by the hyaenas, included hippopotamus, lion, straight-tusked elephant, slender-nosed rhinoceros, and also woolly rhinoceros, mammoth and reindeer. The story is the same in all cases—before the Ice Age and also during a long "inter-glacial" period within it, the climate had been warm enough for these semi-tropical animals to thrive. During the Ice Age they became extinct and only the mammoth and species of rhinoceros with a thick woolly covering and adaptation to Arctic conditions could survive.

Although Palaeolithic (Old Stone Age) man hunted these colder type animals on the fringe of the ice-covered areas, the conditions in Yorkshire were not attractive to him, so we have no human remains until the end of the Ice Age, and during the time evidenced by the zone 11 peats of our table. A few fishers and fowlers reached the eastern end of a glacial lake Pickering, around the present parish of Flixton, leaving a few flints as the only evidence of their visits. In the beginning of post-glacial time, zone IV, the pre-Boreal, another group made a permanent home at Star Carr (TA027810), five miles S.S.E. of Scarborough, building a platform of birch trunks and brushwood at the edge of the lake Pickering and living on it, probably in skin tents. They fished and hunted red deer, and in fewer numbers, the aurochs, elk, roe deer and pig, living largely on the deer venison and hazel nuts. They used deer antler for many of their tools, and kept a few dogs. They cut long splinters of antler, with flint tools, and worked them into spear points which have a row of well-cut barbs down one edge. The Star Carr people belonged to the group of forest people called Maglemosian, who came across the forested North Sea area.

Many of the remains can be seen in the Scarborough Museum.

Later than the Maglemosian there was a more nomadic people who moved from Africa into North France and Belgium and settled around Fer en Tardenois. They made very minute flint
implements, used bows and arrows tipped with flint, and may have used fire, but had no pottery. They were hunters and made summer forays onto the Pennines hunting birds and small game, coming year after year to the same temporary camps where the chips of flint, small implements and debris from making new ones from flint nodules which they brought with them, are the chief evidence of their visits. They are called the Tardenoisian people and may have come in all the long period from about 7500 B.C. to 3000 B.C. Their tiny implements (sometimes called "pygmy") are found on all parts of the Pennines and also, though in less abundance, on the North York Moors.

A further group of people, the Azilian, moved from the south of France. They were fishers and hunters of small game, and users of bone tools. About 6000 B.C. they settled in the caves on the west Scottish coast and at a few other coastal sites, also at a few inland sites on the Pennines near the glacial lakes and tarns. Their most typical tool was a flat harpoon, barbed on both edges, the best example being from Victoria Cave (in Pig Yard Museum, Settle). A rather unique bone tool was unfortunately lost, but there is a cast replica in Craven Museum, Skipton. It was found in the Calf Hole Cave, Skyrethorns and is a chisel of boar's tusk set in a haft of deer horn.

During the Boreal period of Tardenoisian and Azilian, zones V and VI, pine had reached this country and the woodlands were fairly open pine-birch forest with a great expansion of hazel scrub. Hazel nuts, judging by the amount of hazel nut shells sometimes found, were an important food source for the Mesolithic population. About 6000 B.C. the climate became appreciably warmer and wetter, entering the Atlantic period, zone VIIa of the peats, which lasted until 3000 B.C. About the end of the period one of the great advances in ways of living began with the so-called "Neolithic Revolution" in which men changed from being only wild-food gatherers to producers of food, cultivating grains and domesticating animals. The women made pottery and baskets, used fires and cooked food. More permanent dwellings were made, huts were built and, in the south, great defensive hill-top forts were constructed. The Neolithic people came here from the Continent, probably as simple farming groups, migrating with their cattle and sheep and bringing seed corn with them, to pioneer a new country. A slight sinking of the land had caused the flooding of the North Sea basin and the cutting of the English Channel, so the Neolithic people had crossed the sea in boats, probably dug-out canoes, but were not really a sailor community.

