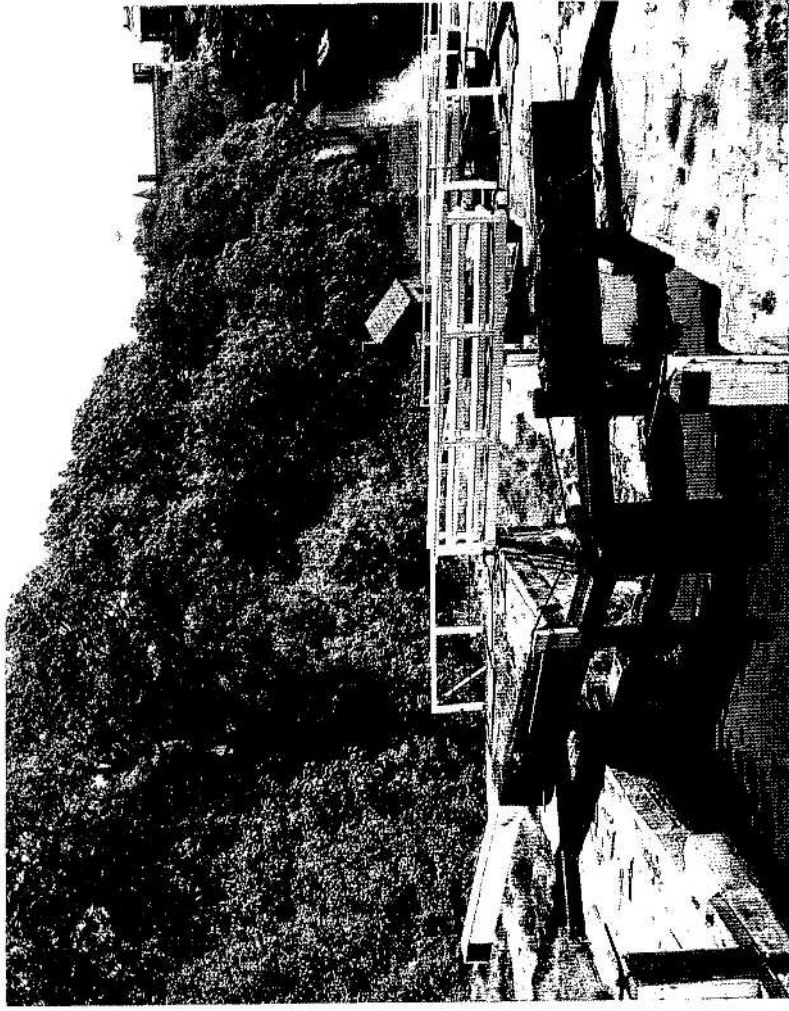


The arrival of canals was a boon to many industries, especially the textile area of west Yorkshire. Here the Leeds-Liverpool canal runs up Five Rise Locks at Farnley. The mills in the background are arranged along the bank.



Canals

The canals of England are mainly the creation of the last forty years of the eighteenth century and the first quarter of the nineteenth, and they introduced a number of distinctive changes into the landscape. Not only did they bring stretches of water into country often lacking in them, as in many parts of the Midlands, with consequent changes in bird and plant life, but they also brought — mostly for the first time — aqueducts, cuttings and embankments, tunnels, locks, lifts and inclined planes, and many attractive bridges, and they greatly influenced the growth and appearance of many towns. One town, indeed, was entirely the creation of canals (Stourport in Worcestershire) and is worth seeing solely on that account.

It is true that the Romans had constructed two or three artificial waterways in this country large enough to be regarded as canals: Car Dike that winds from Peterborough up to Lincoln, the Foss Dike joining the Witham and the Trent, and perhaps the Itchen Dike from Winchester to the Itchen. But these were hardly distinguishable from drainage channels, having none of the features that we associate with canals. The first true canal, with locks and a towpath, was that constructed by the municipal authorities of Exeter between 1564 and 1567 to allow barges to pass around the weirs on the river and to reach the city. On this canal poundlocks were used for the first time in England, i.e., an upper and a lower gate fitted with sluices and enclosing a chamber into which boats passed to be raised or lowered to the next level. The Exeter canal had three locks of this type. It was a small undertaking, only sixteen feet wide, three feet deep, and about three miles long, but it was a remarkable work for its time, all the more so because it was a municipal enterprise. Since then it has been

As already noted, the Car Dike, north of Peterborough, is the earliest not to have been a canal but a Roman drainage-water drain.

three times enlarged, in width, length and depth. It became a favourite walk in the eighteenth century for the citizens of Exeter, and remained so until recent years. Perhaps it still is, for it still winds peacefully between the elm-shaded meadow of the Exe valley past congenial inns.

The Exeter canal remained the only one of its kind for almost two hundred years, until James Brindley made his first canal for the Duke of Bridgewater in 1760. In the meantime more than a thousand miles of rivers had been made navigable, but these made no noticeable change in the landscape. But Brindley's canal from the coal-mines at Worsley to Manchester had several features hitherto unknown. His principle was to keep his canal as level as possible. To achieve this he carried it over roads and streams by means of aqueducts, of which the most notable was that at Barton (two hundred yards long and nearly forty feet above the Irwell), crossed valleys by embankments, cut through hills where they were unavoidable, and followed the contours where possible. At times the Worsley canal followed a most circuitous route in order to maintain a level course, and this excessive winding remained a feature of the early canals. On reaching Worsley the canal tunneled into the sandstone cliff to reach the coal workings some three-quarters of a mile inside the hill, where it divided into channels that eventually reached a length of several miles. The village of Worsley was transformed by this undertaking, the first of many to be so affected by canals. When Josiah Wedgwood visited it in 1773 it had 'the appearance of a considerable Seaport town. His Grace has built some hundreds of houses, and is every year adding considerably to their number.'

Later canals became more daring in their engineering as experience was gained. The Grand Trunk Canal (1766-77) not only made use of aqueducts, cuttings and embankments, but was carried through the hill country between the Mersey and Trent basins by means of five tunnels, of which the Harecastle Tunnel near Kidsgrove was 2,880 yards long and more than two hundred feet beneath the surface at its deepest point. One can still see this triumph of Brindley's engineering skill, though it is now disused, having been superseded by a second tunnel, parallel with the first, which was constructed by Telford in 1827. Altogether the Grand Trunk Canal had five tunnels and seventy-six locks on its ninety-three mile course from the Mersey to Shardlow, near which it entered the Trent. Shardlow was transformed from a quiet farming village into an inland port like Worsley, but with even wider connexions. Wharves were constructed to handle the coal and timber traffic, and tall red-brick warehouses arose after 1777 for iron, for cheese, for corn and salt. By the early nineteenth century three 'large carrying establishments' had made their headquarters here, of which Sutton & Co. carried on a great trade with Hull and Gainsborough, Liverpool and Manchester, the Cheshire salt works and the Potteries, and with Birmingham, Dudley and the Black Country. For many years Shardlow was 'an improving place', but the Derbyshire directory for 1857 observes that business had declined greatly after the opening of the Midland and other railways. But one can still go to Shardlow, which has sunk back into obscurity, and see the tall warehouses, the wharves, and the later Georgian Shardlow Hall where the prosperous James Sutton lived, and all the other evidences of a place that was virtually created by the canal age.

More striking, however, than Shardlow is Stourport, at the confluence of the Stour with the Severn. Before 1772 only a little ale-house stood here, on a sandy waste. With the completion of the Staffordshire and Worcestershire Canal in that year, and the refusal of the town of Bewdley to have anything to do with it, a new town shot up at the point where the canal joined the Severn. Soon there were extensive wharves and basins, tall warehouses, boat-building yards, and 'a considerable iron foundry belonging to Messrs Baldwin'. Just as Shardlow was a great inland distributing centre for the east Midlands, where mining, industry and agriculture mingled their products, so Stourport became the emporium for the west Midlands, connected by river and canal with most parts of the kingdom.

Some notable canal engineering was carried out by men like Rennie and Telford. Rennie

built the beautiful aqueduct carrying the Lancaster Canal over the Lune; but even more striking was the Pontcysyllte aqueduct, constructed by Telford between 1795 and 1805, carrying the Ellesmere Canal over the Dee. This, perhaps the greatest monument in stone of English canal engineering, is over a thousand feet long and 121 feet above the river. On the same canal may be seen the Chirk aqueduct and tunnel. Telford's canals took a much more direct course than Brindley's, and so involved much more dramatic engineering, of which a splendid example is the bridge over the deep cutting near Tyrley, on the Shropshire Union Canal.

Tunnels, too, became bolder in conception. The Sapperton tunnel (1789) at the summit of the Thames and Severn Canal bores through the Cotswolds for more than two miles. The Pennines presented the most formidable obstacles of all to the canals, but even they were successfully overcome. The Standedge tunnel, at the highest point (637 feet) of the Huddersfield Canal, was 5,415 yards long. On the little canal linking Tavistock with the navigable Tamar in Devon, the Morwell Down tunnel (1804-17) was a mile and a half long and emerged at its western end nearly 240 feet above the river meadows. This drop was overcome by means of an inclined plane, up and down which the loaded barges were carried on trolleys. For many years the quay at Morwellham was

*a scene of busy industry, with its unloading barges, and shouting sailors, and hammering workmen, and train of waggons ascending or descending the inclined plane. A quantity of ore is here shipped off to distant smelting-houses. It is curious to enter the well-swept yard, and observe the different wooden shafts down which distinct ores from various mines are poured. Then it is to be collected, and placed on board the vessels bound for distant quarters. These ships in return bring coals, and lime-stone, and many other commodities.**

By the end of the nineteenth century the quay was deserted; and now it is a grass-grown waste covered in part with the ruins of houses and other buildings. The canal was derelict for many years, but now flows again to produce electricity for the neighbourhood; and it still makes a pleasant summer evening walk from Tavistock to the tunnel mouth.

By the 1820s some three thousand miles of canals had been made, the industrial districts in particular being a network of grimy waterways. But all over the pastoral Midlands and the south of England too, the canals flowed clear and sparkling in the sunshine, something new in the landscape with their towpaths, lock-keepers' cottages, stables for canal horses, their Navigation or Canal Inns where they met a main road, and their long and narrow gaily painted boats. The early canals were contour canals, winding about for miles in order to circumvent a hill; but the later ones were made as straight as possible by means of cuttings and embankments. Sometimes an older canal was straightened by later engineers. The Oxford Canal, for example, was shortened by thirteen and a half miles between 1829 and 1834. The old course and the new can be seen

The construction of Pontcysyllte aqueduct is misleading. The masonry contains some substantial stonework but the outstanding feature is the cast-iron water trough which carries the canal across the masonry piers.

The canal is no longer a grass-grown waste. It has been completely restored and its former importance can be fully appreciated, even if it has now lost its earlier

* Quoted by Finberg, *Devonshire Studies*, p. 170.

particularly between Hawkesbury Lock, where it joins the Coventry canal, and Hillmorton near Rugby. In 1868 the Fenny Compton tunnel, on the same canal, was removed and replaced by a cutting.

By vastly cheapening the carriage of heavy materials over long distances, the canals also brought about indirect changes in the landscape. Thomas Pennant observed in 1782 that the Grand Junction Canal, between Trent and Mersey, had brought in new building materials: 'the cottage, instead of being half covered with miserable thatch, is now covered with a substantial covering of tiles or slates, brought from the distant hills of Wales or Cumberland. The fields, which before were barren, are now drained, and by the assistance of manure, conveyed on the canal toll-free, are clothed with a beautiful verdure.' But it was left mainly to the railways to break down finally the various regional traditions of building in England, and to put an end to the use of age-old local building materials in favour of standardised brick and slate.

Railways

Two generations of canal-building brought about great alterations in the landscape of England, now matured by centuries of slow growth, but these changes were highly localised. They were confined for the most part to the close proximity of the waterways and some parts of the country hardly knew them at all. The railways made a more massive impact. Not only were they greater in mileage, penetrating to remote places unknown to

One very special place to appreciate this and other aspects of the English landscape is in the marshy south-west of Braunton, Northamptonshire. The either side of the River Leam, lie the wonderfully served sites of the deserted villages of Braunton and Wolfhamcote, both apparently finally abandoned in the sixteenth century, together with the latter's church. They are hemmed in on the east by the Grand Junction Canal which still flourishes, on the north by the straight alignment of the shortened Oxford Canal on the west by the former Great Central Railway, constructed in 1896 and on the south by the extension of the old Daventry to Leamington railway. These lines of communication cut through the and-furrow of the open fields of the villages as if on the wandering line of the original Oxford Canal, south-east and west.

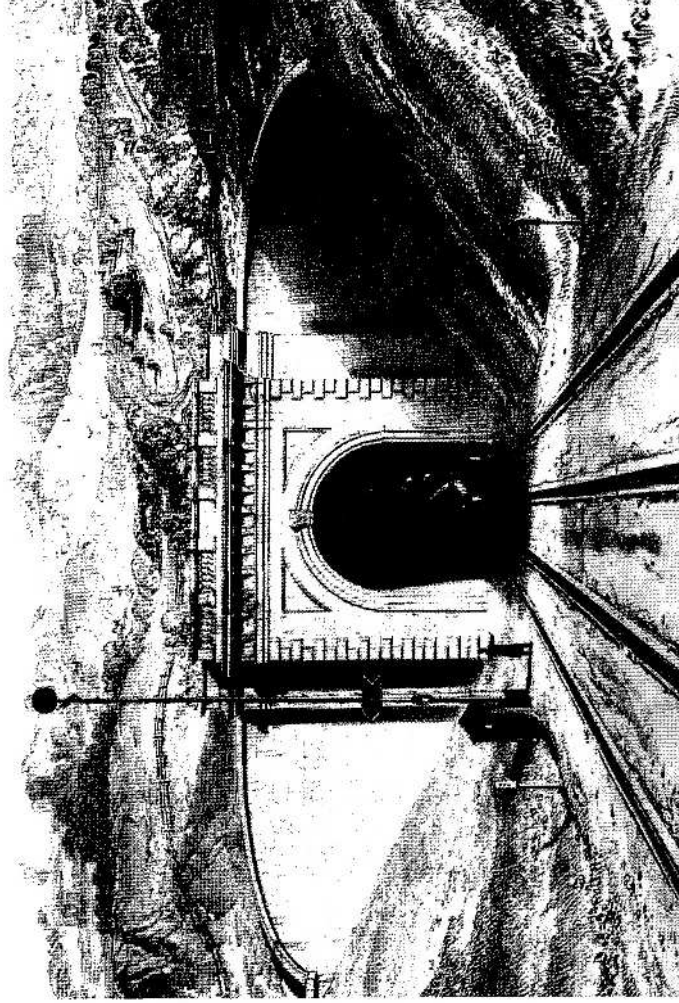


PLATE 102. Box Tunnel on the Great Western Railway near Bath. Railway builders gave a special dignity and significance to the treatment of tunnel entrances. The western portal to Box Tunnel is nearly twice the height required for modern traffic. Even the short tunnels on this part of the line are treated on a grand scale.

