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ROMAN ROADS IN BRITAIN

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THOMAS CODRINGTON

M. INST. C.E., F.G.S.

WITH LARGE CHART OF THE ROMAN ROADS, AND SMALL MAPS IN THE TEXT

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PREFACE

THE following attempt to describe the Roman roads of Britain originated in observations made in all parts of the country as opportunities presented themselves to me from time to time. On turning to other sources of information, the curious fact appeared that for a century past the literature of the subject has been widely influenced by the spurious Itinerary attributed to Richard of Cirencester. Though that was long ago shown to be a forgery, statements derived from it, and suppositions founded upon them, are continually repeated, casting suspicion sometimes undeserved on accounts which prove to be otherwise accurate. A wide publicity, and some semblance of authority, have been given to imaginary roads and stations by the new Ordnance maps.

Those who early in the last century, under the influence of the new Itinerary, traced the Roman roads, unfortunately left but scanty accounts of the remains which came under their notice, many of which have since been destroyed or covered up in the making of modern roads; and with the evidence now available few Roman roads can be traced continuously. The gaps can often be filled with reasonable certainty, but more often the precise course is doubtful, and the entire course of some roads connecting known stations of the *Itinerary* of Antonine can

only be guessed at. All vestiges may have been destroyed, but chance discoveries show that much may yet be learned from remains buried beneath the soil.

The network of roads might easily be made more complete, as a glance at the map will show; but it seems best to refrain from conjecture as much as possible, and to follow the roads only so far as there is evidence available for tracing them. Where routes of the *Itinerary* of Antonine can be identified, the position of the stations will be fixed by distances, or other evidence, and the dimensions of camps and walled stations on the courses of the roads will be given; but no attempt will be made to describe the remains of towns and stations.

To no one can the imperfection of this attempt to describe the Roman roads of the country be more evident than it is to myself. The materials available are incomplete, and though I am indebted for information to many under whose notice remains have come in recent years, it must happen that, in so wide a field, vestiges known locally, and perhaps described, have been overlooked.

My acknowledgments are due for the facilities for reference which have been afforded me in the library of the Society of Antiquaries with the ready help of Mr. George Clinch. My thanks are also due to the Rev. E. McClure for his valuable advice, and especially to the Rev. George Herbert for undertaking much troublesome work in looking through the proofs, and aiding in the preparation of the map.

T. C.

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ROMAN ROADS IN BRITAIN

CHAPTER I

INTRODUCTION

The roads constructed during the Roman occupation do not appeal to the imagination like such remains as the Wall of Hadrian, or the ruins of an ancient city; but when the extent and the permanent nature and effect of them are considered, they may claim a foremost place among the remains of Roman work in the country. They were part of the network of roads that covered the Roman world; for many centuries they continued to be the chief means of communication within the island; and while some of them are still to be seen in almost perfect condition, portions of many more form part of the foundations of roads now in use.

The course of the roads was evidently planned with skill, and laid out with a complete grasp of the general features of the country to be passed through; the work of construction, however, was probably carried out under many masters, and perhaps not at the same time.

The method of construction followed by the Roman

road-makers has unfortunately not been investigated with any thoroughness in this country. What we do know of it has generally been learned from sections made by chance, and too often not carefully described, and in the absence of ascertained facts writers have fallen back on the descriptions of ancient authors, as given by Nicholas Bergier in 1622.1 Vitruvius, who wrote about the time of the Christian era, is often cited as having described the manner in which the Romans made their roads, but he was really describing the making of pavements in connexion with architectural works.2 Bergier states that as he found no ancient author who had described clearly the interior parts of paved Roman roads, he was led to go to descriptions of the manner of constructing pavements in connexion with buildings, and he opened Roman roads near Rheims to see how far they corresponded with Vitruvius' description. He gives the results, which show that neither the number of the layers which he found, nor their order, agreed with this description, or with each other. He however adopted Vitruvius' names for the several layers, and this is the only authority from which later writers give those names, Stratum, Rudus, Nucleus, and Pavimentum, to layers found in Roman roads.

A quotation from the poet Statius 3 (A.D. 81-96),

Hic primus labor inchoare sulcos, Et rescindere limites; et alto Egestu penitus cavare terras.