To make small clearings in the woodlands that covered most of the country, the Neolithic farmers used stone axes, either of flint or hard volcanic rock, which were brought to an approximate shape by coarse chipping and finished by grinding and polishing to a sharp edge or, in the case of the stone axes, grinding to a smooth shape and surface all over. In connection
with the axes we see the beginning of specialised craftsmanship and of trade, as material suitable for such use was found only in a few places. Good "axe stone" occurs at Graig Lwyd in North Wales and at Langdale Pikes, English Lake District, and at each of these places the rock was got and axes were made in very large numbers. The Langdale rock is easily recognised and "Langdale axes" are found at many places, into Scotland, all over the North of England, and even down through the Midlands to the south. They are seen to be along definite lines, fanning out across Stainmore into Yorkshire, and by other clear dispersal routes. A comparable organisation existed in East Anglia where flint was mined at Grimes Graves, worked into tools and axes and carried to many parts of the country.

The coarser working on the flint axes was accompanied by very skilful finer work on arrow points, knives and saws. The arrow points are either triangular, diamond or leaf-shaped, reduced to a thin section by chipping or flaking on each surface, and brought to very sharp edges and perfect shape by minute secondary chipping. The saws which are small, and probably for working bone, have teeth often finer than ten to the inch, on the edge of the narrow blade. This flint working art was carried into the Bronze Age when the arrow points were developed into the many types of "barbed and tanged", and some larger spear points and other tools were made. A common tool of all periods is the "scraper", probably used in preparing skins and in shaping arrow shafts. Every museum has an abundant collection of all these implements.

About 2000 B.C. a new group of people appeared in the country who built stone structures, many of which are still famous monuments. These people are often referred to as "Megalithic", though this term ought to be reserved for their large stone monuments. They were the people who built Stonehenge and other stone circles and who brought this culture with them from the Mediterranean. They built elaborate tombs, "passage graves", of which the most striking examples are in Ireland. There are two very decadent examples on the Pennines-Giants Graves, near Penyghent House, SD856732, and the Bradley barrow near Skipton, SE009476. These are both long barrows in which more than one burial was made in a cist or small chamber. The remains, however, will prove disappointing except to the experienced student, and a special visit to them is not recommended.

Of far greater interest to any visitor are such monuments as the "Devil's Arrows" at Roecliffe near Boroughbridge, SE391666, and the Rudstone monolith, five miles north-west of Bridlington, TA097677. These enormous standing stones (the Rudstone is 251 feet high, and the Devil's Arrows are 18, 21 and 22-1 feet), are related to the many stone circles which have some ceremonial significance we do not now know. In the past the large stones of several of the circles
have been taken for gateposts or broken up as a convenient quarry for rough walling stones, but many remain almost complete and these are worth a visit.

A good group is to be seen on Rumbald's Moor (Ilkley, Addingham and Burley Moors), easily found from Ilkley as a centre. Twelve Apostles is a circle near the footpath from Ilkley to Dick Hudson's, Eldwick, and has twelve stones, a few feet high, set on a circular gravel bank 52 feet diameter. Other circles are at Grubstones, SE136447, Hornciffe, SE134435, and Bradup, SE090440. On Brackenhall Green, Shipley Glen, there is one with a double row of stones, which used to be called the Soldier's Trench, and there are several others, mainly on the Pennines. Perhaps those easiest to find are at Yockenthwaite in upper Wharfedale, SD899794, and near Carperby on New Pasture, SE991901. On the North York Moors, the Bridestones, NZ576978, was probably a circle enclosing a burial mound, and there are other small circles such as Stanton, near Scarborough.

This megalithic culture included the making of the mysterious "cup and ring" rock carvings and many fine examples of these are to be seen on Ilkley Moor. The simplest carving is a round "cup" which is pecked into the rock surface and might be a couple of inches diameter, and a concentric ring or more than one, round it. Both are shallow hollows and grooves and many are weathered to slight depth so that a good light is necessary to see them to the best advantage. Some of the Ilkley rocks have complex patterns. Near St. Margaret's Church in Ilkley some fine examples, though badly worn, are preserved, but a bright day is needed if they are to be seen.
at their best. Here the cups are surrounded by several circles. A good group will be found near the Cow and Calf Rocks at Hangingstone Delf, and other famous ones at Badger Stone. The best known, the Swastika Stone near the head of Hebers Gill, is probably later, of early Iron Age. It is at SE094470. There are a few cup and ring rocks in North Yorkshire and a few stone circles, but most of them lie on the Pennines.