This is the great period of railway closures of the 1950s and 60s. It is, of course, now possible to walk along the former track beds and appreciate their contribution to the landscape. The line of the Great Central Railway south of Leicester, through Catesby Tunnel and near Evington, is a superb example where an appreciation of the engineering involved in the construction of the great main line in England can be obtained. In a different landscape are the deep cuttings and high embankments south-east of Overstrand, Norfolk, which have been opened out into a vast grass amphitheatre-like space. The site of Mundesley Station, only opened in 1898, is a fine example of a terrace of standard Great Northern Railway Company houses are all that remain of a village which attempted to turn Mundesley from a tiny hamlet into a major seaside resort in the early years of this century. All that is, except for the vast Hotel Mundesley and the grid lines of an abortive speculative development high on the cliff top overlooking the sea.

the canals and sometimes even to the roads, but they began – from an engineering point of view – where the canals left off. Striking though the tunnels and cuttings and aqueducts of the canal engineers had been, they were soon surpassed in size and grandeur by those of the railways. The canals had indeed created two classes of people without whom the railways could not have been built – the civil engineers at one end of the scale, and the navvies (the ‘inland navigators’ of the canal era) at the other. Almost from the start therefore the railways manipulated the landscape on a grand scale. Nothing like their earthworks had been seen since the earlier Iron Age of pre-Roman times. We take the railways so much for granted. Indeed, we see little of their grandeur from the line itself as we cross the Wharncliffe Viaduct on the Great Western Railway, or the beautiful bridge over the Thames at Maidenhead, and plunge into the Classical-Renaissance portal of Box Tunnel; or as we traverse the great Tring cutting on the old London and North Western. We must walk to see all this, and it is more difficult to walk along the railways than along the canals with their sequenced towpaths. The early lithographs of J. C. Bourne, John Britton, A. F. Tait and others show us best the magnitude of the physical changes that the railways brought about in both town and country.

In *Dombey and Son*, too, Dickens – an incomparable reporter of the contemporary scene – makes us feel what a convulsion the making of a railway was. Here is Camden Town in the year 1836 when the London and Birmingham Railway was under construction in the locality which Dickens calls Staggs’s Garden:

The first shock of a great earthquake had, just at that period, rent the whole neighbourhood to its centre. Traces of its course were visible on every side. Houses were knocked down; streets broken through and stopped; deep pits and trenches dug in the ground; enormous beaps of earth and clay thrown up; buildings that were undermined and shaking, propped by great beams of wood. Here, a chaos of carts, overturned and jumbled together, lay topsy-turvy at the bottom of a steep unnatural hill; there, confused treasures of iron soaked and rusted in something that had accidentally become a pond. Everywhere were bridges that led nowhere; thoroughfares that were wholly impassable; Babel towers of chimneys, wanting half their height; temporary wooden houses and enclosures, in the most unlikely situations; carcasses of ragged tenements, and fragments of unfinished walls and arches, and piles of scaffolding, and wildernesses of bricks, and giant forms of cranes, and tripods straddling above nothing. There were a hundred thousand shapes and substances of incompleteness, wildly mingled out of their places, upside down, burrowing in the earth, aspiring in the air, mouldering in the water, and unintelligible as any dream. Hot springs and fiery eruptions, the usual attendants upon earthquakes, lent their contributions of confusion to the scene. Boiling water hissed and beaved within dilapidated walls; whence, also, the glare and roar of flames came issuing forth; and mounds of ashes blocked up rights of way, and wholly changed the law and custom of the neighbourhood.

In short, the yet unfinished and unopened Railroad was in progress; and, from the very core of all this dire disorder, trailed smoothly away, upon its mighty course of civilization and improvement.

But as yet, the neighbourhood was too shy to own the Railroad. One or two bold speculators had projected streets; and one had built a little, but had stopped among the mud and ashes to consider farther of it. A brand-new Tavern, redolent of fresh mortar and size, and fronting nothing at all, had taken for its sign The Railway Arms; but that might be rash enterprise – and then it hoped to sell drink to the workmen. So, the Excavator’s house of Call had sprung up from a beer-shop; and the old-established Ham and Beef Shop had become the Railway Eating House, with a roast leg of pork daily, through interested motives of a similar immediate and popular description. Lodging-house keepers were favourable in like manner; and for the like reasons were not to be trusted. The general belief was very slow. There were frowsy fields, and cow-houses, and dungbills, and duntheaps, and ditches, and gardens, and summerhouses, and carpet-beating grounds, at the very door of the Railway. Little tumuli of oyster shells in the oyster season, and of lobster shells in the lobster season, and of broken crockery and faded cabbage leaves in all seasons, encroached upon

its high places. Posts, and rails, and old cautions to trespassers, and backs of mean houses, and patches of wretched vegetation, stared it out of countenance. Nothing was the better for it, or thought of being so. If the miserable waste ground lying near it could have laughed, it would have laughed it to scorn, like many of the miserable neighbours.

Bourne's lithograph (Plate 95) of the excavation at Park Village near Camden Town, showing the works in progress in September 1836, must be the identical scene to that described by Dickens.

The railway pushed on to Birmingham, the army of navvies departed, the convulsion subsided, and within a very few years

there was no such place as Staggs's Gardens. It had vanished from the earth. Where the old rotten summerhouses once had stood, palaces now reared their heads, and granite columns of gigantic girth opened a vista to the railway world beyond. The miserable waste ground, where the refuse-matter had been heaped of yore, was swallowed up and gone; and in its frowzy stead were tiers of warehouses, crammed with rich goods and costly merchandise. The old by-streets now swarmed with passengers and vehicles of every kind; the new streets that had stopped disheartened in the mud and wagon-ruts, formed towns within themselves, originating wholesome comforts and conveniences belonging to themselves, and never tried nor thought of until they sprung into existence. Bridges that had led to nothing, led to villas, gardens, churches, healthy public walks. The carcasses of houses, and beginnings of new thoroughfares, had started off upon the time at steam's own speed, and shot away into the country in a monster train.

As to the neighbourhood which had hesitated to acknowledge the railroad in its straggling days, that had grown wise and penitent, as any Christian might in such a case, and now boasted of its powerful and prosperous relation. There were railway patterns in its drapers' shops, and railway journals in the windows of its newsmen. There were railway hotels, office-houses, lodging-houses, boarding-houses; railway plans, maps, vices, wrappers, bottles, sandwich-boxes, and time-tables; railway hackney-coach and cabstands; railway omnibuses, railway streets and buildings, railway bangers-on and parasites, and flatirers out of all calculation. There was even railway time observed in clocks, as if the sun itself had given in. Among the vanquished was the master chimney-sweeper, ubilom incredulous at Staggs's Gardens, who now lived in a stuccoed house three storeys high, and gave himself out, with golden flourishes upon a varnished board, as contractor for the cleansing of railway chimneys by machinery.

To and from the heart of this great change, all day and night, throbbing currents rushed and returned incessantly like its life's blood. Crowds of people and mountains of goods, departing and arriving scores upon scores of times in every four-and-twenty hours, produced a fermentation in the place that was always in action. The very houses seemed disposed to pack up and take trips. Wonderful Members of Parliament, who, little more than twenty years before, had made themselves merry with the wild railroad theories of engineers, and given them the liveliest rubs in cross-examination, went down into the north with their watches in their hands, and sent on messages before by the electric telegraph, to say that they were coming. Night and day the conquering engines rumbled at their distant work, or advancing smoothly to their journey's end, and gliding like tame dragons into the allotted corners grooved out to the inch for their reception, stood bubbling and trembling there, making the walls quake, as if they were dilating with the secret knowledge of great powers yet unsuspected in them, and strong purposes not yet achieved.

But Staggs's Gardens had been cut up root and branch.

Dr Johnson had deplored the effect that canals would have upon the privacy of the landed class. The railways aroused an even greater opposition for this as well as for numerous other reasons, and not only among those who quietly enjoyed the amenities of a large estate. At Helpston in Northamptonshire, Clare recorded in his diary for 4 June 1825:

Saw three fellows at the end of Royce Wood, who I found were laying out the plan for an iron railway from Manchester to London. It is to cross over Round Oak spring by Royce Wood corner for Woodcroft Castle. I little thought that fresh intrusions would interrupt and spoil my solitudes. After the enclosure they will despoil a boggy place that is famous for orchises at Royce Wood end.

The Making of THE ENGLISH LANDSCAPE

Nothing came of this particular project, not at least for many years, and Clare continued to enjoy the orchises of Royce Wood undisturbed. But the battle to preserve beloved solitudes flared up repeatedly in patches all over the country, precisely as it does today with the threat of new airfields and military training areas. The price of solitude in the modern world is eternal vigilance. In 1844 Wordsworth was aroused by the proposal to construct a railway from Kendal to the shores of Lake Windermere:

*Is then no nook of English ground secure
From rash assault?*

His two long letters to the *Morning Post* marshal every conservative argument against the proposal, and conclude:

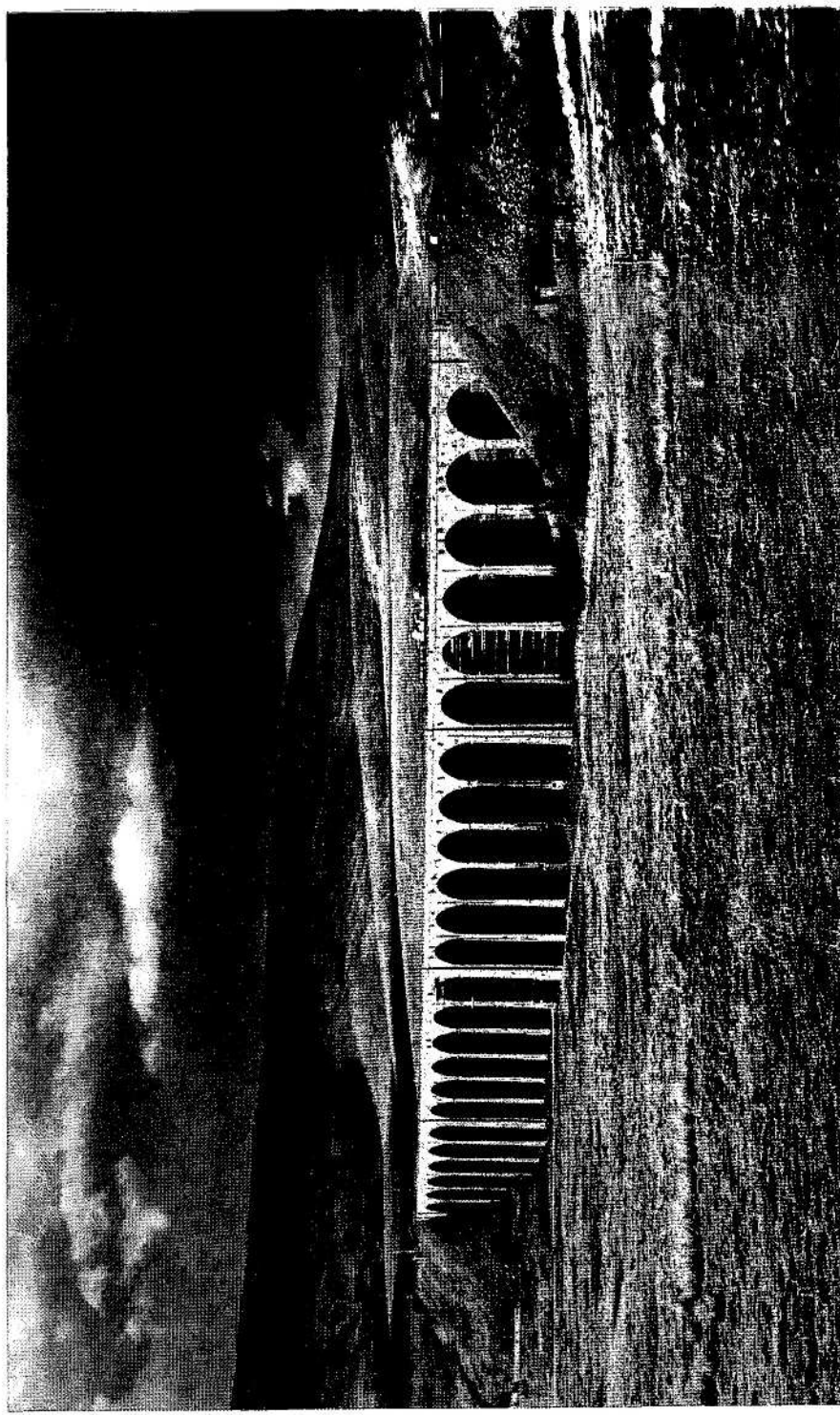
*We have too much burying about in these islands; much for idle pleasure, and more from over
activity in the pursuit of wealth, without regard to the good or happiness of others.*

*Proud were ye, Mountains, when, in times of old,
Your patriot sons, to stem invasive war,
Intrenched your brows; ye gloried in each scar;
Now, for your shame, a Power, the Thirst of Gold,
That rules o'er Britain like a baneful star,
Wills that your peace, your beauty, shall be sold,
And clear way made for her triumphal car
Through the beloved retreats your arms enfold!*

*Heard YE that Whistle? As her long-linked Train
Swept onwards, did the vision cross your view?
Yes, ye were startled; — and, in balance true,
Weighing the mischief with the promised gain,
Mountains, and Vales, and Floods, I call on you
To share the passion of a just disdain.*

West Cranmore Station, a typical of the rural railways of the country. This was built by the East Somerset Railway Company between 1862 and 1863. It was one of three short lines, each belonging to a different company, laid to the small market city of Wells between 1862 and 1863. Wells then only had 7,500 people. The East Somerset line, later taken over by the Great Western Railway, could never have made a profit at a gradient of 1 in 50 or more for several miles. Yet it, and the other numerous railways, knitted town and country together in a way that had never been achieved before. All were closed to passengers in 1963.





But the conservatives, however right they were – and we have lost nearly all our privacy and silence since they wrote – lost all along the line. The new railways 'slashed like a knife through the delicate tissues of a settled rural civilization. They left their scars on park and copse; they raised high walls of earth across the meadows – "your railroad mounds, vaster than the walls of Babylon," Ruskin called them; they brutally amputated every hill on their way.*

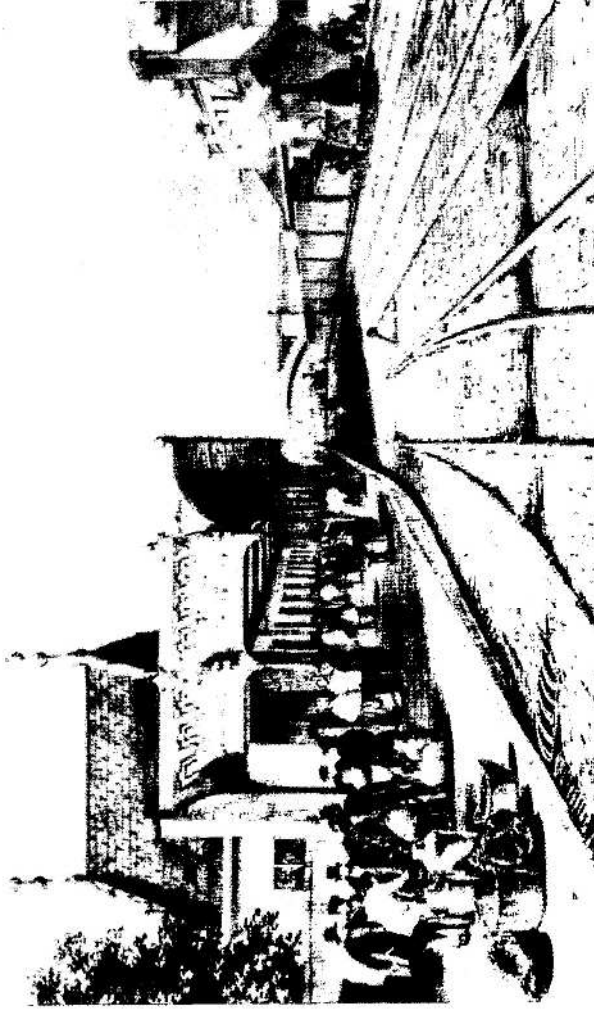
The magnitude of the early railway works was enhanced by the severe limitation the engineers placed upon themselves as regards gradients. Brunel would have nothing steeper than 1 in 660 for the first eighty-five miles out of Paddington; Robert Stephenson planned the London and Birmingham Railway with no gradient steeper than 1 in 330 (except the first rise from Euston to Camden); and Locke nothing steeper than 1 in 250 on the difficult London and Southampton line. So we get on the London and Birmingham route the vast cuttings at Tring (two and a half miles long and at times nearly sixty feet deep) and Roade (one and a half miles long and nearly seventy feet deep), and the embankments at Boxmoor and Wolverton. On the London and Southampton line sixteen million cubic feet of earth were moved in making the cuttings and embankments, mostly between Basingstoke and Winchester: some of the most extensive cuttings in the world are on this stretch of line. On the Great Western route we have such major engineering achievements as the Warncliffe Viaduct over the Brent valley at Hanwell, the Sonning cutting, the embankment west of Chippenham (and the fine viaduct over the town itself), the Box tunnel, and the series of tunnels, cuttings and embankments between Bath and Bristol.