¹ Histoire des Grands Chemins de l'Empire Romain, 1622.

² De Architectura, lib. vii. cap. i.

³ Silvarum, lib. iv. iii.

with the explanation given by Bergier, has often been made use of since. It relates to the making of the *Via Domitiana*, but Statius was more concerned with flattering Domitian than with precise description, and he affords only a very general and poetical sketch of marking out the road, excavating the ground, and filling in other material to form a bed for the pavement or other surface layer.

Palladio 1 (1570) gives an account of two methods of making Roman roads in Italy. One is described as simply a mound of sand or gravel raised somewhat in the middle; the description of the other seems to have been based on remains of roads then existing, and a plan is given in illustration. The road consisted of three divisions, the middle paved with flat stones of irregular shape, closely jointed; and two sides somewhat lower separated from the middle by stones set on edge. The sides, which were half the width of the middle, were covered with sand and small gravel. According to Palladio those on foot travelled on the paved road, and horses on the side roads, and he does not mention wheeled traffic.

In France remains of Roman roads with a middle and two side spaces have been found. Bergier unfortunately tells us nothing about the transverse

Mox haustas aliter replere fossas,
Et summo gremium parare dorso;
Ne nutent sola, ne maligna sedes,
Et pressis dubium cubile saxis.
Tunc umbonibus hinc et hinc coactis,
Et crebris iter alligare gomphis.

1 I quattro libri dell^a Architectura, lib. iii. cap iii.

section of the roads which he opened near Rheims, but Gautier, a century later, describes 1 such roads, of which he had seen many remains. The materials composing the middle portion of the road were in a trench as much as three feet deep, from which the earth had been taken to form the side roads. At the bottom of the trench was a pavement of stones on edge, five or six inches thick, and a little rounded, over which was a bed two or three feet thick of stones of about the size of eggs. The middle road was separated from the side roads by flat stones set on edge, and appeared to have been used by wheeled vehicles. The side roads, which were made much in the same manner, might, he thought, have served for foot passengers and perhaps for horsemen, and were wide enough to allow a horseman and a man on foot to pass easily. No mention is made of a paved surface.

Of such roads there are still remains, which are called Chaussées de Brunhaut, and the middle and side roads seem to survive in the *chaussées* and *accetements* of modern French roads. The evidences of similar roads in Britain are few and doubtful.

It is evident from remains which have been described, and others which still exist, that the Romans followed no hard-and-fast rule, but made their roads according to the situation and to the materials available, and perhaps in a different manner at different times

In Britain we find considerable variation in the Roman method of construction. An embankment is

¹ Traité de la construction des Chemins, p. 7, 1721.

a very usual feature, and, constructed with the utmost care on a solid foundation with suitable materials, it constitutes the ridge of the road, which often remains almost unchanged by time when man has not disturbed it.

The height of the embankment or ridge was some-times considerable, not only where a low place had to be crossed, but on high ground. Perhaps the most striking example remaining is the embankment called Atchling Ditch or Dyke to the south-west of Salisbury, which for four miles runs across the high open down almost unchanged in profile, five yards across the top and five to six feet high. Another example may be seen between Doncaster and Pontefract, where for several miles there is an embankment four, six, and eight feet high, and six yards wide, on high ground with a rock subsoil. In some places the Roman road has been removed for the sake of the materials, so that instead of a ridge, a wide shallow trench remains. In other places the paved foundation is found a foot or more below the level of the ground without a trace of the road on the surface. This has arisen from the removal of the upper part in the interests of cultivation, the portion beyond the reach of the plough having been left; deeper ploughing has caused this process to be repeated in recent years. It is, however, difficult to suppose that the roads were in all cases raised. On the Foss Way, between Bath and Cirencester, where it is a wide, grass-grown, deserted road on a high oolitic plateau, there is, to the south of Jackments Bottom, a ridge

in the middle four to six feet high; but not much further south there are no traces of a ridge for miles. The same thing is to be observed on the deserted part of Watling Street north of Watford Gap, where the green road shows no sign of a ridge for several miles until low ground is crossed, and then the ridge appears as much as five feet high, where it has not been removed for the sake of the materials.