There was a migration from the Continent into Britain of a people called, for convenient reference, the Beaker Folk, from their frequent custom of burying a pottery vessel of beaker shape with their dead. They came about 1800 to 1500 B.C., mainly entering by the Humber, spreading over the Yorkshire Wolds and a small number of them crossing the York moraines into West Yorkshire. Over 150 beakers have been found in Yorkshire and at least 130 of them were found in burials on the Wolds, while the one at Grassington, Wharfedale, and a few fragments from Malham Moor and Upper Ribblesdale are the westernmost examples. The graves in which beakers are found are under circular mounds, with a "cist" or rectangular stone box made with large slabs and floored and covered with slabs, in which the body was placed in a crouched position. The beaker was placed near the head, probably containing or symbolising food and drink for the spirit's long journey into the next life.

These people used bronze in the form of knives and daggers, and introduced the cultivation of wheat and the making of the fine quality "beaker ware" pottery. Their habitation sites are often small farmsteads, one or two circular huts and a few small and irregular fields, or a large family habitation with a few clearings not far off, but not directly linked to it. The best example of this last type is the Bronze Age house on Malham Moor, near Comb Scar, SD894648, on a small and very sheltered limestone terrace. It is a sub-rectangular building with massive boulder walls which are often six feet thick and still stand up to three feet high, enclosing a space 19 feet by 18 feet. At the centre a deep post hole shows that a timber roof was supported over the whole, and on the floor there were traces of charcoal, a few flints of early Bronze Age type and bits of pottery. It was probably the home of a family which in the course of a few generations cleared some of the many small fields round about. There are not many Bronze Age homesteads to be seen with certainty, as the round but of 10 to 15 feet diameter built by most of the peasants cannot clearly be distinguished from similar huts which were widely built in the Iron Age, unless some actual implement or pottery fixes a date. There is a late Bronze or early Iron Age farm on Dewbottom Scar, SD912692, overlooking Cowside Beck and about 21 miles from Arncliffe. There is a large field about 120 feet square, defined by gravel banks with some large boulders on them, with four smaller fields adjoining and linked to it. Circular huts with dry stone walls, about 10 feet inside diameter and walls about 3 feet thick, are placed, two of them in the course of a field wall and three at
junctions of field corners. Several other small buildings and enclosures are in close association, and the whole makes a rather fine largish, family farm and small holding.

There was some trade with Ireland throughout the megalithic folk period, flat bronze axes being brought by a route across Yorkshire and possibly carried by sea across to Scandinavia. All along this route, which comes in by the Ribble, crosses Airedale near Keighley, over into Wharfedale then across the York moraines into East Yorkshire, flat axes are found, both those which have been in use and a few new and unused ones. In stone implements, the Bronze Age people replaced the polished stone axe of Neolithic time with a stone axe-hammer, perforated to take a haft. In flint tradition, barbed and tanged arrow points, scrapers and spears reached a very high quality of workmanship. In North-East Yorkshire the jet which occurs in rocks along the coast, and is so well known in Whitby, was picked up from the shore and worked into buttons and beads and there is evidence which shows that the jet, both as buttons and as fine necklaces, was traded to many other parts of the country.

So far in the prehistoric story we have dealt mainly with material which is largely or only to be seen in the museums, but with the Bronze Age there are remains which often make a clear, and sometimes a spectacular feature on the ground. There is one group of monuments in which Yorkshire is richer than any other part of the country, the "henge" structures, of which the most famous in the south are Stonehenge and Woodhenge. The "henge", which dates from the end of Neolithic and the opening of Megalithic times, is essentially a monument of religious significance. A "henge" has a central circular platform which may be from 60 to 600 or more feet in diameter, surrounded by a ditch with a high bank outside it. At one or two places in the circumference the bank has a break corresponding to a causeway across the ditch, providing an access to the central area. The "stonehenges" have one or more concentric circles of standing stones on the central area and the "woodhenges" may have had circles of wooden posts, or in some cases may be free of them.