At times the railway altered almost the whole aspect of a town, or at least of distant views of it. The Great Western Railway's embankments and viaducts changed the prospect of

* C. Barman, *Early British Railways* (Penguin Books, 1950), p.25.

PLATE 104. Viaduct, Ribblesdale, Yorkshire, on the Settle-Carlisle line. Scenically perhaps the most attractive line in England. It was built by the Midland Railway in 1870-5 as a third route to Leeds. It was not actually needed until the construction. Yet it was a product of Victorian engineering and adds more to the English landscape than most railway lines do.

Crewe Station in 1848. The early railway stations were not a pleasure to contemplate – they were sometimes, and even more faintly romantic, like the first Crewe Station. Few stations of the first generation survived the increase of railway traffic, but they did and they are well worth seeing. Railways added a vast amount of detail to the English landscape, besides manipulating it on a large scale.



Bath; the viaduct over the Mersey at Stockport brought a fine geometrical composition

into the urban landscape. Indeed the railways created as much beauty as they inadvertently destroyed, but of a totally different kind. The great gashes they inflicted on the landscape in their cuttings and embankments healed over, and wild flowers grew abundantly once more. Going down to the south-west in spring, the cuttings through Somerset and Devon sparkle with primroses. Even in Clare's own country, the railway has been absorbed into the landscape, and one can enjoy the consequent pleasure of trundling through Rutland in a stopping-train on a fine summer morning: the barley fields shaking in the wind, the slow sedgy streams with their willows shading meditative cattle, the elegant limestone spires across the meadows, the early Victorian stations built of the sheep-grey Ketton stone and still unaltered, the warm brown roofs of the villages half buried in the trees, and the summer light flashing everywhere. True that the railway did not invent much of this beauty, but it gave us new vistas of it.

Or there is the grander scenery, and the more spectacular engineering, of the railway from Settle up to Carlisle, some of the finest railway landscape in Britain; and the route over Shap with its visions of the Lakeland mountains; and there are the superb night scenes from the railway viaducts that span the industrial towns of Lancashire and Yorkshire. There are the elaborate tunnel entrances like Box and Bramhope and others, the great viaducts like Monsal Dale and Dutton, the bridges like Saltash and Severn; and the charming survivors among early railway stations that one comes across unexpectedly almost anywhere in England. All the convulsions and brutal gashings of the rural landscape by the railway engineers have long been smoothed over and forgotten; and we take the railway earthworks and monuments as much for granted as we do the hedges and fields of the enclosure commissioners or the churches of our medieval forefathers.

The railways not only made a direct physical impact on the landscape: their indirect effects were equally powerful and far-reaching. The diary of a Middlesex parson, the Rev B. J. Armstrong, shows us what a devastating effect they were having as early as the 1830s.*

* R. M. Robbins, 'A Middlesex Diary', *Transactions of the London and Middlesex Archaeological Society*, XL, 1954, pp. 105-14.

His father had decided in the year 1830 to move out of London and to take a small house in the country.

It was thought advisable to take some small place in the country for the benefit of our health... He took a very pretty and rather commodious cottage-residence at Southall Green, Middlesex, about a mile out of the high road to Uxbridge, and exactly 10 miles from Tyburn Gate. Our intention was to reside half the year at Southall, and the remainder in London, and I remember we moved there on the 26th June, 1830... My delight at everything I saw was beyond bounds – gardens were allotted my sister and self – there was the canal to fish in – a pony to ride – besides animals of different kinds... Having been long pent up in town, Annie and myself viewed Southall as a second Paradise, and I remember I nearly hung myself on my pin-before the very first morning after our arrival, in attempting to scale the yard gates to see the country beyond them.

Eight years later the main line from Paddington to the west was opened through Middlesex. West Drayton (for Uxbridge) was the first station; and in the following year stations were built at Ealing, Hanwell and Southall. The effect on Southall is duly recorded in Armstrong's diary:

A remarkable change for the worse took place about this time in the hitherto retired neighbourhood of Southall Green. The railway spread dissatisfaction and immorality among the poor, the place being inundated with worthless and overpaid navigators ['navvies']; the very appearance of the country was altered, some families left, and the rusticity of the village gave place to a London-out-of-town character. Moss-grown cottages retired before new ones with bright red tiles, picturesque hedgerows were succeeded by prim iron railings, and the village inn, once a pretty cottage with a swinging sign, is transmogrified to the 'Railway Tavern' with an intimation gaudily set forth that 'London porter' and other luxuries hitherto unknown to the aborigines were to be procured within.

These immediate effects were observable only near the stations, but as the railways extended rapidly to all parts of the country their effects on local building and building materials grew correspondingly wide. In Middlesex the impact came soonest, and was most violent. The older houses had been built of a homely and native brown stock brick, and the farm buildings largely of wood. Between 1800 and 1850, however, a hard soapy-looking yellow brick was pouring up the Thames from Suffolk, and most of the new Middlesex churches were built of it. 'From 1850 onwards' – with the triumph of the railways – 'every kind of material was poured on to the unprotesting soil: harsh red bricks, sometimes glazed; in the north, yellow-green brick from Three Counties, near Hitchin; slates, pantiles, green tiles; stucco, artificial stone, and concrete.* What happened in Middlesex eventually happened all over England, and as Midland bricks and Welsh slates – and later more unspeakable materials like asbestos and corrugated iron – flooded into every corner of provincial England, the ancient local materials that fitted their own regions so well, for they came out of their very soil, disappeared one by one. In Oxfordshire the Stonesfield slate-pits and mines shut down one by one during the second half of the nineteenth century;† in Leicestershire the Swithland slate-quarries, which had been worked since Henry III's time, shut down altogether in 1887; and so it was in nearly every county in England. All regional styles and all local materials were exterminated except where the well-to-do could afford to build deliberately in the old manner, with the aid of an architect. What had been the living style of a whole region, modified to suit all classes of people, became a piece of pleasant antiquarianism for a rich man.

The nineteenth-century expansion of London in particular was general and west London in particular was not by any means always related to the railways. In many areas the coming of the trams and later the electric trams, of which traces have gone, were a far greater influence on the policies of individual railway companies than what happened. As Professor Simmonds has pointed out, the Great Western was mainly concerned with the increase in passenger traffic in its early years. Though stations were built on the main line west of Paddington after the opening in 1838 the initial suburban service was small, and the passenger receipts small. Only at Ealing did the large-scale housing development begin in earnest, and until the Metropolitan Railway was linked to the Great Western at Paddington, this enabling through trains to run to the City, that traffic developed and new housing appeared elsewhere. Even then the existing demand for limited services. Only when the track was greatly extended in 1879 did residential development begin in earnest in this part of London. Though Ealing itself did not develop between 1861 and 1871 and grew by over half in the next two following decades, the first of these developments can hardly have been the result of the railway, although the later ones may have been.

* R. M. Robbins, *Middlesex* (Collins, 1953), p. 165.

† The Duke of Marlborough managed to keep a pit open until 1909 (W. J. Arkell, *Oxford Stone*, Faber, 1947, p. 140).

The Making of
THE ENGLISH
LANDSCAPE

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with an Introduction and Commentary by

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THE LANDSCAPE BEFORE THE ENGLISH SETTLEMENT

Wordsworth in his *Guide through the District of the Lakes* – one of the best guide-books ever written, for poets make the best topographers – opens his description of the scenery of the Lakes with a View of the Country as formed by Nature. He then passes, in his second section, to the Aspect of the Country, as affected by its Inhabitants, and this he begins by asking the reader to envisage what the landscape, finished by the great impersonal forces of Nature and awaiting its first human inhabitants, looked like in its primeval freshness.

He will form to himself an image of the tides visiting and revisiting the friths, the main sea dashing against the bolder shore, the rivers pursuing their course to be lost in the mighty mass of waters. He may see or hear in fancy the winds sweeping over the lakes, or piping with a loud voice among the mountain peaks and, lastly, may think of the primeval woods shedding and renewing their leaves with no human eye to notice, or human heart to regret or welcome the change.

How often one has tried to form these images in various parts of England, seated beside a wide, flooding estuary as the light thickens on a winter evening, dissolving all the irrelevant human details of the scene, leaving nothing but the shining water, the sky, and the darkening hills, and the immemorial sound of curlews whistling over the mud and fading river-beaches. This, we feel, is exactly as the first men saw it when they reached the shingled margin of the river a hundred generations ago. Nothing has changed. We are seeing the natural world through the eyes of men who died three or four thousand years ago, and for a moment or two we succeed in entering into the minds of the dead. Or on some desolate English moorland it is even easier to feel this identity with the dead of the Bronze Age who lie near by under a piled-up cairn or under the heathery blanket of a burial mound. It is easy, too, to feel this kinship while watching the summer morning waves falling with a meditative indifference on a beach still untrodden by the human race. There are many such timeless scenes and there is an acute and melancholy pleasure in this mental game; but it is not always as easy as this. On unpeopled moorland, beside remote estuaries at dawn, or at sea approaching an historic coast, little or nothing is alien to the natural scene. We see it precisely as the first men saw it. The imagination is liberated over the scene.

But there are not many places where one can feel with such complete assurance that this is exactly as the first inhabitants saw it in 'the freshness of the early world'. Not much of England, even in its more withdrawn, inhuman places, has escaped being altered by man in some subtle way or other, however untouched we may fancy it is at first sight. Sherwood Forest and Wicken Fen are not quite what they seem. The historian, trying to enter into the minds of the first men to break into a virgin landscape, trying to envisage precisely what they saw and no more, is aware of some of the difficulties of his task, if not of all. One needs to be a botanist, a physical geographer, and a naturalist, as well as an historian, to be able to feel certain that one has all the facts right before allowing the imagination to play over the small details of a scene. For unless the facts are right there is no pleasure in this imaginative game, if we clothe the landscape with the wrong kind of trees, or allow in it plants and birds that are really only the product of some recent changes, or if we fail to observe that the river has changed its course well within historic times. We may have to make all sorts of allowances – subtracting here and adding there – before the natural landscape, still untouched by man, is recovered in all its purity and freshness. And if we succeed in recovering this buried landscape, and wish to communicate to others the pleasure it gives us, how difficult it is to do so without intruding the unpalatable jargon of the geologist or the economic historian or some other learned trade.



For what a many-sided pleasure there is in looking at a wide view anywhere in England, not simply as a sun-drenched whole, fading into unknown blue distance, like the view of the west Midland plain from the top of the Malvern Hills, or at a pleasant rural miniature like the crumpled Woburn ridge in homely Bedfordshire, but in recognising every one of its details name by name, in knowing how and when each came to be there, why it is just that colour, shape, or size, and not otherwise, and in seeing how the various patterns and parts fit together to make the whole scene. One may liken the English landscape, especially in a wide view, to a symphony, which it is possible to enjoy as an architectural mass of sound, beautiful or impressive as the case may be, without being able to analyse it in detail or to see the logical development of its structure. The enjoyment may be real, but it is limited in scope and in the last resort vaguely diffused in emotion. But if instead of hearing merely a symphonic mass of sound, we are able to isolate the themes as they enter, to see how one by one they are intricately woven together and by what magic new harmonies are produced, perceive the manifold subtle variations on a single theme, however disguised it may be, then the total effect is immeasurably enhanced. So it is with landscapes of the historic depth and physical variety that England shows almost everywhere. Only when we know all the themes and harmonies can we begin to appreciate its full beauty, or to discover in it new subtleties every time we visit it. Nor is it only a programme of symphonics that the English landscape provides. One can become satiated with magnificent views over

PLATE 3. Prehistoric but, probably
Bronze Age date. Kestor, Dartmoor.
This is one of a number of butts
associated with a huge block of
land over 600 acres in extent, all
covered by a single field system.
Such a prehistoric field system is
small by Dartmoor standards, the
largest cover over 2000 acres.

FIGURE 4. One of the circular stone-walled huts of the Iron Age village of Brynaunder, in West Cornwall. The fields beyond may well be contemporary with the village but unlike the latter have never been abandoned.



a dozen counties. There is as much pleasure to be had in the chamber music of Bedfordshire or Rutland; perhaps, one might say, a more sophisticated pleasure in discovering the essence of these simpler and smaller landscapes. This book is, then, an attempt to study the development of the English landscape much as though it were a piece of music, or a series of compositions of varying magnitude, in order that we may understand the logic that lies behind the beautiful whole.

The Pre-Roman Landscape

The English landscape as we know it today is almost entirely the product of the last fifteen hundred years, beginning with the earliest Anglo-Saxon villages in the middle decades of the fifth century. The direct prehistoric contribution to the landscape is small. It is more impressive in some parts of England than others, fascinating when studied in detail – as in the remarkable Iron Age villages of western Cornwall or the hill-forts of Wessex – but, considered as an influence on the whole landscape, of little importance. There are, indeed, some counties where it can not be ignored, but in a general survey of the country as a whole we need not linger over it.

Even in Neolithic times (2500-1900 BC), to go no further back, the maximum population of Britain was probably only about twenty thousand – about the size of a large country town, such as Bridgwater in Somerset, today. Corn-growing was still subsidiary to pasture-farming, life was more or less nomadic, and so it remained until the late Bronze

As already noted in the Introduction, this is no longer true. The English landscape is the result of almost 20,000 years of man's achievements and failures and now there can they be ignored, even if they are not always easy to see.

Age (1000-500 BC). The oldest recognisable corn 'fields', small irregular plots of ground associated with hut-circles on the western side of Dartmoor, date possibly from the early Bronze Age (1900-1400 BC). There are others on the western slopes of Rough Tor on Bodmin Moor in Cornwall and similar sites with small, curvilinear plots have been found on the Yorkshire moors, where they are attributed to the middle Bronze Age (1400-1000 BC). These prehistoric fields are, however, only recognisable to the archaeologist, and then only at certain times of the year, and they can hardly be said to be a feature of the landscape wherever they are. They are interesting only as the earliest known corn-plots in this country, just as the hut-circles of Dartmoor (mainly concentrated in the southern and south-western valleys) are interesting, for our purpose, as the remains of the earliest recognisable dwelling-houses, dating as they do from the early Bronze Age to the early Iron Age.

With the late Bronze Age, and especially the early Iron Age (from 500 BC onwards) the further development of agriculture led to the appearance of settled villages, a revolution in human life comparable in magnitude with the effects of the industrial revolution of the nineteenth century. There had been 'villages' of a kind on Bronze Age Dartmoor – as, for example, on Standon Down above Tavy Cleave – but villages as the centre of settled agricultural communities may be said to date from the centuries immediately preceding the Roman Conquest. One of these villages, or more strictly a hamlet of at least eight houses, has been completely excavated at Chysauster in the far west of Cornwall, three miles due north of Penzance. Chysauster is most exciting, even to those whose interest in prehistory is a flickering holiday affair, for here we have a village, still substantially intact, of houses built of granite dry-walling still standing to a height of several feet. The houses were built in the form of rooms opening on to a central unroofed courtyard, four houses on each side of a cobbled street. The inhabitants of Chysauster cultivated the garden-plots and small arable fields that surround the houses, and also dug and smelted tin. The village seems to have been occupied from about the second century BC into Roman times, and was then abandoned. At some later date – but precisely when it is impossible to say – a new site was occupied on lower ground about half a mile south, probably by the medieval colonist and his household who created the present farm of Chysauster. Three miles to the north-west across the moors, near the St Ives-Land's End road, is the excavated village of Porthmeor, with granite-built houses of the same type, occupied mainly between the second and fourth centuries AD. Other Iron Age village sites are known in England, but none is so revealing and impressive to the layman as these two sites in western Cornwall.