The width of the embankment appears to have varied from six or seven feet, as at Radstock, to six or seven yards south of Jackments Bottom, both of these places being on the Foss Way. Deep trenches were commonly dug on the sides of the road, the material from which, when suitable, went to raise the ridge, but in soft places it appears to have been cast outwards. The side ditches can now generally only be traced by digging, but they sometimes remain, as on the chalk down between Vernditch Chase and Woodyates. Where Roman roads have been modernized the side ditches have become the natural receptacles of mud, etc., from the road surface, with which they are filled up.

Perhaps in this country the surface of the roads was more generally made of gravel or stone, grouted with lime or coarse mortar, and of a considerable thickness. Camden describes roads which in his time were of gravel, as in the case of Kind Street between Middlewich and Northwich, made of gravel brought from a distance. The Sussex Stane Street when it was cut through early in the century, in a situation where previous disturbance was unlikely, was found

to consist of "four and a half feet thick of flints and other stones laid alternately and bedded in sand or fine gravel." The Roman road near Woodyates, between Old Sarum and Dorchester, appears to have been of gravel. The ridge on the chalk down is as much as six or seven feet high, and where it is away from a modern road appears to be in its original state. Where it has been cut through for a drove-way, a coating of tertiary gravel two and a half to three feet thick is exposed that must have been brought four or five miles, and any material for a paving was probably not to be got. Evidence of the same sort is to be seen for several miles further on.

The original structure of Watling Street may be seen near Kilsby, where no modern road has taken its place, and a brook on one side has cut into it. The ridge across the low ground close by is five feet high where it has not been dug away, but there is little or no ridge where the stream has made a section of the grass-grown road, and there is a thickness of about a yard of gravel with a layer of pebbles or cobbles at the base on a clayey subsoil.

The surface was certainly sometimes paved. Camden describes the Kentish Stone Street as being paved with stone.² Stukeley found part of Erming Street north of Huntingdon still paved, and describes the paving of the Foss Road south of Ilchester as consisting of the flat quarry stone of the country, of a good breadth, laid edgeways, and so close that it

¹ Manning's *History of Surrey*, vol. iii. p. xiv. ² *Britannia*, vol. i. p. 321.

looked like the side of a wall fallen down,1 and the road remained much in its original state up to the beginning of the last century. Near Radstock the paving of the Foss Road still remains on the top of a hill where it has been deserted. Stukeley saw a paving for several miles on the Foss near Willoughby-in-the-Wolds 2—some of which still remains near Six Hills; and he described Leeming Lane³ on Erming Street as paved with large coggles which were being taken away for building, and which are still to be seen in adjacent walls and buildings. The original paving of Watling Street has been discovered of late years in Rochester, Stroud, Dartford, and in London. Wade's causeway remains paved on the Yorkshire moors, where the stones have not been removed for building fence walls. Maiden Way still retains its paved surface on the Cumberland Fells, and part of Dean road remains paved.

The destruction of the Roman roads for the sake of their materials began long ago, as Camden, Stukeley, and others testify, but their wholesale obliteration took place when turnpike roads were constructed along them or near them, in the latter part of the eighteenth, and the beginning of the nineteenth century. It would appear that the more usual plan was to use the materials of the old embankment to make a wider road, the height being reduced to insignificance in the process, and in time still

¹ Ilinerarium Curiosum, p. 155.

² Ibid. p. 106.

³ Iter Boreale, p. 72.

further reduced by wear. Thus, the Salisbury and Blandford road, where it takes the line of the Roman road near Woodyates, is not sensibly raised above the surface of the ground, while beyond, in both directions, where it has not been destroyed for the sake of the materials, the narrower embankment of the Roman road remains five or six feet high. Sometimes the Roman embankment was widened, generally on one side, and if it was reduced in height at all it was still left elevated considerably above the ground at the sides. This is well seen along the Erming Street between Castleford and Aberford.

The so-called milliaries afford very little information about the roads. With very few exceptions those that have been preserved only bear inscriptions to emperors, and it may be doubted if they can properly be called milestones. They consisted of a short column on a square base, or of a flat stone set upright, and their fate has been to be used for garden-rollers, posts, grottoes, gravestones, building, and the like purposes. The inscriptions are nearly always of too late a date to be evidence for that of the roads, and the original position of the stones, which might sometimes determine the course of a road, is often unknown.