The central platform would be used for ceremonies-perhaps fertility rites to ensure a good harvest and increase of stock-or may be connected with the seasons or other purposes we don't know about. The ordinary folk would not take part in the ceremonies, but would probably watch everything from the bank. The biggest group of henges in the country lies north and east of Ripon, with two henges on the Pennines, one about a mile N.N.E. of Grassington, SE013654, and the other, Castle Dykes, near Aysgarth, SD982872. The finest group is on Thornborough Moor, SE285795-SE353735, 51 miles north of Ripon where three henges lie in a line at distances apart of 660 and
Each of the three has two "causeways" and the six causeways are in a line N.W. to S.E. The three monuments are about 800 feet diameter. Five miles away on Hutton Moor, 34 miles E. of Ripon there are two more, not so clearly preserved, being much reduced by ploughing.

The middle Bronze Age was mainly a time when the "native" people, descendants of Mesolithic and Neolithic stocks, mingled with the Beaker folk and absorbed them. They expanded at a rapid rate, spreading much further to the west right across the Pennines. This new hybrid population continued to bury their dead under small circular barrows but sometimes used cremation which, as it became general, led to the making of urns to contain the ashes and burnt bones. The barrows are so numerous and so often gathered together in large numbers that the names Urn-folk and Urn-fields have been given to the people and their cemeteries. On the North York Moors, on some of the prominent ridges and spurs, the burial mounds, low, small diameter stone heaps, are crowded in scores and hundreds. On Danby Rigg, NZ710065, between Danby Dale and Little Fryup, the mounds number a few hundreds, while on Crown End, NZ668075, three miles to the west, there are at least a thousand mounds. Other urn fields can be seen at Thompson's Rigg, SE882922, and Alan Tops, NZ828028.

There is nothing comparable to the urn fields to be found on the Pennines but isolated burials are fairly numerous. Many of them have a characteristic mid-Bronze Age pottery vessel with them, called a "food vessel", smaller than a beaker or a cinerary urn (for ashes) and thought by the early antiquaries to have been made to carry food for the spirit. The cinerary urns are the largest of all the burial pottery, often ten inches or more tall, with a long body of rough paste, topped with a big overhanging collar. The food vessels and beakers are usually decorated all over their surface but in the cinerary urns, decoration is nearly always restricted to the collar, which hatching. However, the best way to appreciate the Bronze Age pottery is to visit any of our larger museums where you will see plenty of examples of all types. Sometimes personal ornaments, weapons, knives and so on are buried with the skeleton or ashes, and again these articles will be seen in the museums. On the ground, only the burial mounds are to be seen. These can be very dull, small circular mounds which you would probably over look if they were not pointed out to you, given that name because it was the period during which some tools, in particular a variety of axes, daggers, swords and knives were made of bronze. The bronze was almost certainly brought by travelling bronze founders, rather like the later tinkers, who carried with them a small stock of bronze and some moulds, and added to their stock by trading for broken and worn-out implements. The founder set up his fire and cast new implements and from time to time he introduced new forms and fashions. The earliest axes from Ireland were flat, probably hafted in a cleft stick. A first improvement on this, coming from the Continent, was to hammer up the edges of the axe into flanges which could grip the haft. To prevent the haft being split by the shock of
repeated blows, a ridge was cast across between the flanges, and this naturally developed to a half socket on each side, making the implement called a "palstave". A later development was to cast a hollow head, giving a single socket for the haft. All these implements were called axes and no doubt were used as such to clear more forest, but some could have been hafted on a straight stick and used as hoes for the cultivation of the small enclosed fields. The climate of the Bronze Age was very pleasant, dry and warm, with woodlands in which alder, oak, lime and ash were the dominant trees, and the tree line reached up to 2,000 feet O.D. or more, with thin woodlands right over the Pennine summits. About 500 B.C. there was a rapid deterioration to cold, wet conditions, much less pleasant than our climate of today, and this poor climate persisted through the Iron Age. About 500 B.C. a new group of invaders had come into the south of England, the Hallstatt folk, but reached Yorkshire only in very small numbers. The only true Hallstatt site is on Scarborough Castle Hill where there was a settlement un covered beneath the Roman Signal Station. There were about 30 refuse or storage pits, with bits of broken pottery and animal bones. The pottery was of late Bronze Age type with some shards of true Hallstatt type, and dating about 800 to 400 B.C.