The people of the early Iron Age lived mostly in single farmsteads or in small hamlets, of which Chysauster and Porthmeor are examples. The single farmsteads are revealed in the first instance by air photography, which detects their presence by markings in the modern crops, but nothing is visible on the surface of the ground and they cannot be said to be significant for our study of the landscape. There is, however, one other relevant aspect of these Celtic farmsteads and that is the distinct possibility that a number of existing farmsteads and hamlets in south-western England (and possibly elsewhere, but of that I cannot speak) represent original Celtic farms which have been continuously occupied ever since their beginning in pre-Roman or Romano-British times. The farmstead itself in such places has been rebuilt over and over again during this long period of time, and is usually of no interest whatever to the archaeologist, but as the descendant of a Celtic farmstead on the same site it is a fascinating place to the historian.

The other visible evidences in the landscape of these early farms are the lynchets or cultivation terraces that abound on the chalk downlands of south-eastern England, though they are found sporadically elsewhere also.

The dating given in this section is now in need of revision. The Neolithic period is known to have begun perhaps as early as 5000 BC and to have drawn to a close about 2500 BC. The early and middle Bronze Age is now be dated between 2500 and 1500 BC. The late Bronze Age between 1600 and 800 BC and the Iron Age from 800 BC to AD 43.

Professor Hoskins' suggestion that some of the early Roman settlements in south-west England stand out as being earlier prehistoric Roman farms and villages is certainly of considerable interest and certainly worthy of serious consideration. It is probably correct and that much of the evidence for the dispersed settlement in south-west England, west of Exeter and parts of Somerset at least is the result of the pre-Roman pre-Roman achievements rather than of the Roman periods. In the end, however, only archaeological excavation can provide the answer and digging at the existing farmstead poses problems that must at once be faced up to.

These Celtic fields represent an immense advance on the tiny irregular corn-plots of the Bronze Age farmers, for they are more or less rectangular blocks – often approximating to a square – varying in size from half to one and a half acres. They are seldom more than four hundred feet long (usually much less), and seldom less than a hundred feet in breadth (often more). It is this great breadth which distinguishes them clearly from the arable strips of the 'open field' system that followed them in time. Such fields can be most readily seen from the air, as at Fyfield Down near Marlborough in Wiltshire, or on Windover Hill near Eastbourne in Sussex, but they are often easily seen on the ground also. On the Wiltshire and Sussex downs many square miles are covered by these fields. Immediately to the north of Brighton, an area of no less than eleven and a half square miles is still covered with the lynchets of the Celtic field system.

These ancient fields survive so clearly today because they were laid out in the smooth turf of the chalk country on a relatively dry soil, and because they were abandoned at some early date when cultivation and settlement moved down into the heavier and more rewarding soils of the valleys. In other parts of England they would be more difficult to find, especially where later cultivation has altered the field boundaries, but one can detect possible clues on the large-scale maps, in conjunction with other evidence. The present-day field pattern around the remote Dartmoor farm of Babeny, for example, is highly suggestive of Celtic farming in small square plots. Immediately below these plots flows the Walla Brook, hurrying on its way down to join the East Dart. Now Walla Brook was originally *Wēala Brōc*, 'stream of the Welsh or Britons', a name given by the first Saxon settlers on the moorland fringes to a stream beside whose banks, far up into the Moor, scattered groups of Celtic farmers still survived. It is possible that at Babeny we have traces of one of their farms in the lay-out of the fields. Celtic farmers did not live merely upon the chalk downlands. It is only that the traces of their presence upon the landscape are more visible in that type of country. We may well seek for signs of their presence in the more difficult terrain of the West and the North, and in the lowlands of southern and eastern England.

There is so much of the archaeological record which has survived to survive centuries of later activity, almost all the fields near Brighton have now been destroyed by the increasing demands of twentieth-century agriculture. Yet the boulder, still be seen on air photographs.

Western Farmsteads and Fields

The subject of Celtic farmsteads is difficult to speak about, especially the visible evidences in the landscape. It seems likely that we shall find our surest signs in Cornwall, and above all in the far west of that country, for here the Celtic kingdom of Dumnonia subsisted until the early tenth century. Here a number of active farms continued in being and come down to us more or less intact so far as their fields and hedges are concerned. The farmsteads themselves have been rebuilt over and over again, but the network of small, irregular fields bounded by miles of granite-boulder walls was almost impossible to change once the pattern was laid down. The 6-inch maps of western Cornwall abound in this pattern, for example in the parish of Zennor between St Ives and Land's End. Bosigran farm shows perhaps the most remarkable of these patterns (Fig. 1). For the dating of these fields it is probably significant that both east and west of the farmstead Iron Age houses of the Chysauster type have been found.* At Porthmeor, not far away, the Iron Age village was occupied mainly between the second and fourth centuries AD, as we have seen; and at Treen, a little further to the north-east, another Iron Age village is known to exist (Field 831, OS 25-inch map).

Not all Celtic field-patterns are of the Bosigran type. At Castallack, in the

Excavations in West Penwith has indeed confirmed Professor Hoskins' ideas. There is now no doubt that the Bosigran fields, and perhaps the farmsteads as well, are certainly a Roman one and perhaps prehistoric.

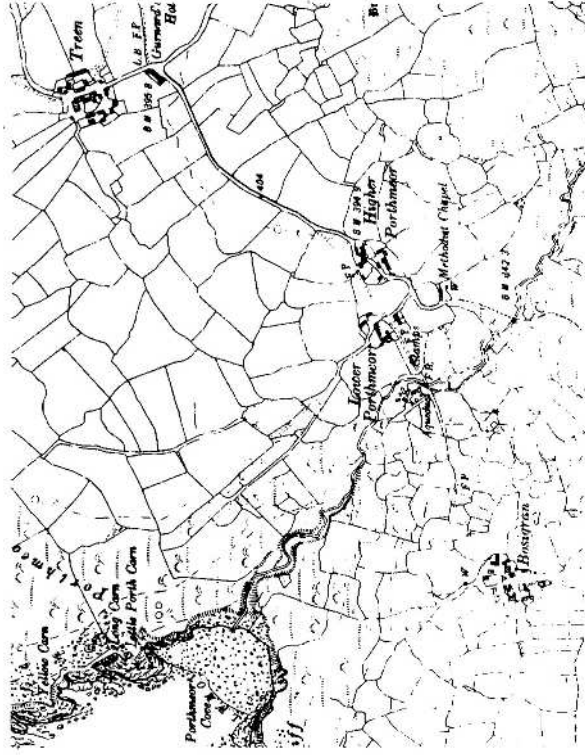
* H. O'N. Hencken, *Archaeology of Cornwall and Scilly* (Methuen, 1932), p. 311.

PLATE 6. This prehistoric field system on Chalcomb Down, near Winchester, Hampshire, is now sadly typical of most of those in southern England. Modern agriculture has largely destroyed all trace of it except from the air. Even so a contemporary trackway and a long ditch, off which the fields are laid as part of a planned landscape, are visible.



PLATE 7. 'Celtic' fields, on Fyfield Down, near Marlborough, Wiltshire.





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parish of Paul, the six-inch map reveals a continuous hedge enclosing a large squarish area roughly one third of a mile long and nearly as broad. This was later cut up into about fifteen fields with no particular distinguishing characteristics, so that the original enclosure has been completely lost sight of except to the observant map-reader. The large original enclosure was an early cattle-field, covering about sixty acres. Since a fogou, or subterranean retreat, of Iron Age date is known to have existed immediately north of Castallack farm, and 350 yards north-west lay a fortified masonry enclosure called the Roundago – probably a small Iron Age fort – we are probably safe in assuming that the enclosed cattle-field was of the same period.

At what date was this large enclosure sub-divided into a number of little fields averaging three or four acres each? I think it likely that this was done in the thirteenth century when Castallack was re-occupied. It is probable that the farm was abandoned at an early date, as we know Chysauster and Porthmeor to have been. The massive original walls of the enclosure remained, though the interior must have been completely submerged in bracken and furze. We first hear of Castallack again in a record of 1284, which suggests that it had been re-occupied not long before, and it seems fairly certain that the small enclosures within the larger one date from this time. Here, then, we have field boundaries of two widely different dates for the historian of the landscape to study.

Nowhere can we *prove* continuity of occupation from Celtic times to the present day, for no records exist to enable us to do this. It is indeed likely that a great number, perhaps most, of the farmsteads of Iron Age date have been abandoned at some date and re-occupied in medieval times under the pressure of a rising population. This may be true of such Dartmoor farms as Babeny, already referred to, where the field pattern and the stream-name both suggest the existence of Celtic farmers. On the other hand some farms may have enjoyed an unbroken occupation. The fact that Walla Brook – 'the stream of the Welsh or Britons' – cannot have been so named until the late seventh century at the earliest (when the Saxons reached Devon) is evidence for the continuance of Celtic farming along that stream (as at Babeny) at that comparatively late date, though as a name Babeny does not appear in the records until 1260. I see no reason to reject the possibility here of continuity of occupation since Celtic times, given a known survival as late as AD 1000 or thereabouts.

FIG. 1. CELTIC FIELDS IN ZENNOR PARISH, CORNWALL.

The Penwith peninsula of west Cornwall is almost entirely of this character: hamlets of the Treen and Babeny gran type, and thousands of small fields of very irregular shape. These fields are enclosed by rubble walls of unburnt granite blocks gathered from the surface of the land and therefore almost irremovable. The fields are of the same date as the numerous 'British villages' which are dotted all over the peninsula. Two of these have been excavated, Chysauster and Porthmeor. The latter (not marked on the above map) was discovered in 1933 near the Methodist chapel. Excavation showed that it was occupied from the middle of the first century AD until the sixth century, when it was abandoned. The present Lower Porthmeor and Higher Porthmeor represent a settlement, probably of medieval date. The Iron Age fields retained their identity, however, because of the massiveness of their boundary walls, and were re-occupied to form a very distinctive pattern of more tangled and irregular fields. Indeed, it is possible that the native Celtic but still irregular field patterns of north of Porthmeor and west of Treen are the result of medieval clearance, that we have fields of two distinct periods on the above map. Reproduced by permission from the Ordnance Survey map of the Ordnance Survey.

The Making of THE ENGLISH LANDSCAPE

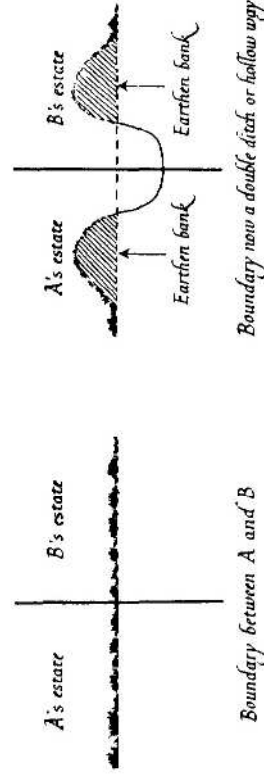
It is not the case, as Professor Hoskins suggests, and as many other places in England, ancient estates, pre-Roman in origin, have now been lost. Most like Treable, passed almost unaltered from one generation to the next. Most like Treable, passed almost unaltered from one generation to the next. Most like Treable, passed almost unaltered from one generation to the next.

Just off the northern foothills of Dartmoor, in the parish of Cheriton Bishop, is a farm called Treable for which some fascinating early evidence is forthcoming. Treable is one of the comparatively few Celtic place-names surviving in Devon: it means 'the *trev* or home-stead of Ebell', a personal name corresponding to the Gaulish Epillus. Now although Treable is not recorded as a name until 1242, it can be identified quite con-

clusively with an estate called 'Hyple's old land' granted by King Edward to his faithful vassal Aelfsige in the year 976. Hyple is a corruption of Ebell, and the reference to 'Hyple's old land' suggests that this Celtic landowner (whose name also appears in Ipplepen in south Devon) was in possession not long before, certainly within the tenth century.* Here, at any rate, a Celtic estate – in this instance covering an area of six thousand acres – survived almost to within a hundred years of the Norman Conquest, and there is no reason to doubt the continuity of occupation of some part of it at least. A coin of the reign of Hadrian (early second century) has indeed been found in a hedge on 'Treable farm, but to assume continuity back to that period is hazardous.

The field pattern of Treable today shows nothing indicative of great age. The Tithe Map of 1842 – the oldest we have for this purpose – is disappointing. But there is one aspect of the estate boundary, as given in the charter of 976, which is worth dwelling upon for the light it throws on a minor feature of the English landscape. At one point on its eastern boundary, the charter takes us 'along the way to the old ditch'. Walking along this boundary, with the help of the 2½-inch Ordnance map, one finds oneself dropping down a steep hillside along a cart-track which is shut in on either side by an earthen bank several feet high, i.e., a hollow way. This hollow way – 'the old ditch' – was already 'old' in the tenth century. It can hardly be doubted that it represents the ancient boundary between the estate of Hyple and his ancestors to the west, and that of another (unknown) Celtic landowner to the east. The two hedge-banks, still enclosing the fields of today, are thus of great age – certainly pre-Saxon.

The 'hollow way' was made by each landowner digging out a ditch and throwing up the earth into a continuous bank on his own side. So we get a double ditch which forms in fact a track several feet wide and sunk several feet below the level of the fields on either side, thus:



That this is often the origin of the 'hollow way' running between two high banks is clinched by the expression in a charter of c. 1174 setting out the boundaries between the Abbot of Tavistock's estate at Abbotsham in north Devon and that of a neighbouring squire – Richard Coffin – at Alwington and Cockington. Here the bounds begin 'from the two-fold ditch' (*twifelda ditch*). A Somerset charter of 963, relating to a Saxon estate called Manworthy in Milverton, refers to 'the hollow ditch' at one point, evidently the same construction as a two-fold ditch.

The Treable and Abbotsham charters explain the significance and origin of a puzzling feature which all those who walk across country (and do not rush in utter blindness through it in a car) must have come across at one time or another: that is the track, sometimes only a few feet wide, sometimes much broader, which begins suddenly on one side

* H. P. R. Finberg, *Early Charters of Devon and Cornwall* (University of Leicester, Department of English Local History, Occasional Paper no. 2, 1953), pp. 27ff., upon which these remarks on Treable are mostly based.

of a field-gate, runs between hedge-banks for several hundred yards, occasionally more, and then stops as suddenly as it began, debouching into a field and losing all identity forthwith. If we regard such lanes as trackways, they are impossible to explain, for they begin and end nowhere, so to speak. They are in fact ancient boundaries between two estates, sometimes medieval, sometimes Saxon or even Celtic, formed by the digging of a double ditch. It should be observed that this does not explain all 'hollow ways', some of which are true traffic routes, but it explains those that appear to go nowhere in particular and to peter out without reason.

There is much more to be learnt about the visible signs of Celtic estates, farms, fields and hedges, in the English countryside. I have set out above a few of the considerations that have come my way, but patient and minute topographical research – of the sort that is wrongly despised by most historians – will undoubtedly reveal to us in time much more of this distant period still embedded in the landscape around us, if only we have eyes to see, the records to follow up the visual evidence, and the imagination to read the records aright.

Roman Britain

With the spread of settled villages it is possible that the total population of Britain may have risen to something like a quarter of a million before the arrival of the Belgae early in the first century BC. The spread of the Belgae over the whole of south-eastern England and well into the Midlands, and their cultivation of the loams with the heavy wheeled plough, opened up new kinds of land hitherto considered too intractable for the light prehistoric plough, and there can be no doubt that it resulted in a further substantial increase of population. Knowing what we do of the population of Roman Britain (not much, it is true, but incomparably more than we know of the earlier periods) we cannot put the maximum population of Britain on the eve of the Roman Conquest at more than four hundred thousand – about the size of modern Bristol. When we bear in mind figures of this magnitude, and remember that for the greater part of the prehistoric period in Britain the population was less than fifty to a hundred thousand, we can readily appreciate that even the first two thousand years of agriculture from Neolithic times onwards has left little mark upon the landscape, other than a few more or less impressive isolated features. The continuous story can still hardly be said to have begun.