Almost the only contemporary information of the Roman roads of this country is furnished by the *Itinerary* of Antonine (*Itinerarium Antonini Augusti*). This work is generally considered to date from the second or third century; it embraces the whole Roman Empire, giving routes from one place to another, and

the total distances, with the names and distances apart of intermediate stations. It was first printed in 1512, and not long after a part of it was brought to notice with annotations by Talbot, and was afterwards printed by Hearne in Leland's Itinerary. Camden's many references to Antonine show that the Itinerary was well known to him. Roger Gale in 1709 published at length that part of the *Itinerary* relating to Britain, with a commentary, in which, taking Iter by Iter, he suggested localities for the stations, and proposed emendations in the distances in the Itinerary to suit those localities. Horsley in 1732 1 followed Gale in the text of the Itinerary as printed by him at length, and also in most of his alterations of the numerals, and added others of his own to suit his localities. Unfortunately in his essay, taking Iter by Iter, and localizing the stations, he prints the numerals as if the proposed emendations were of equal authority with the originals in the Itinerary. Thus he prints "XIII. al. XVI. & XVIII.," "XX. al. XXX.," "XVIII. al. XIII.," and so forth, and Gough, in his edition of Camden's Britannia, prints the Itinerary consecutively with Horsley's emendations in this manner. Reynolds, in a commentary published in 1799, with far less information or local knowledge than Gale or Horsley, makes much more free with the distances to suit his localities, and then prints his version of the Itinerary, "with the numerals in their corrected state, and in words to secure them from alteration." It seems to have been

¹ Britannia Romana.

considered that the *Itinerary* had been so much corrupted by copyists that any emendation that fitted a writer's speculations was allowable.

In 1735 an edition of the Itinerary by Wesseling was published, giving the result of a comparison of various MSS., but without reference to the localities of the stations, except that supposed sites are given in the notes. Another edition by Parthey and Pinder was published at Berlin in 1848. These authors state that out of a large number of codices they selected twenty for comparison. On comparing the text of the Iter Britanniarum thus arrived at with that of Wesseling, and with that used by Gale and Horsley, it is found that with some variations of spelling, the differences in the distances are few. Thus out of 176 distances in the Iter Britanniarum, there are 16 differences between the text of Parthey and Pinder and that of Wesseling, of which to are of one and two miles; 12 differences between Parthey and Pinder's text and that used by Gale and Horsley, of which seven are of one and two miles; and eight differences between Wesseling's text and that used by Gale and Horsley, of which four are of one and two miles. There are no doubt errors in all three texts, but there is no indication of such general corruption by copyists as to warrant the alteration of the numerals to suit mere guesses as to the sites of stations.

The *Iter Britanniarum* is here given from Parthey and Pinder's edition. It is prefaced by a statement of the distance from *Gessoriacum* (Boulogne) to *Portus*

¹ Antonini Augusti Itinerarium. Amsterdam, 1735.

Ritupis (Richborough), which was apparently the place to which the sea was generally crossed. At Gessoriacum an Iter of Antonine ends which begins at Lugdunum (Lyons) and communicated thence with Rome by a road over the Cottian Alps. The Iter Britanniarum contains fifteen Itinera, which are not numbered in the original, but they have been so long known as Iter I. to Iter XV., that they have been so numbered. The word "Item" which appears at the beginning of Iter II. and each succeeding Iter is printed by Wesseling and others "Iter," and the "mpm" before the numbers is printed by Wesseling M. P. In the first entry of the Itinerary "milia plus minus" in Parthey and Pinder's edition is printed at length, with a note to the effect that "mpm" is so explained in several codices. There can be no doubt that the figures signify Roman miles (millia passuum), and they are conveniently indicated by the abbreviation M. P.

ITINERARIUM ANTONINI AUGUSTI. ITER BRITANNIARUM.

A Gessoriaco de Galliis Ritupis in portu Britanniarum.

(ITER I.)