In the third century B.C. a group of invaders came in by the Humber to the Yorkshire Wolds, from around Marne in France, and their culture can be referred to as Marnian. They were a warrior group with a love of horses, and used chariots which were often buried with them. Unfortunately their burial mounds are no more interesting to look at than those of any other period, but the ornaments, harness and remains of the chariots are worth seeing in the museums. There were many chariot burials in East Yorkshire and one at least on the Pennines at Stanwick Park, NZ180115, just north of Richmond. The many bronze trimmings include several in which the design is based on a horse's head, which was in fact the common basis of much early Celtic design. There is a barrow cemetery of this date on the Wolds, about 34 miles north of Driffield, TA018633. It is the Danes Graves; a group of 200 round barrows 10 to 30 feet diameter, some with ditches. One of them was a chariot burial and all of them belong to the first Iron Age invasion of mid third century B.C. These invaders were a military caste and carried swords of iron with elaborate sheaths; swords of this kind and age have been found at Flasby near Skipton (now in the Craven Museum, Skipton), Clotherholme near Ripon, Cotterdale in Wensleydale, and at Toft Hill, Stanwick.

The military invaders conquered the native population and subdued them into a tribal group, the Brigantes, who by the first century B.C. and the opening years of the first century A.D., had become a strong tribal confederacy with a capital at Castle Hill, Almondbury, near Huddersfield. The hill fort there is well worth a visit. At an early date a bank and ditch cut off this natural promontory as a hill fort, and there is evidence of hearths in use about 56 B.C. In
20 A.D. a double rampart and ditch was dug to enclose the whole summit and these banks and ditches are the main part of the fine earth works you see today. This was the capital of Queen Cartimandua. In 1829 a hoard of coins was found at Castle Hill about 200 Roman coins and 18 British gold coins. Unfortunately the coins were scattered, but five of the British can still be seen at York Museum and a set of casts is on view at the Tolsen Museum, Huddersfield. Two of the coins have on them the names VOLISIO and DUMNOCOVEROS. Another hoard at nearby Honley, found in 1893, included British coins with these names and CARTIMANDUA, and it is now generally assumed that Volisios was king of the Brigantes, Dumnocoveros, his son, and Cartimandua his daughter and heiress, and queen of the Brigantes at the time of the Roman invasion. (The Brigantian-Roman story is told in The Romans in Yorkshire, Dalesman publication.)

Because of the very wet climate most of the occupation sites of the Iron Age lie on the land that was well drained and free of the heaviest forest cover. In general terms this was the great areas of limestone in the north-west Pennines, some areas of the Millstone Grit, also in the Pennines, and a few of the sandstones of the Yoredale Series, along with the Chalk Wolds of East Yorkshire. The limestone areas of Craven where the Great Scar Limestone makes many square miles of plateau surface around Ribblesdale and upper Wharfedale and all the country between, and the terraces of the thicker of the Yoredale limestones in Wensleydale, have abundant remains belonging to the period. There will only be room to describe a few typical sites as a guide to what to look for on these areas, as the total number of sites is many hundreds.

The Bronze Age tradition of a family unit persisted through the Iron Age until the influence of the Romans began to be felt. All over the limestone country the most numerous of the settlement types is that of a single but with one or a few irregular enclosures near to it, not entirely distinguishable from late Bronze Age. The but is usually a circular bank of gravel and boulders, often with a few large boulders set on its top. The circle may be 10 or 20, and sometimes 25 feet diameter, and the bank two or three feet thick but now only a foot or so high. There is not always a recognisable entrance. The circle may be against or in the corner of a roughly rectangular or curved enclosure, one side of which is commonly a low limestone scar against which the whole site abuts for shelter. The enclosures are of no regular size or shape, but vary, 10, 20, 30 or more feet long and usually less across. Again it is a puzzle that there is only very rarely a break in the bank which would have made an entrance to the croft. The circle is the stone foundation of a hut, probably very simply made with tree branches leaning together at the top and tied with thongs, with the feet wedged into the stone foundation bank. The bank has never been more than an anchorage for the but walls. The branch framework could be covered with thatch or with skins. Entry could have been provided by leaving a small section of the side open, with a flap of skin to act as a door—it would then be easy
to step over the butt foundation wall. The "croft" was the foundation of a stockade, again of branches or wattle, in which a few sheep, goats or stock of any kind could be penned. The people who built these homesteads which number some hundreds, were almost entirely pastoral, combining the care of stock with some hunting and fishing.