Nor was the Roman contribution to the landscape, or what can be seen of it today, much more substantial. It shows itself mainly in the surviving roads, in the sites of villas, and in a few canals or dikes in eastern England, all of which remained important in their various ways well beyond the Roman period.

The network of the major Roman roads in England is fairly well known, though many gaps even in the known roads remain to be filled in. Besides the major roads, a large system of secondary roads gradually came into existence to serve local needs, and much more remains to be discovered about these. Mr I. D. Margary's *Roman Ways in the Weald* (Phoenix House, 1948) brought to light a whole network of these lesser roads in Kent and Sussex, mostly unsuspected until he wrote. East Anglia probably had an equally complex system of local roads to judge by the unrelated fragments on the present map. Most of this still awaits working out. Even so, more than five thousand miles of roads are shown on the Ordnance Survey map of *Roman Britain* (1931 edition).

The Roman road-system, both the main post roads and the local roads, was important in the history of the English landscape. Not only do many of these roads survive to this day (or

PLATE 9. Prehistoric fields and sites, Horridge Common, Dorset. A fragment of what is the largest surviving prehistoric field system known in England, covering 2000 acres and probably in use around 1400 BC. If the same fields were in, say, Leicestershire, they would be interpreted as the remains of planned parliamentary, or at least Here they must be planned enclosure Age enclosure

The population of England was probably at least a million by the first century BC. The Introduction chapter has already pointed out that the prehistoric man was far greater than Pericles in the period. There is a continuous story which is covered, albeit with difficulty, and which was in the present landscape.

The Making of THE ENGLISH LANDSCAPE

more strictly, the line of the road) as trunk roads carrying a thunderous lorry traffic over long distances (for example, Watling Street, now the Holyhead road) or as useful secondary roads between villages in many parts of southern England, or in a more intimate fashion as bridlepaths and footpaths for solitary man and beast, but they opened up in their time whole tracts of the countryside on a scale hitherto unknown. Even the lesser local roads

pushed through the forested clay lands in all directions, and crossed the high moorlands. This does not necessarily mean that these forests and moors were opened up for clearance and settlement, except perhaps in unimportant little patches. The roads cut through the woods in going from one place to another, but the bulk of settlement was still confined to the lighter and more open soils and was associated with the pre-Roman trackways rather than the Roman roads. The Weald, for instance, remained mostly unsettled and wild, except for clearings where iron mining was carried on, and the dense forests on the heavy Midland clays show very few sites of villas or native Romano-British villages. The real importance of these roads comes out in the Anglo-Saxon period, for they were, together with the larger rivers, the ready-made routes by which the English colonists penetrated more swiftly and safely into new country than if they had had to hack their way in yard by yard from the edges. There had been, of course, and there still existed, a considerable system of prehistoric trackways, along which settlers and colonists of new land had moved since Bronze Age times, and of which the Anglo-Saxon colonists also made extensive use wherever they found them; but these early trackways kept mostly to the higher and more open ground, on the lighter soils, whereas the Roman roads thrust through the heavier and more fertile soils that offered greater possibilities to the English farmers.

The Romano-British villas, of which well over five hundred are known (and many others still await discovery), represent a substantial clearance and taming of the natural landscape. Some of them, like the villa at Ditchley in Oxfordshire, were the centres of estates of a thousand acres or more. The villa was an isolated farmhouse, standing in its own large, open fields, quite unlike the small enclosed fields that surrounded the native villages. Sometimes it was large enough and elaborate enough to be regarded as a country house, with a correspondingly large estate around it. In some instances excavation has shown that a pre-Roman farmstead stood on the same site (as at Offord in Kent or at Newport in the Isle of Wight), and that the villa represents the rebuilding of an older and more primitive farmstead as some native farmers acquired wealth and a taste for Roman ways of living. Such extensive rebuildings by farmers rising in the social scale occur at later periods in English history, notably in the sixteenth and seventeenth centuries.

Most villas appear, however, to stand on new sites, though they were still built upon the lighter soils – chalk, oolite and gravel – favoured by men before them. 'They tend,' says R. G. Collingwood, 'to select a rather

The centres of Roman villas were indeed the centres of the estates. But it is probable that many of these estates were not the result of clearance and the taming of the natural landscape, but merely the formal Romanisation of earlier estates. Excavations at numerous villas have revealed earlier farmsteads beneath them. The occupants merely replaced the wooden thatched buildings with mosaic floors and central heating, as the new Roman culture was eagerly adopted. A modern parallel is the transformation of the villages in say East or West Africa in less than a century under the impact of western 'civilisation'.

It is likely that Roman villas had large open fields attached to them. Where they still survive, as at Barnsley in West Yorkshire, or are visible from the air, they show the relatively small paddocks.

special type of site: a valley-slope facing south or east, not too high up, with shelter from the wind, exposure to the sun, and water close at hand.* Though occupying in the main the lighter and more easily cleared soils, villas were also established in forest clearings, virgin sites on the heavier soils which the new wheeled plough was able to cope with. One finds such villas in the Cambridgeshire woods, on the edge of the forest in southern Berkshire, and in Wychwood forest in Oxfordshire. The attack on the forests and woods which covered the greater part of England under natural conditions, and above all on the extensive clay lands, was making headway throughout Roman times, though still only slowly and sporadically.

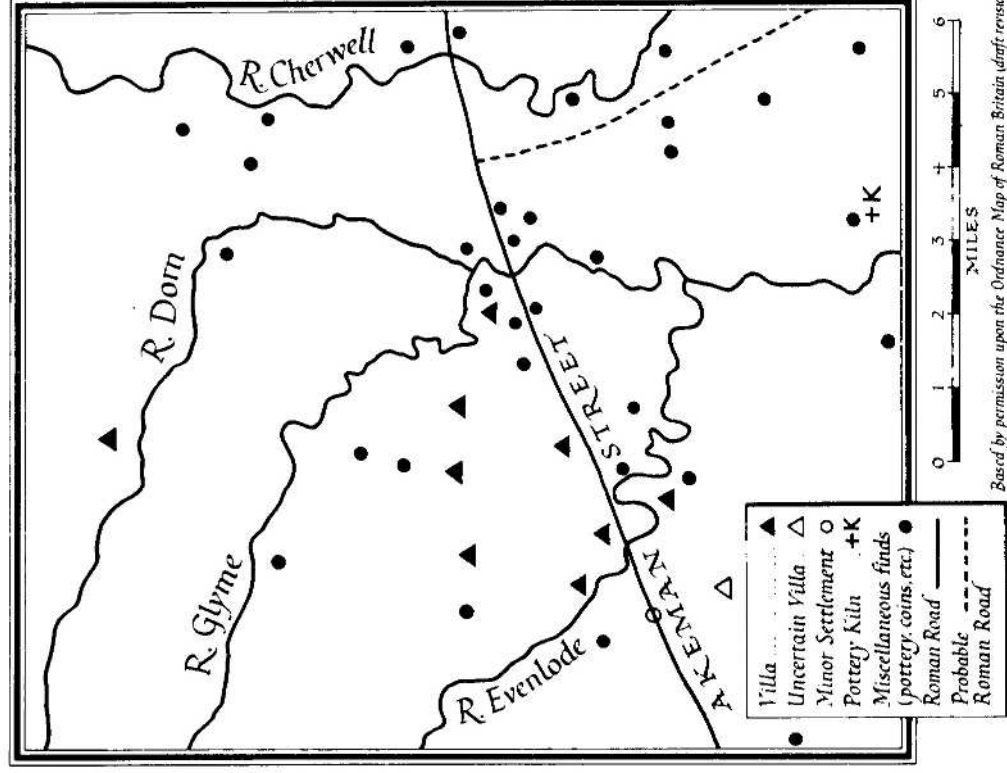
Besides the villas, there was a totally different type of settlement – the native villages, scattered over the landscape. These were small, often isolated, and usually situated on the lighter and more open soils, but they were also found in the forest clearings, on the edge of the forest in southern Berkshire, and in Wychwood forest in Oxfordshire. The attack on the forests and woods which covered the greater part of England under natural conditions, and above all on the extensive clay lands, was making headway throughout Roman times, though still only slowly and sporadically.

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* R. G. Collingwood and J. N. L. Myres, *Roman Britain and the English Settlements* (Oxford: Clarendon Press, revised edn 1937), p. 209.

7. ROMANO-BRITISH SETTLEMENT IN SUSSEX

The comparatively small district of about 10 miles by 10, which is bounded by the oolitic limestone, contains no fewer than nine villas and one uncertain villa site, one of the most important (Wilcote), a pottery kiln and a great number of sites of native villages. The concentration of sites is particularly marked between the Glyme and the R. Adur. Just off the map to the west is the important industrial settlement of Ashby, to the south of the map is the Romano-British village of Wood Eaton.



with their small, rectangular fields. These villages, of which a considerable number have been recognised, were simply groups of one-roomed huts: 'sometimes pit-dwellings sunk into the ground, sometimes stone-built structures standing wholly above it; they are never neatly aligned on streets or laid out on a regular plan, but clustered shapelessly, generally within some kind of ditch or fence; and although the people who lived in them used Roman pottery and coins to a certain extent, their daily life was affected by Roman ways very little, and in some cases, especially in the highland zone, not at all.* Most of these settlements were so small that they should be called 'hamlet' rather than 'village'. Only eight houses have been recognised at Chysauster in Cornwall, and the Romano-British village on Thundersbarrow Hill, near Shoreham, in Sussex, seems to have consisted of nine wattle huts scattered over an acre of ground or more. Nothing resembling a large nucleated village has been found in Roman Britain: this was to be the most distinctive contribution of the Anglo-Saxons to the landscape.

The distribution of villas and of native villages in Roman Britain is generally distinct. Certain regions, like Salisbury Plain, Cranborne Chase and the Sussex Downs between the Adur and the Ouse, were apparently occupied exclusively by villages. Such villas as occur in these districts are found on the outskirts. The villas with their large open fields and the villages with their enclosed fields seem to represent two different economic systems,

* *ibid.*

The Making of THE ENGLISH LANDSCAPE

existing contemporaneously. Whether they are everywhere geographically distinct remains to be seen. In the fairly closely settled region of north Oxfordshire depicted in Fig. 2 they appear to be intermingled.

In some parts of England the landscape was fairly thickly settled and cut up into fields by means of broad low banks. Of the sixty-five square miles of chalk downland between the Adur and the Ouse in Sussex, nearly fifteen square miles show signs of having been divided into fields of the Celtic type; and on this area no fewer than thirty-two occupation sites have been recognised. It now seems probable that this concentrated area of native farming

supplied London with its surplus products. Already the Great Wen was going far afield for its food. In recent years areas of close agricultural settlement have been recognised elsewhere in England: in the Fenland, in the Evesham district of Worcestershire, in the lower Trent valley and on the Yorkshire Wolds near Malton.

The close settlement of the Fens of southern Lincolnshire and of Cambridgeshire in Romano-British times was made possible by an extensive system of dikes or drainage channels and causeways, constructed by the Roman engineers. Aerial photography has revealed many sites of native villages and their associated fields, especially in the silt areas (as distinct from the peat) and on certain 'islands' rising above the general level. The Car Dike is the best known of these artificial waterways, and has now been shown to be Roman work. It was probably made to provide water transport between the Cam and the Ouse, but Sir Cyril Fox considers that it was also a drainage channel. In Cambridgeshire it forms a wet ditch, five miles in length, best seen near Waterbeach, on the east side of the Water-beach-Landbeach road and about four miles north-north-east of Cambridge. Through the Old West Water the Cambridgeshire section of the Car Dike is linked with the ditch of the same name and similar character on the western side of the Fens, running from the Nene near Peterborough northwards to the Witham near Lincoln, a total length of fifty-six miles with an original width of about fifty feet.

Long stretches of this ditch may be seen in Lincolnshire, especially just north of Peterborough; again near Bourne, where it runs parallel with the Bourne-Market Deeping road for some distance on its eastern side; and for long stretches north of Bourne. Another good stretch is to be seen from Billinghay north-westwards towards Timberland, about eight miles north-east of Sleaford. Although Roman in origin, the ditch takes its name from a Scandinavian named *Kari* or *Karr*, probably a considerable landowner in the period between the Scandinavian and the Norman Conquests, part of the ditch being in all probability a boundary of his estate. It first occurs by name as *Karesdīc* in a twelfth-century charter.

Another Roman canal, the so-called Foss Dike, was probably also used for both drainage and transport. It connected the Witham near Lincoln with the tidal Trent at Torksey – a cut of eleven miles across a narrow neck of countryside – so giving direct inland communication by water between Cambridge and York. This canal was still of considerable importance in early medieval England, for by its aid the Witham trapped the agricultural and mineral wealth of the north Midlands, and it contributed to the prosperity of Torksey, Lincoln and Boston as ports between the twelfth and fourteenth centuries.

Down in Dorset, a contour canal brought water from the river Frome below Maiden

It is probable whether London had more effect on producing areas of native farming than any other Roman town. Many Roman towns had villas set around them, but in the country residences of the urban aristocracy the villas were the main centres. Most areas of England had a very dense network of settlement, regardless of the proximity of the

The Car Dike in Cambridgeshire may well be a Roman work and was probably linked to numerous other artificial and rivers in the southern fens. Recent research in the Cambridgeshire Car Dike suggests that it was never a watercourse but was a fen-edge catch-water ditch to prevent the flooding of the fens. It is but one example of many that illustrates the considerable work of Roman engineers' work of drainage in the south-west and perhaps in the Somerset Levels. Again, the Car Dike was altered and added to by later drainage work and a great deal of the basic framework of dikes and waterways was fixed at this time.

Another Roman canal, for such it is, to Roman Dorchester is the Foss Dike. This was a good example of Roman engineering. Many other Roman canals as well as military establishments had sophisticated systems of water supply.

Newton to the Roman town of Dorchester, meandering through the country on the south side of the river. But this was an isolated feature of the landscape, of only local importance, whereas the ditches of the Fensland were important agents in the transformation of great tracts of land from natural marsh to fairly thickly scattered farms.

There was one other important Roman contribution to the landscape, and that was the town. A few towns had indeed already been founded in south-eastern Britain by the civilised Belgae, who preceded the Romans by about a century. Most important of the Belgic towns was Camulodunum (Colchester), the capital of Britain at the time of the Roman invasion. Other important Belgic towns were Verulamium (St Albans), Calleva (Silchester) and perhaps Venta Belgarum (Winchester), and there may have been others.* But the Romans founded many new towns during the second half of the first century and the early part of the second century, mostly on virgin sites, as at Exeter (Isca Dumnoniorum) which was founded about AD 50. By the second century, or the early third, most of these towns were walled around. But the towns were only small oases in a vast extent of countryside: the thirty-three civil towns together added up to only about four square miles of urban settlement. The twelve tribal capitals averaged about a hundred acres each in size, the ten smallest towns about thirty acres each. Roman London covered about 330 acres, but Roman Bath only twenty-three, and Irchester only twenty.

We have to record the appearance of towns as a new feature in the English landscape, but they were small, generally far apart, and quite foreign to the mode of life of most of the population of Britain. Possibly some 200,000 people lived in them altogether. As for the total population of the country at this period, it has been put at half a million by Collingwood, and at one and a half million by Wheeler. Grahame Clark comprises at six hundred thousand to seven hundred thousand. We do not know more exactly than this.