Near these small butt settlements is often found that small valleys among the limestone scars are divided into small enclosures by stronger gravel or boulder walls which go right across them from scar to scar. These enclosures made between two scars and two cross banks may have been used for cattle or for horses, for the "Celtic" people had a great love of and skill with horses. On Langeliffe near Kettlewell, between SD980719 and SD984708, there are a dozen such small homesteads on a limestone terrace, backed by a limestone scar, some of them with one hut, some with two, but all with their crofts of varying size and shape. The limestone terraces on both sides of Wharfedale from Grassington to Buckden and in part of Littondale, carry large numbers of these huts and crofts. They are found but in smaller numbers in Wensleydale, again mainly against the limestone scars, looking out across the limestone terrace.

An equally common type of settlement, probably of Iron Age, is a group of crofts, irregular, with a few huts associated with them the whole rather strung out and joined together by boulder walls. These occur on ground other than the limestone terraces, still on the limestone area but in more open areas and more level ground. A good example of this type of settlement, with some associated fields, lies to the south of Mastiles Lane, as it rises from Kilnsey to the moor top. On many limestone scars where there is a bit of a break or a set-back in the limestone edge, the recess is walled off with a very strong wall and it is possible that some of these places may have been cattle pounds or they may have been dwelling sites without permanent huts, the people probably using skin tents within the enclosing bank. It is very rare that hut circles can be associated with them.

It seems fairly certain, at least on the Pennines, that the mass of the Bronze Age descendants just adopted the Iron Age ideas slowly as they came along, without any real break in their way of life beyond an increasing poverty for the bulk of the peasant herdsmen. The basic pattern continued to be the separated settlement, rarely more than a one family site, using the circular butt and the irregular crofts and varied enclosures, with occasional larger enclosures that might possibly be called fields. The settlements most clearly of Bronze Age are perhaps some in the North York Moors, such as Crown End, 11 miles S.W. of Castleton, NZ668075. There one can see a settlement of large irregular enclosures with boulder walls, one enclosure with many hut circles and nearby a very large circular enclosure 250 feet diameter, with two good entrances, the bank being set with large stones. Associated with the settlement there is a large number of burial cairns, probably of the Urn-folk. The whole area is on a spur which has across the neck a defining
ditch and bank. In North Yorkshire there are also a few "promontory" sites. There is a semicircular area of about 2-1 acres, cut off on Bolby Scar, SE506857, by a bank and ditch 25 feet across, the high scar forming the remaining sides. Three barrows within the area have been proved to be earlier than the main work and recent excavation has found Iron Age pottery. Three-quarters of a mile south of Sutton Bank there is another promontory site, at Roulston Scar, SE514816, a short bank and ditch across the neck of the promontory cutting off about 53 acres. These two examples may be called promontory forts and belong to the second and first centuries B.C., the early Iron Age.

There is a form of hut which may belong to the Bronze Age, as the few tiny sherds of pottery found in them seem more akin to late Bronze Age, though they may be very early Iron Age. These huts are generally about 20 or 25 feet diameter, and have the very regular shape, almost perfectly circular, of a saucer. Their bank is a well-made boulder bank, steep on the outside, rising a foot or so above the general ground level, and then sloping gently inwards into the saucer which at the centre may be a foot or even two feet below the outside ground level. Near Shorkly Hill, on the east side of Malham Cove four of these saucer huts lie in a roughly diamond shape enclosure, SD901639, each having a well formed entrance from the common area inside the boundary bank. There are others on the corner of Chapel Fell, and others are scattered about, in twos or threes, at various places on the Pennines.

So far we have considered sites which may fairly be thought of as belonging to a single family or individual. There are, however, many sites which seem to have housed a community of more than one family, and these can be studied in two groupings. There are "multiple" sites which may range from Bronze Age, into the Iron Age, and then there are the quite distinct Romano-British sites. For convenience the ones not Romano-British are often referred to as "native". Of the native sites several lie in West Yorkshire, and some of these, which are often very striking monuments, can now be mentioned. If you wish to visit these, remember that they all lie on private ground and permission must be obtained to see them. Near Kilsney, SD791669, at Outgang Hill, there is a massive embankment, in part three feet high, enclosing an oval area 150 feet by 100 feet. This is divided internally into four circular huts from 15 feet to 20 feet diameter, and four roughly rectangular areas and some irregular parts. On the north side there is another enclosure 60 feet by 50 feet with a hut in one corner, and there is an area of large fields associated with the site and linked to it by a sunken road. At Scot Gate Pasture in Conistone, SD988684, there is a rather comparable high banked enclosure 200 feet by 170 feet enclosing six or more huts. The largest circular but is 40 feet diameter, the others from 20 to 30 feet. At Threshfield, SD984643, in Chester Wood and Little Wood, there is a group of well-defined fields with massive boundary walls, and in a central enclosure a connected group of six but circles. They have a
double wall of large boulders packed in with smaller stone. The walls are 5 feet to 8 feet thick and the huts are 25 feet, 25 feet, 30 feet, 40 feet, 45 feet and 40 feet internal diameter. The walls are now about 2 feet high. There are two other huts among the fields. In each case we seem to have the communal settlement of several families, in an enclosed area, with a large system of fields around them, leading a life which seems to have been based, at least in part, on arable agriculture. All are on rather lower ground in areas where there would be a deeper soil than on the limestone terraces.

Soon after the Roman invasion the attack on the north began, culminating, in the Yorkshire Pennines, in the battle of Stanwick in 74 A.D., This was to be of the greatest importance as the opening of the Romano-British period in native life. Cartimandua was at Almondbury and when she divorced Venutius (see Romans in Yorkshire) he gathered the Brigantes of West Yorkshire together and started many works in preparation for a Roman attack. Among those easily seen are Gregory, near Grassington, SD988684, Ta Dyk well, SD986756, and the Fremington Dykes in Swaledale, near Grinton.

Gregory is a high limestone hill now in the midst of Grass Wood and its highest point commanding a large part of upper Wharfedale. The summit is occupied by a fort which is built with massive stone walls but no ditches. The precipitous hill slopes have been made more defencible on the north-east side by walling up all gaps in the limestone scar, and on the south side by long and massive outflung walls right to the edge of the steepest slope. Further up the dale and completely crossing the head of the first pass into Wensleydale, Ta Dyke stands at the head of Park Rash, spanning the road into Coverdale.

![Diagram](image)

It is at the last big limestone scar, a ditch a mile long and 20 or 30 feet deep, made by excavating a rock-cut trench at the foot of the limestone cliff and piling the debris as a bank to
deepen the down hill side. On the top of the high side there is another bank and several enclosures. The road from Kettlewell into Coverdale crosses the Ta Dyke about its mid-point so that it is one of the easiest monuments to find. The size of it and the amount of work it has involved will give one cause to respect the energy and organisation of the native population under Venutius.

After defeat at Stanwick, the bulk of the native Brigantes retreated into the western dales, with Venutius occupying his hill fort of Ingleborough. The summit is surrounded by a big wall within which there are the foundations of about 20 circular huts. The main population settled on the limestone plateaus around Ingleborough, and from Settle across to upper Wharfedale, with others on the limestone and grit terraces of Wensleydale. These settlements are different from the earlier ones as they include large areas of fields, rectangular huts, and some other features borrowed from the Romans during the intervals of peace in the Roman occupation. There is thus a clear-cut difference between what we can call the "native" and the "Romano-British" (mainly second to fourth centuries) remains.

About 82 A.D. Agricola built a road system which enclosed the Brigantes of the northern Pennines, and in 122 A.D. Hadrian began the building of the wall from Tyne to Solway. In the Pennines there was a good deal of unrest and revolt among the Brigantes and in the caves of Craven a fine series of small remains have been got by excavation, which, while having a few Roman objects among them, are chiefly a development of the early Iron Age La Tene arts of working in bone and particularly in bronze and enamels. The most important group belongs to about the first quarter of the second century and the most interesting objects are the bronze brooches of several types, many still bearing traces of coloured enamels (page 20). Bone was used for fish hooks, dress fastenings, weaver's combs, needles and other small tools.