It might seem from the foregoing pages that in the five hundred years that elapsed between the coming of the Belgae and the departure of the Romans the natural landscape had been very considerably altered, tamed, and brought into use as farming land. Wide tracts of marshland had been drained and settled, the forests invaded by roads and by villa-estates in many places, the open downs and some of the valleys dotted with hamlets and isolated farms, nearly a hundred towns (most of them small) planted here and there all over the country, and especially south of the Trent. Over five hundred villas are known: more are discovered every year: the total may well reach a thousand in time. About seven hundred native villages are shown on the map of Roman Britain, and many more await discovery. The map of south-western England, for example, is almost a total blank: only one town (Exeter), three or four villas, perhaps half a dozen villages or permanent settlements: only this meagre sprinkling in an area of more than four thousand square miles. Moreover, this was the important Celtic kingdom of Dumnonia, which was resisting the Saxon invasions (however ineffectively) in a number of pitched battles as late as the closing years of the seventh century. It is clear that there must have been a considerable population in this part of England all through the Roman period of which hardly any record has yet reached the map, and this may be equally true of the northern kingdom of the Brigantes, where the map is almost as barren of evidence of settled life. When these parts of England have been more exhaustively explored by archaeologists, we may well have nearer fifteen hundred native hamlets in place of the seven hundred or so now known. Some twenty generations had been colonising the landscape

The exact significance of the 'Belgic' influence is the subject of some dispute. It is more likely, however, that which developed in southern England in the years of the pre-Roman Iron Age were the increasing contacts with the expanding civilised Roman Empire on the continent, rather than of large-scale invasions. The 'towns' themselves appear to have been clusters of buildings set amongst cultivated fields and ditches whose function is not clear. These towns survive around St Albans and Silchester but are not seen for example on Minchinghampton in Gloucestershire where no later town appears.

Few Roman towns were on virgin sites but many began their formal urban life as settlements attached to early forts. Cambridge is thought to be of the latter type, has produced evidence of early occupation.

It is impossible to ascertain the population of Roman times. However, in view of the fact that settlements now known, even assuming that they were occupied simultaneously, all the towns and villages must be regarded as far too small. Five million people would be nearer the mark, above that of early medieval times. This is a measure of the impact of Roman activity on the landscape.

As already noted, there were far more settlements in England in Roman times than Professor Haverland conceived. Certainly towards the end of the Roman period some land and settlements had probably been abandoned and towns were in decay. But in the early part of the English landscape this had happened, and much land was in good heart and being cultivated. Estates were still flourishing and the country, in formal, if declining, government organisation, with the withdrawal of Roman military protection, was in that government, economic decline and the loss of urban life. But for the millions of people the landscape had to continue albeit in reduced circumstances.

* I give the modern names in brackets, though the sites of the Belgic town and the modern town (or village) are not quite identical.

since the arrival of the Belgae, and must have made a considerable impression upon it before the Anglo-Saxons appeared upon the scene. One would have expected the back of the task to have been broken after all this activity, whereas in fact the Anglo-Saxons moved into a country that was generally still a wilderness, with almost everything yet to be done. In certain favoured regions like the Cotswolds and north Oxfordshire they may have entered a fairly civilised landscape; but in general they had to start (literally) from scratch.

There are two reasons why this should have been so. In the first place we must not over-estimate the total impression made by the Romano-British generations upon the landscape. Their clearances, fields and settlements were locally important, but considered as a whole they made little impression upon the natural scene. There may have been, allowing for discoveries yet to be made, a hundred towns and some 2,500 rural settlements – villas, hamlets and single farms. It is nearly impossible to say what this rural settlement meant in terms of land cleared and under crops and grass. If we may judge by the Sussex downland already referred to, where nine thousand acres of land show signs of farming in Romano-British times and thirty-two settlements (large and small) have been recognised, we have a very rough average of three hundred acres per settlement. And if we apply this figure (which is almost certainly too high as an average for the country as a whole) to native hamlets and villas alike, we have a grand total of seven hundred and fifty thousand acres already rescued from the waste and used as arable or grassland. In 1914 the total acreage under crops and grass in England and Wales (excluding mountain pastures and heaths) was rather more than twenty-seven million acres. In Roman Britain, then, only two or three acres in every hundred capable of bearing crops and grass had been conquered from the natural waste. Such a figure can only be the roughest of estimates, but even if we doubled it – and this would certainly be too high – the Romano-British contribution to the making of the landscape remains unimpressive when considered as a whole.

Moreover, much of this cleared and tamed landscape had reverted, or was reverting, to its natural state when the Anglo-Saxons were taking over. In the fenland, the artificial drainage system of the Romans had collapsed by the fifth century and the rich farmlands were turned once more into a morass. Either there had been a general sinkage of land-levels, or the elaborate drainage system had been wrecked in the first devastating attacks of the Anglo-Saxons, or by their subsequent ignorance. Whatever the cause, the fenland went out of cultivation for many centuries, and the first Old English settlers moved through the

The idea that the Wiltshire downs were converted to sheep walks in the third century, often used as an excuse of the decline of Roman life, was based on a misunderstanding of the evidence. There is now no suggestion that such sheep walks existed. Certainly the downland villages were abandoned, but others continued them.

new wastes to higher ground farther inland. On the Wiltshire downs, large tracts of arable land were being converted to sheep-walks by the latter part of the third century and the upland villages were being depopulated. Possibly, however, the displaced population was being settled elsewhere, perhaps in the fenland. We do not know. On the Sussex downs the native villages show signs of having been abandoned by about AD 400.

All over the country, villas and their estates were decaying well before the Saxon invasions. A few villas were violently destroyed, but most simply decayed two or three generations before the first Anglo-Saxon colonists arrived on the scene. The buildings were tumbled and weed-grown, the fields gone back to heath and scrub. We have all seen in recent years what ten years' decay and neglect can do in a bomb-damaged town. Most villa estates must have been a tangled wilderness after fifty to a hundred years of unpeopled silence, though some survived into a later generation and their land may have been taken over by the Old English without much difficulty, as we shall see in the next chapter. Much farmland went out of use in south-western England when the Dumnonii migrated in large numbers across the channel to Brittany, probably during the first half of the sixth century. It was rescued again from the waste only after many centuries, when the medieval peasant of the twelfth or thirteenth century came upon it again and called it the 'old land', for he recognised that someone had been there before him and had once tilled or grazed it. Such is the significance of farm-names like Yelland, Yellaton, Yellowland and

Yellowmead, all in Devon.

Much, then, of the work of taming and shaping the landscape by the hungry generations from the Belgae onwards had been lost in weeds, scrub and ruins by the time the Anglo-Saxon colonists arrived. The work had to begin all over again. Not quite all over again, as we shall see, but the great majority of the English settlers faced a virgin country of damp oak-ash forest, or beech forest on and near the chalk; and what was not thickly forested was likely to be cold, high mist-wrapped moorland, or water-logged wet heath, drowned marshes and estuary saltings, or sterile, thin-soiled dry heath. Studies of separate counties will correct this picture in detail, and show more clearly what survived from the wreckage of Romano-British rural life; but in the main this is what the picture looked like to those land-hungry invaders as they penetrated up the Humber rivers, the rivers of the Wash, and up the Thames, in the middle decades of the fifth century, looking for their new homes.

The Landscape before
THE ENGLISH SETTLEMENT

It is now clear that this picture is far from the truth. Whenever and however the Saxons arrived in England they found a land which was entirely tamed and exploited. Nowhere could they or did they start from scratch. They merely adapted the framework laid down by generations of earlier peoples.

Introduction

scape of communications has always fascinated historians alike. Generations of scholars and local historians have understood the pattern of roads and tracks in England and in parts of the same enthusiasm has been shown for railways and all these means of travel have their own intrinsically interesting features largely generated by the method of movement. Bridges, turnpike cottages, milestones in the case of roads, inns, cuttings, locks, warehouses, etc. in the cases of canals and rivers. The actual line of communication is usually of little interest, but the road, a grassy lane, a sheet of water or two parallel rails, may have a main interest in the methods of communication should lie in the way they affect the wider landscape rather than in their specific details. Yet so many people fail to see these wider and far more important aspects in their search for minutiae such as the differences between the Midland Railway signal boxes and those of the Great Western, or the fact that the worst has been the invention of a whole pseudo-history of turnpike roads based on the tracing of communication across large areas of countryside and explaining the results in terms of prehistoric and medieval roads.

From the major engineered Roman roads, limited lengths of high- or nineteenth-century turnpike roads, some nineteenth-century enclosure roads and modern by-passes and motorways, there have been a road. The Ridgeway in Wiltshire and Berkshire have been used in prehistoric times, but probably no more of the line of the A4 across the same counties. Similarly the A11 from Thetford and Norwich is likely to be just as old as the nearby Icknield Way, but we do not know, nor is there any way of knowing it. More time and energy has been expended on the history of roads and tracks than on any other feature in the English landscape of it to little effect. Just because a road runs past a group of prehistoric burial mounds does not mean that it is prehistoric. There are prehistoric Age burial mounds in their thousands all over England and Wales, but no road or track passes near most of them. Nor is the road between,

say, Salisbury and Winchester necessarily medieval just because it now links the two medieval towns. It may be older, it may be younger. Indeed one can safely say that almost all of our roads have been used in medieval times and perhaps most were also used in prehistoric period as well. But that said we have come to no conclusion.

To understand roads we need to begin with the premises. Roads are very old indeed and that what we need to study is the changing importance through time as man adapted the requirements. Thus a minor lane between two Iron Age villa sites has been improved and linked with others to become a Roman estate centre and one of its dependent farms. Then it has been further extended and incorporated into a local road stretching across three counties. Later it may have developed into a local field access path in the thirteenth century, been re-enclosed by enclosure commissioners in the eighteenth century and turned into a dual-carriage trunk road in this century. It is still the same road, but it has merely changed its function and thus its form. It is in this history of these changes that we begin to understand the history of the landscape as a whole, the Iron Age village, the Roman estate, the medieval trade, the medieval fields, the eighteenth-century agricultural revolution, the nineteenth-century industrialisation.

Professor Hoskins was incorrect in suggesting that there is now to say about roads. Basically there is everything to say, and roads are not understood at all, at least in their wider context. It was probably correct in attempting to explain some of the complexities of roads in England by using one sheet of the Ordnance Survey 1-inch map series. Much of what he says about the roads as depicted there is perceptive and useful, but even Professor Hoskins is wrong in the attribution of many of them. Some of the explanations and differences of interpretation are covered in the original notes to this chapter, but it is perhaps worth mentioning at greater length here.

PLATE 94. *Wade's Causeway, Wheeldale Moor, North Yorkshire. This is the Roman road from Malton to Whitby and has been cleared of vegetation and exposed to show its structure. What is visible are merely the rough foundation stones. The smooth road surface has long since disappeared. It is thus a failed routeway.*

area covered by the old Ordnance Survey Sheet 145 is now on parts of the new 1:50 000 scale series, Sheets 151, 152, 164. Within this region, as Professor Hoskins suggested, there are names and alignments which raise questions in the mind of a landscape historian, questions which could be asked of any part of

the region. Professor Hoskins was particularly interested in the Banbury Lane, because it had been identified as a prehistoric trackway by geographers in the 1950s, shortly before he wrote this book. It now seems likely that this was any more of a prehistoric trackway than the roads depicted on the map. The identification of the so-called 'Way' was always based on the very flimsy evidence that it was some six or seven Iron Age sites. Now, hundreds of Iron Age sites are known from the area and the 'way' has no direct connection with any of them except by accident. The section west of Banbury is, of course, by no means a continuous line, nor is the alleged early 'arc' dated. The real importance of the Banbury Lane, regardless of how old it is, is that it was the main medieval route from Oxford to Banbury. Northampton was founded in late-Saxon times as a planned town. Banbury is certainly a planned town, the Bishop of Lincoln between 1123 and 1138. The importance of the Banbury Lane must have begun therefore in the twelfth century. Yet by the late seventeenth century it is not one of the roads described by John Ogilby in his atlas, *Britannia*, and it has lost its former significance by that date. Nevertheless much of the important road between the two towns.

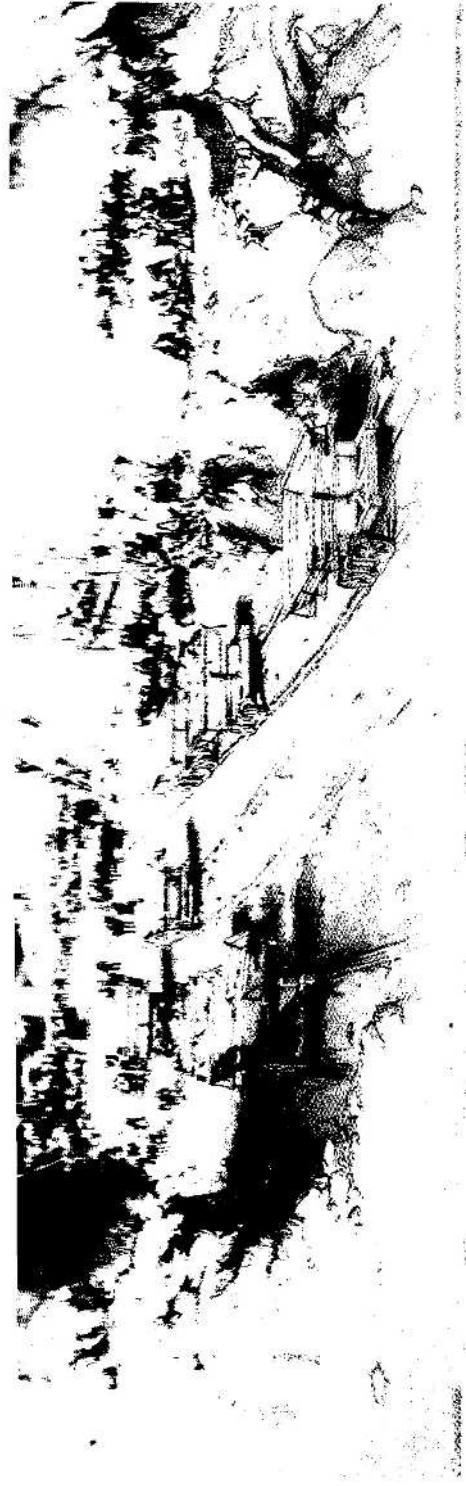
The other alleged prehistoric routeway, the A432, any more significant. It is indeed on a ridgeway in places, but the existence of roads near it is entirely fortuitous. It is no doubt an old road, no older than most, whose importance developed in the period as the main route between Oxford and Banbury. By the time it was part of the main Oxford to Coventry road and of course as a major trunk road today. That is, it had a similar status to Banbury Lane in medieval times but it is one which it has kept and it has responded to changing circumstances, whereas the Banbury Lane has failed.

The early failed road, at least to the west of Bicester, is the Roman

Akeman Street which is only used as a modern road in short sections. This is because it has been replaced by more suitable roads which have been adapted to the continually changing pattern of communications and settlement development. A much odder but more interesting Roman road is that running north-east from Bicester on to Towcester in Northamptonshire. As far as Fenny Stratford it is now a road to Buckingham (A421). One might easily assume that it has always been an important road. Yet in the late seventeenth century the road to Buckingham ran roughly parallel to it, a mile or so south-east, through Stratton Audley. This is now merely a series of narrow winding lanes, cut at its north end by a second world war road. Then it was part of the Oxford to Cambridge main road. It was not until the eighteenth century that the Roman road was re-routed and became important as a through route.

In the late seventeenth century too the main road from London to Aberystwyth did not pass through Oxford but followed the minor road (B4027) to the north, via Islip and Woodstock to Banbury and then via the modern A34 to Stratford-on-Avon. All these are examples of the changing importance of roads through time. They show well the difficulty of identifying 'old' roads. Even more interesting is the situation at King's Sutton, a village to the south of Banbury. Today no main road passes less than two miles from it, set at the junction of four minor lanes, none of which has any antiquity. Yet recent research has shown that the village was the centre of a great late Saxon estate that once extended north to Towcester, south-east to Buckingham, north to Chipping Wyke, west perhaps well into Oxfordshire, and was also the site of a Saxon minster church. All the lanes must have once been of great importance, but nothing on the map nor indeed on the ground shows this. The dangers of 'dating' roads from their former alignments are clear.