There is plenty of evidence with these and the numerous spindle whorls that a textile skill was well developed and that among the natives there was some degree of people of sufficient wealth to have personal ornaments of value. The principal change, however, was in the development of agriculture based upon arable fields, and some of the most spectacular "pre historic " sites are the large areas of such "Celtic fields" associated with habitation sites. There are many stages to be recognised: "native" settlements with an occasional rectangular but or a small field or two, with many intermediate sites up to large ones such as Grassington where only traces of the earlier "native" type are to be seen in over 200 acres of RomanoBritish fields.

A good group of "Celtic" fields is to be seen at Malham and is crossed by public footpaths, so that there is no difficulty of access. It lies between Shorkly Hill and Stridebut Edge. SD902640 and SD907638. Stridebut is the settlement with eight circular huts and a rectangular house and several enclosures. Two of the sub-rectangular enclosures, about 50 feet by 50 feet, and 35 feet by 40
feet, are built against the limestone scar and each has in its south wall the feature called a "wall passage". The south wall is about 10 feet wide and along its centre line is a carefully built, flag-floored "trench", almost 40 feet long overall. One end is blocked off by large boulders and the other curves round to open into the enclosure. The trench is between two and three feet wide and now about two feet deep, and is well built in good boulder walling. This is a feature of many Romano-British sites recently surveyed, and may have been a form of storage place. It could be covered with a series of heavy wattle hurdles, or with light timber, which could be lifted from any part without disturbing the rest. The wattle cover could easily be made waterproof with a skin cover. Since the first "wall passage" was discovered many others have been found and they seem to be a fairly regular feature of the very mixed sites, where round huts and rectangular enclosures are both present.

There is a very big settlement to the south side of Addlebrough in Wensleydale, where on Greenber Edge, SD950869, and for a length of nearly half a mile along the terrace, there is a complex of huts and enclosures where there are at least three "wall passages" to be seen. On the slopes of Addlebrough there are large areas of fields which are associated with this site. Perhaps the best known area of fields is that near Grassington, which spreads over part of Lea Green (with public footpath), High Close, and Sweetside (footpath), covering an area of nearly 300 acres. The site is a network of stone and turf banks, in the main enclosing oblong rectangular fields which may be up to 400 feet long and 75 feet wide, with a good deal of variation between narrow and nearly square shapes. The fields are often associated with smaller irregular crofts and enclosures, with a few but circles, with narrow roadways defined by banks, and with long "boundary" walls. Nearby there is at the north end of Lea Green a major habitation site, almost worthy of being called a village, with a number of large rectangular huts inside a massive enclosing wall. The remains from the area belong mainly to the second to fourth centuries A.D., and the whole forms a Romano-British community site of considerable extent. Many sites of various ages have been described in this booklet, with the prime object of helping the reader to acquire an interest in the long prehistoric story of our part of the country. Remains on the ground are very numerous, perhaps more so than in more cultivated areas, and anyone visiting the upper Dales, the North York Moors, or the Wolds, will be very likely to come across traces of occupation, burial mounds, and so on. With a little effort one can soon learn to recognise them, and respect them as prehistoric sites, even if it is not easy to put a date and description upon them. The material to be seen in all our museums should have more meaning and significance, if one remembers that flint arrow points, stone axes, bits of metal, and all the minor objects of the "prehistoric" cases, have actually played their part in the life of the people who made and occupied the
sites which now appear only to be stone and turf banks, but which in the past were the homesteads of a people struggling to live and to enjoy their life.

As a final word it must again be said that prehistoric monuments and material can never be replaced if damaged or lost. anything, however small, that you find will have more importance and will tell you more about its meaning and history, if it is shown to the curator of a museum, and if it stays in the district where it was found. Your generosity in giving it to a local museum may help to instruct and inspire someone else and may fill in a little gap in the story which the archaeologists are trying to write about the past. The goodwill and care of the public is one of the great necessities in the work of archeology.

Foundations of the Roman Fort at Bainbridge, in Wenslydale