The canals of England had a much shorter life, though many have gained a new importance as recreational routeways. They were mainly constructed to link the new industrial areas to ports and markets, but were soon overtaken by the great railway companies. However, in the short time they flourished, they had an enormous impact, not so much on the towns they joined but on the country.



which they passed. While the actual canals, together with locks, bridges and wharfs, have their own intrinsic interest, far more significant is the fact that they allowed the easy and cheap movement of bulk cargoes over long distances. This, as Professor Hoskins points out, was further developed by the railways, but the railways began the spread of standard bricks, tiles and slates which gave the visual appearance of much of England.

There have even more interest in terms of the resulting local changes of the landscape with their cuttings, tunnels, bridges and viaducts. But in the end their greatest impact was the way in which they helped to change most people's way of life and in so doing changed much of the landscape. Professor Hoskins gives some vivid and varied descriptions of what happened and rightly stresses the importance of cheap standardised building materials. But in addition whole communities came into existence. Crewe, Wolverton and Eastleigh became all new railway towns, while Doncaster, Swindon and Ashford became major engineering centres. Other towns were changed and recognised because of their location at centres of major railways. Peterborough is perhaps the best known but March in Cambridgeshire and Gainsborough and Spalding in Lincolnshire are other places where the railway transformed provincial towns. The railways also changed the development of all was York. The railways also speeded up the development of some of the early resorts such as Skegness, Mablethorpe, Bournemouth, Swanage and Weymouth, and certainly allowed minor villages such as Grimsby to become lesser resorts and ports such as Grimsby to be developed into major exporting centres. Even sleepy rural villages were transformed into minor railway settlements with the coming of the railways. An example of this was Woodford Halse, in Northamptonshire, which was transformed by the arrival of the Great Central Railway's new depot in 1896.

One of the most fascinating places is Melton Constable in Lincolnshire. Up until 1880 it was a typical Norfolk village with no railway, but merely a dispersed pattern of cottages and farmsteads. In 1882, the Lynn and Fakenham Railway Company extended the line from Fakenham to Norwich via Melton. In 1883 the company, the Eastern and Midlands Railway, laid a further line

PLATE 95. *Excavations for the cutting for the Park Village, Camden Town, 1836, on the London and Birmingham Railway. This splendid lithograph by Bourne gives one a vivid idea of the impact of the railway on urban landscapes. It is the scene of the 'earthquake' description in Dombey and Son.*

from Melton to North Walsham and also established Melton as an engineering headquarters. A year later another branch to the north, the Great Northern Railway, was completed and Melton stood at the centre of a major railway junction. In 1889 the new Midland and Great Northern Joint Railway took over the lines and Melton was further developed as the new Committee's locomotive building and repair works. Today all the rails have gone, as have most of the station buildings, the cuttings, the locomotive works, the school and the 'Railway Terrace', both dated 1896, and rows of neat terraced houses designed by a Great Northern architect, still survive. Visual evidence remains a railway centre even more than twenty years after the way went. Its much longer history before the 1880s is hard to trace. Elsewhere the overall impact of the railways on the English landscape is not as easy to assess as it at first appears. As Professor Hoskins has shown, it is by no means always clear what effect the railways had. The arrival of a railway in a town did not always lead to an increase in population. For example, in 1851 just after the railway came, Macclesfield had a larger population than Coventry, Halifax or York, having had a 160 per cent increase in population in the previous forty years. Yet by 1881 the population had fallen by four thousand. Professor Simmons says when he says that it is very hard to isolate the part played by the railways in the growth of towns and the development of the country that all the other economic and social factors of the nineteenth century are also factors in the study of railways in the landscape has hardly begun.

ROADS, CANALS AND RAILWAYS

Roads

The roads of England have attracted a considerable literature, and it might seem difficult to say anything very new. It would be attempting the impossible to write about all the varieties of roads there are in England in the space of a few pages: such a wide-ranging discussion would be full of familiar generalisations and would make very dull reading. Let us take instead one comparatively small piece of country, which contains every variety of road from the prehistoric trackway to the modern by-pass, so that the detailed differences are brought out: for the interest of an inquiry such as this, and one cannot say it too often, lies in the detail of the subject. For this purpose I choose the country depicted on Sheet 145 of the Ordnance Survey (sixth edition), which runs from the edge of Oxford northwards to a few miles beyond Banbury, and from Chipping Norton on the west to beyond Brackley in Northamptonshire on the east. One could find as much to write about on almost any other sheet of the Ordnance Survey; and one could indeed write a whole chapter about a single sheet of the 2½-inch map, covering only some six miles each way.

A merely casual inspection of sheet 145 reveals a number of named roads suggestive of several different ages and uses. There are the Welsh Road, the Salt Way, the Port Way, Akeman Street, Traitor's Ford Lane and Banbury Lane; and besides these named roads a considerable number of roads, lanes and paths that excite our curiosity by their directness for miles across almost uninhabited country, or by their association with parish boundaries or ancient earthworks (like Aves Ditch), or some other suspicious circumstance.

Banbury Lane, now in part a main motor road, is the oldest of the roads on the map, though there is little about it today to indicate its great antiquity. It is a part of the so-called Jurassic Way, which runs along the junction of the upper lias and the lower oolite like a corridor, eventually linking the Bristol Avon with the Humber.* The course of this important trackway across sheet 145 is perfectly clear. It makes its appearance on the bold ridge by the Rollright Stones, where it forms the boundary between Warwickshire and Oxfordshire for part of its course. Keeping along the watershed between the Warwickshire Avon and the Cherwell, it runs past Oatley Hill Farm to Wigginton Heath. Thence it drops down to cross the Cherwell at Banbury. East of Banbury, where it has attracted the name of Banbury Lane for some twenty miles, it follows a winding course along the watershed between the Cherwell and the Great Ouse. For a considerable distance it is now followed by a main road (A422 and B4525), but near Culworth it becomes a narrow lane, running through almost deserted country, past Adstone Lodge and Foxley to Cold Higham. Here we are in the uttermost depths of the Midlands. After Cold Higham it crosses Watling Street, runs past the important Iron Age hill-fort of Hunsbury, and reaches the crossing of the Nene at Northampton. There is no need to trace it farther. Mr O. G. S. Crawford believes the Jurassic Way to be of Iron Age date in view of its strong associations with hill-forts and finds of this period, though he does not dismiss the possibility of its being older. Whether it goes back to the Iron Age or the Bronze Age, however, it has lost its original character as a wide trackway across open country. To see what it was once like we have to turn to the chalk downlands, notably the Ridgeway that follows the crest of the Berkshire Downs or the Icknield Way near Royston in Hertfordshire.

In its present form the Banbury Lane represents a great narrowing down of what was originally not a single track but a more or less open corridor (so that one cannot be too precise about its prehistoric course), bounded on either side by dense forest, in places several miles wide. The narrowing down of this primitive trade-route took place, perhaps

* See the essay by W. F. Grimes in *Aspects of Archaeology in Britain and Beyond* (H. W. Edwards, 1951), pp. 144-71, and some pages in O.G.S. Crawford, *Archaeology in the Field* (Phoenix House, 1953), pp. 81-5.

An unusual feature on an English road, this tunnel on the A176 at Beaminster, Dorset, dates from 1831-2. It was built in order to provide the ancient road over the long-ruined Horn Hill into Somerset, and largely paid for by Giles, a major local landowner, in place of genuine public money. It was designed and constructed by one of the new breed of civil engineers, M. J. B. & Co. from that presages early Victorian railway architecture, and at that time had not yet been completed.

The explanation here is that these prehistoric trackways crossed across open land. If indeed they were prehistoric, it is doubtful that they crossed the open downland after the later Bronze Age. The Ridgeway on the Berkshire Downs is edged by the traces of thousands of acres of prehistoric fields and would have merely been the home among many passing through a totally cultivated landscape. The Icknield Way in Hertfordshire certainly consisted of at least half a dozen clearly defined and parallel lanes edged by contemporary fields with other lanes crossing it at right angles. Even today, in the medieval period, when the downlands were indeed grass-covered grazing areas, the generally accepted zone of communication was made up of countless trackways criss-crossing each other, quite unlike our structures today.

in stages, in Saxon and early medieval times as more and more land was taken in for arable cultivation. On the chalk downlands, which have been under sheep pasture ever since the Iron Age, something like the original appearance of a similar trackway has been preserved, but in the arable Midlands it must have disappeared fairly early. We know that in the eleventh century the Jurassic Way in Oxfordshire was the main road to Northampton, probably joining it with the important town of Gloucester, and throughout the Middle Ages it was a market-road, linking one market town with the next in a long series. Its present course can almost certainly be dated from late Saxon times. Northampton began life as a fortified position in the early tenth century – it is first recorded as a name in the year 917 – and soon became the shire town. From this time we can probably date the development of Banbury Lane as a road rather than a wide corridor.

Deviations from ancient routes appeared at an early date. It is clear from the map (and other evidence) that the original trackway near Great Rollright ran due north, across the Stour and straight up Traitor's Ford Lane (this must be a medieval name), along the broken lip of the escarpment to Edge Hill. Thence it described a great arc through Fenny Compton and Byfield to rejoin the other road at Cold Higham (Crawford). Crawford considers that the Saxon road to Northampton was a later shortening of this ancient trackway; even so, parts of the Banbury 'cut-off' are themselves prehistoric in date.

The other deviation, that from near Culworth to Watling Street, is of recent date. The old lane was in use down to comparatively recent times as a through road from Northampton to Banbury. On the first edition of the 1-inch map (1834) it is shown as boldly as the lanes linking the villages of Canons Ashby and Moreton Pinkney, and similarly on the map of 1887. The Lane must have fallen out of use in this stretch within living memory.

There is at least one other prehistoric ridgeway on sheet 145. This has continued in use to the present day and carries a vast traffic between Oxford and Coventry and Birmingham. It is now A423, which began as a prehistoric ridgeway along the watershed between the Cherwell and the Evenlode. It ran from a crossing of the Thames at or near Oxford (perhaps ultimately from the Berkshire Ridgeway) northwards to join the Jurassic Way near Banbury. There are remains of long barrows and of megalithic tombs at various points along its course. Later it was taken over and paved by the Romans from a point north of Oxford to Sturdy's Castle, where it met the east-west road of Akeman Street. Medieval



One of at least three lines of the so-called Ridgeway, near Banbury, Berkshire. How old is it? It is certainly used in medieval times, but it is doubtful if it is prehistoric. It even though traces of prehistoric and Iron Age fields lie on either side of it. In fact a little further to the north-west this track is edged by a Bronze Age ditch.

charters along its course refer to it as 'the ridgeway'. It apparently remained in continuous use throughout medieval times; it figures as the main road from Oxford to Banbury in Ogilby's road-book (1675); it was turnpiked in the eighteenth century and it still follows its original course after some three thousand years. Because it has remained in use all this time, and has been continually adapted to heavier traffic, it has lost its original character except in two respects. It still commands extensive and airy views over the valleys to the east and west, and in places its broad grass verges betray something of its original width before the road was metalled.

Of the Roman roads of the district, one need say little. Akeman Street will serve as an example. A good deal of it to the east of the Cherwell remains in use as a main road (A41 and A4095), the only important break in the line being caused by the growth of the Saxon town of Bicester, a mile to the north, in place of the now-vanished Romano-British town of Alchester. Just short of the Cherwell, however, the line of the road disappears from the 1-inch map, and to the west of the river for many miles it can be followed only as a continuous hedge-line, a field-path, and a bit of lane here and there. Its entire course can, however, be traced without much hesitation.

Among other features of the road it is interesting to see how it still forms the northern boundary of Kirtlington Park, to the east of the Cherwell, and the southern boundary of Tackley Park, on the other side of the river. The immense continuity of English boundaries is fascinating. Akeman Street was the boundary between what is now Tackley Park and Whitehill Farm as early as the year 1004 when King Ethelred gave the small estate of Whitehill to St Frideswide's monastery at Oxford, and it is still a boundary though the Roman road has vanished from sight. Not many miles away, two estates meet, between Wootton and Steeple Barton, precisely where they met in a charter dated 958, and possibly for some considerable time before that.

The colonisation of new land, and its demarcation into private estates, created thousands of miles of *boundaries* for the first time. Often these new boundaries followed a stream or a trackway that already existed, but very often they created their own boundary lanes or *meres* (from the Old English word '(ge) *maere*', 'boundary'). This is the origin of a great number of 'green lanes' on the map which run for a few miles, separating parishes on either side but eventually petering out. They are to be distinguished, therefore, from the green lanes that run for more considerable distances, which are portions of through-roads dating from prehistoric times. Sometimes these ancient estate-boundaries took the form of deep V-shaped ditches, much more impressive than the ordinary ditch for drainage, and therefore puzzling until one realises their special origin.

These green lanes are sometimes ten to fifteen yards wide, still entirely grassed over, and used only by tractors and cattle. An example of this kind is Dornford Lane, which runs parallel with the Banbury to Oxford road for some miles north of Woodstock. The age and original purpose of this road, like that of many similar green lanes, are puzzling. At its northern end it has no obvious beginning, but it assumes a recognisable course at Barton Lodge in Steeple Barton parish. Thence it runs directly southwards for four and a half miles to Woodstock. For centuries the lane served no doubt as a cattle-road, but why did it come into existence at all, and when? It runs so near the ancient Banbury-Oxford road (within a quarter of a mile in places) that it cannot have served as another through road. One might suspect then that it originated as a boundary – a green *mere* between two ancient estates – but there is no sign of a boundary along it today. The parochial and manorial boundaries (both very ancient) follow either the Banbury-Oxford road or else take a winding course between the main road and the lane. At no point on its way to Woodstock is it followed by a boundary that is known to be ancient.

The break in the line of Akeman Street was not caused by the growth of Saxon Bicester which actually lay to the north of the road. The road through the Roman town was abandoned and re-routed just outside it probably in the fifth or sixth centuries. Bicester seems to have been a medieval planted town, probably founded around 1239 along the then main road through the area, the Aylesbury to Banbury road (A41). The Akeman roads were then diverted into the new town

Dornford Lane is much more likely to have been the former main road into Woodstock from Banbury which developed after 1154-74, when Woodstock was founded as a royal town by Henry II. The decline of Woodstock relative to Oxford merely led to the increasing importance of the present main road. Dornford Lane itself has an extension which actually begins at Woodstock to the east and joins the main road at Oxford (A34) further south at Begbroke. It may therefore have had an earlier importance as an alternative main road to Oxford in late Saxon times before the arrival of Woodstock.

The Making of
THE ENGLISH LANDSCAPE

Fig. 1.5. Packhorse bridge, 12th century, Cambridgeshire. Bridges of this type were a characteristic feature of the medieval landscape.

It was not a through-road for Saxon or medieval traffic; it did not come into existence as a boundary; it was not originally a drove-road, for cattle-drovers took over existing tracks and lanes and did not create their own except in special circumstances. We are left with one possibility – that it originated as a road from one of the royal demesne farms to the royal hunting lodge of Woodstock. The Anglo-Saxon kings are known to have used Woodstock (now Blenheim) Park as a hunting-ground. It is first heard of about the year 1000, and a charter of 1005 speaks of the 'baga' or enclosure which existed here. At the other end of the lane lay the manor of 'Bertone': no amount of ingenuity can carry the lane any farther north than this.

Barton means literally 'barley farm' or 'corn farm', but later came to have the special meaning of 'demesne farm'. Although by 1086 the Barton estate had been split up into a number of manors, of which only one was still in the hands of the king himself, there can be little doubt that before the Conquest the Anglo-Saxon kings had had here an estate of some seven thousand acres which they kept in hand for their own supplies. Nor can there be much doubt that when they were in residence at Woodstock these supplies were called upon, and were carried in carts along the wide green track now called Dornford Lane. The lane came into existence for this special purpose not later than the tenth century: in no other way can we explain its peculiar and limited course. The fact that the lane runs so wide and straight also tells us that when it came into existence the open arable fields of Barton and Wootton did not yet extend so far. It clearly ran through uncultivated land originally.

I have dwelt upon this small piece of local topography in order to show how here and there, and possibly oftener than we think, roads came into existence to serve a special and limited purpose. Most of these curious little by-roads and lanes developed in Saxon times. In the same piece of country, for example, we read of 'the wood way' in Saxon charters: these are the lanes that grew up between certain villages and the distant woods in which they had rights or pickings. Many of these tiny lanes survive, some incorporated into motor roads.

It is likely that a considerable number of Romano-British by-roads came into existence in the same way for limited purposes and yet remain to be discovered on the map or on the ground. Mr Margary's book on *Roman Ways in the Weald* was a revelation of how much can be unearthed by a patient and detailed examination of one region. There can be no doubt that on Sheet 145 of the Ordnance Survey, with which we are immediately concerned, there are by-roads which will prove eventually to be Romano-British in origin. We have been bemused too long by the great military roads of the Romans and have not given enough thought and research to the local 'economic' roads that developed during the two or three centuries that followed the Conquest and the brief phase of military occupation.

In many parts of England, roads marked as 'Salt Way' may be found. On Sheet 145 there is a short stretch of lane so described immediately south of Banbury. Salt was one of the very few necessities of life that could not be produced anywhere and had to be transported from the centres of production on the sea coasts, on tidal rivers, and from certain inland centres. At Ingoldmells, to the north of Skegness, heaps of debris have been found to be the result of salt-workings in the late Bronze Age. In 1086 there were 278 salt-pools in Lincolnshire, in Sussex 285, and many other coastal counties had a considerable salt industry at this period.

At an early date, the inland brine springs of Droitwich and Cheshire were discovered and used for the manufacture of salt. The earliest reference to Droitwich salt occurs in 716, when King Ethelbald granted a salt pit there to Evesham Abbey. By 1086, Droitwich salt was being widely distributed over the Midlands; King William himself had eighty-five salt pans here. According to Domesday Book, no fewer than sixty-eight manors and estates had

It is extremely true that many of the by-roads in an area such as this may well have been used in Roman times but it is difficult to prove. The example of King's Sutton, described in the Introduction is significant. Its importance as a late Saxon estate centre was probably the result of its being an equally important Roman and even earlier site. A large Roman settlement existed just north of the village and the great Iron Age hill-fort of Eton Colliery lies a little to the south-east. Many of the Roman tracks and footpaths which link the village to its Roman forts and to the fort were probably used by pre-Roman and Roman people.

the right to receive salt from Droitwich, including Princes Risborough, some seventy miles away in Buckinghamshire.* Mr F. T. S. Houghton has worked out many of the salt ways of the West Midlands, and considers that the short stretch of Salt Way near Banbury was part of the route taken between Droitwich and Princes Risborough, by way of Stratford-upon-Avon and Aynho. It is therefore of Saxon date, and is an example of a track used for a special purpose. It is doubtful, however, how far the salt trade created its own lanes and tracks. For the most part it made use of trackways already established and ancient, though it is possible that new pieces of track were trampled out where the direct line required it. Certainly the crossing of the Avon at Stratford is extremely ancient.

Salt ways present no special features that distinguish them from other roads and lanes on the map or on the ground. Nor have the medieval market-roads that developed all over England, particularly in the twelfth and thirteenth centuries, any special characteristics. Most of these, too, developed along existing paths, the paths that ran from village to village in Saxon times, though here and there they may have called for a new piece to complete the chain of paths. Many medieval market towns were originally villages of little note, and have sunk back again into obscurity, but their former importance is betrayed by the spider's net of roads that still converge upon them. Deddington, in north Oxfordshire, is an example of such a village, and there are several similar examples in every English county.

Few new roads were created between Saxon times and the turnpike and 'enclosure' roads of the eighteenth century. Like the salt traffic, the cattle trade that developed so strongly from the sixteenth century onwards moved along existing green lanes and trackways. Since most of England south of the Trent was now in a state of cultivation, there was little opportunity for drovers to strike across country and create new lines of movement, though on the moorlands north of the Trent they may have done so. The drovers' roads of the Midlands were particularly important, for it was along these that the great traffic in cattle from Wales to London and the Midland markets found its leisurely way. The Welsh Road, which appears here and there on the map of the Midlands, refers to this cross-country traffic. This road can be picked up just outside Kenilworth, whence it runs in a south-easterly direction through Offchurch across country to Southam, and thence through an almost uninhabited landscape towards the Northamptonshire uplands. Near Marston Doles the route turned south, past Priors Hardwick, Upper and Lower Boddington to Aston-le-Walls, near which it crosses the Banbury-Daventry road. It goes on to Culworth, where it meets Banbury Lane, and may have proceeded along this Lane to the great markets of Northampton, where the cattle were sold in large numbers for fattening on the rich Midland pastures. In the other direction, one can trace the route vaguely from the Welsh border into the Midlands. The Anchor Inn, on the border of Wales and England, high up on the far western side of Clun Forest, was the great point of assembly for drovers coming out of Wales. Thence one recognised route led on to Ludlow, and so due east through Bewdley and Bromsgrove, through the country south of Birmingham, to the point near Kenilworth where we previously picked it up on the map.

The drove-roads of England have yet to be identified and pieced together. They have been written about in Scotland and Wales, and a fascinating piece of field work and historical research awaits someone in this country who is not afraid to use his feet as well as his head. For many miles along the Leicestershire-Lincolnshire border there runs a green lane known as Sewstern Lane or The Drift. This road has a continuous history from the Bronze Age onwards. After it had been superseded in the seventeenth century by the Great North Road, which runs to the east of it through more inhabited country, Sewstern Lane became

The salt ways certainly seem to have been used to transport salt from Droitwich in late-Saxon times and perhaps earlier, but there can be little doubt that they were in use long before then.

Kenilworth is indeed a failed town which was founded a little before 1190, presumably because of its position at the junction of what by then were important roads. It probably failed because Banbury, founded a little earlier (1123-38), was at an even more important road junction.

The salt ways. Welsh roads indicate their use as early as the sixteenth century. But again they were probably making use of older tracks evolved for very different purposes. At the time they were important. Then, with the railways they slipped back into obscurity.

* F. T. S. Houghton, 'Salt Ways', *Transactions of the Birmingham Archaeological Society*, 54, 1932.

a recognised route by which cattle from Scotland and the North of England reached the Midland pastures and London: hence its later name of The Drift. Parts of it have been taken over for a secondary motor road, but much of it remains remote and quiet, rarely disturbed by a human voice.

The old drove-roads made their own contribution to the landscape in the wayside inns that grew up to cater specially for drovers in lonely stretches of country, and in the 'stances' beside them where the cattle were shut up and rested for the night. After the middle of the nineteenth century animals were moved by train (and now by lorry) and the drovers' lanes were deserted for good. Now they make some of the quietest walking in England away from the high moors. For they always avoided towns and traffic; they avoided also the larger roads which became turnpikes in the eighteenth century and were subject to tolls, and they were short-turfed for the cattle and sheep, grazing as they went.

The turnpikes, though important in the history of roads, contributed little to the landscape that did not exist before. For the most part they took over existing routes, though in the hillier parts of the country they were responsible for the making of entirely new stretches of road where the older roads tackled gradients suitable only for foot-passengers and pack-horses. These new roads may often be recognised by the fact that they run for miles without passing through a village, or indeed habitation at all apart from their own toll-houses (their most notable addition to the scene) and an inn or two attracted to the roadside by the prospect of traffic. In the industrial counties such as Lancashire the new towns called for entirely new turnpike roads

Seouthern Lane is a fine example of part of a medieval road system. It does run parallel to the Great North Road (A1) away to its east. But to say it was superseded by the latter in the seventeenth century is not entirely true. In medieval times it was merely an alternative route already existing Great North Road. The latter was probably always more important, for medieval roads were as Stamford and Grantham lay on its line. With the increase from the late seventeenth century, it was usually only one of the various alternative routes improved. The others were largely abandoned as routes. They then became very useful as alternative routes unencumbered by wheeled vehicles. Further south in Cambridgeshire there are two or three alternative routes, parallel to and east of the present A1, which are of the same origin. The same picture is visible in the London to Norwich road between Neumark and the ford across the Breckland.

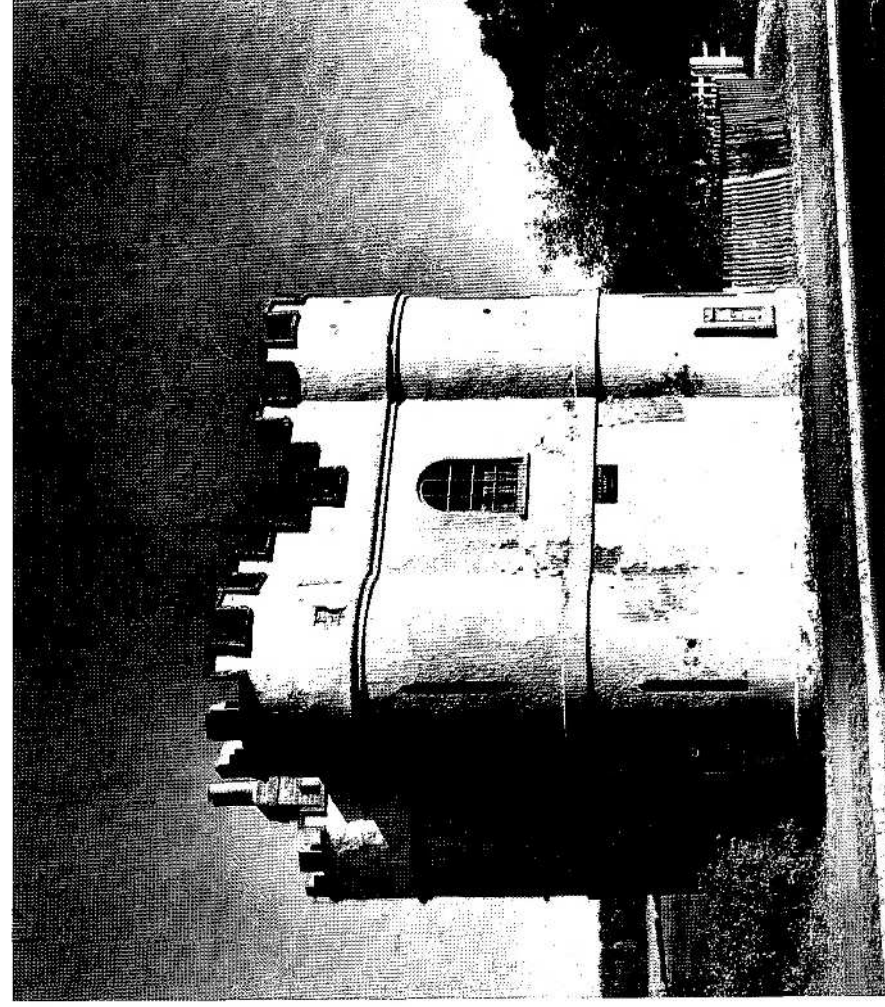


PLATE 99. This toll house at Kintbury, on the Bath Road, near Newbury, Berkshire, is perhaps more exotic than most to be probably late eighteenth-century and known as Halfway House, lies roughly halfway between London and Bath.

...the roads, like the canals and railways after the 1790s, reduced minor settlements or led to changes in settlement patterns. Thus Cowsfield Gate, in Whiteparish, Wiltshire, was a small hamlet of cottages which grew up around a windmill. It was abandoned after 1767 when the Salisbury to Romsey road was widened and re-aligned. The village of Arrington in Cambridgeshire moved sideways to the improved Old Bedford Road (A14) in the eighteenth century.

The Roman road to Holyhead produced a major and major changes to the settlements along its route. At Weedon Bec in Northamptonshire an early medieval new settlement, mainly composed of inns, grew up at the point in the parish where the Holyhead road crossed the Roman Watling Street and struck north-west towards Darenty. The new settlement acquired a Saxon name, Road Weedon. Further north in Staffordshire the ancient market town of Lichfield, founded in the late Roman period, declined into a small village. By the time of one of the main London to Chester roads, which was diverted sixteen miles to the south,

the milestone at Trumpington is only one of a whole series of milestones of which survive, along what was in the thirteenth century the main road from Cambridge to London. Few London-bound travellers follow the route today and much of the road is a relatively desolate landscape.

The most remarkable guide-posts is Dunston Pill, a former beaklands, south-east of Lincoln. It is a small stone pillar, set in a landscape of rectangular fields and lanes, all dating from the late eighteenth- and nineteenth-century enclosures there. But it was not until 1751 as an inland lighthouse to guide travellers that it was then an empty, open and desolate landscape.

lost all their character, historic and otherwise. Sheet 145 of the Ordnance Survey, with which we began, furnishes an excellent example to finish with. The main road from Oxford to Bicester (A43) runs dead straight for several miles and might well be taken for a fine piece of Roman road. But the first edition of the one-inch map, dated 1833, shows a very different sort of road, a narrow Saxon road winding and zig-zagging every few yards. Only in recent years has it been straightened.

between them, and the old road pattern was more drastically altered.

Certain important roads, too, were altered out of all recognition. The Roman Watling Street, which had become the London to Holyhead road, was vastly improved and largely remade by Telford between 1820 and 1828. Cuttings were made to ease the original gradients, causeways laid down in difficult places, and the roadway widened. Much of this engineering work was wasted at the time, for it was done on the eve of the railway age and never put to good use – not until the twentieth century. An incidental effect of the turnpike movement was the construction of fine bridges to carry heavy coach-traffic. There is a notable series over the Thames from Lechlade down to Staines, and there are innumerable others up and down the country. Near Exeter, the old Exeter to Crediton road had been doubled in width (from nine and a half to twenty feet) and so made necessary a new bridge over the Creedy. This bridge (Cowley Bridge), built by James Green, the county surveyor, in 1813-14, is so fine in design that it has already been scheduled and protected as an ancient monument.

Milestones make their appearance along the roads during the reign of Charles II. They were known to the Romans, but no one afterwards used them until the Dover Road was given mile-marks in 1663. Stones were also set up along the Great North Road in 1708, but the first true milestone to be set up in Britain since Roman times was that at Trumpington, just outside Cambridge, in 1727, where it is still to be seen. The earliest milestones were the result of private enterprise. Official milestones were authorised on the London to Chester road in 1744, but they did not become compulsory until 1773. An act of that year ordered all turnpike trusts to provide guide-posts and milestones on their roads.

Guide-posts of a sort are much older than milestones. Rough granite crosses, for example, marked the track across Dartmoor in the thirteenth century; and a German traveller in 1598 found a pre-Reformation wayside cross acting as a guide-post in Kent. A few new guide-posts appeared here and there in the late seventeenth century, and an act of 1698 ordered justices to erect standing-posts at cross-roads; but the act seems to have been ineffective. Guide-posts did not become compulsory until the act of 1773. One of the earliest private guide-posts stands on Broadway Hill, in the Cotswolds, set up by Nathan Izod in 1669. A post dated 1705 stands at Hopton in Derbyshire; and at Bicton, in East Devon, is a fine brick pillar dated 1743, with directions and scriptural texts on its four sides. Yorkshire has many early guide-posts. The older guide-posts stood several feet high for the benefit of travellers in coaches and on horseback, but in recent years those on the main roads have been considerably reduced in height for the convenience of motorists.

In recent years, too, other changes have been made in English roads. Great by-pass roads, like the East Lancashire by-pass, now plunge straight across the country, regardless of contours, using cuttings and embankments to keep as even a gradient as possible. They are entirely without beauty. Is there anything uglier in the whole landscape than an arterial by-pass road, except an airfield? Old roads have been straightened, and have lost all their character, historic and otherwise. Sheet 145 of the Ordnance Survey, with which we began, furnishes an excellent example to finish with. The main road from Oxford to Bicester (A43) runs dead straight for several miles and might well be taken for a fine piece of Roman road. But the first edition of the one-inch map, dated 1833, shows a very different sort of road, a narrow Saxon road winding and zig-zagging every few yards. Only in recent years has it been straightened.