A limite, id e	st a v	ano, i	raeto	rio us	que	
ĺ				m	om.	clvi
A Bremenio	Corst	opitu	m.			XX
Vindomora						viiii
Vinovia .						xviiii
Cataractoni						xxii
Isurium .						xxiiii
Eburacum, lo	eg, vi	victr	ix,			xvii
Derventione						vii
Delgovicia						xiii
Praetorio.						XXV

(Total 156)

(ITER II.)

Item a vallo a	ad port	um	Ritup	is.		
	•		•	mpr	n.	eccelxxxi sic.
A Blato Bulg	io Cast	ra e	explor	atorun	١,	xii
Luguvallo			٠.			xii
Voreda .						xiiii
Brovonacis						xiii
Verteris .						xiii
Lavatris .						xiiii
Cataractone						xvi
Isurium .						xxiiii
Eburacum						xvii
Calcaria .						viiii
Camboduno						XX
Mamucio.						xviii
Condate .						xviii
Deva, leg. xx	vict.					XX
Bovio .						x
Mediolano						XX
Rutunio .						xii
Urioconio.						xi
Uxacona.						xi
Pennocrucio						xii
Etoceto .						xii
Manduesedo						xvi
Venonis .						xii
Bannaventa						xvii
Lactodoro						xii
Magiovinto						xvii
Durocobrivis						xii
Verolamio						xii
Sulloniacis						viiii
Londinio .						xii
Noviomago						X
Vagniacis						xviii
Durobrivis						viiii
Durolevo.						xiii
Duroverno						xii
Ad portum I	Ritupis					xii
1	1					(Total 501)
						. ,

(ITER III.)

Item a Londinio ac	l po	rtum	Dubi		lxvi sic
Durobrivis .					xxvii
Duroverno .					XXV
Ad portum Dubris		Ċ	·	Ċ	xiiii
·					(Total 66)
(Iter	IV.)			
Item a Londinio ad	port	tum I	Lemai mp		lxviii sic
Durobrivis .					xxvii
Duroverno .					XXV
Ad portum Lemanis	3	٠	•		xvi (Total 68)

(ITER V.)

	(11	ER (1)	1			
Item a Londin	io I	uguval	lio a	d vallu	m	
				mpi	m.	ccccxliii sic
Cæsaromago						xxviii
Colonia .						xxiiii
Villa Faustini						XXXV
Icinos .						xviii
Camborico						XXXV
Duroliponte						XXV
Durobrivas						XXXV
Causennis						XXX
Lindo .						xxvi
Segeloci .						xiiii
Dano .						xxi
Legeolio .						xvi
Eburaco .						xxi
Isubrigantum						xvii
Cataractone						xxiiii
Levatris .						xviii
Verteris .						xiiii
Brocavo .						XX
Luguvalio						xxii
						(Total 443)

	Alega	. 1/1	١			
	(ITER		-			
Item a Londin	nio Li			mpr	n.	clvi sic
Verolami.						xxi
Durocobrivis						xii
Magiovinio						xii
Lactodoro						xvi
Isannavantia						xii
Tripontio.						xii
Venonis .						viii
Ratas .						xii
Verometo.						xiii
Margiduno						xii
Ad Pontem						vii
Crococalana						vii
Lindo .						xii
						(Total 156)
	/ T	3777	`			
,	(ITER					
Item a Regno	Lond	linio		mpi	n.	xcvi sic
Clausentum						XX
Clausentum Venta Belgari	m					X
Calleva Atreb	atum					xxii
Pontibus .						xxii
Pontibus . Londinio .						xxii
						(Total 96)
(ITER	VIII	.)			
Item ab Ebur	aco L	ondin	ium	mpi	m.	cexxvii sic
Lagecio .						xxi
Dano .						xvi
Ageloco .						xxi
Lindo						xiiii
Crococalana						xiiii
Margiduno						xiiii
Vernemeto						xii
Ratis .						xii
Venonis .						xii
Bannavento						xviii
						xxviii
Magiovinio Durocobrivis						xii
Verolamo.	÷					xii
Londinio .						xxi
22011011110			·	•	·	(Total 227)

(ITER IX.)

	(ITE	R IX.	.)			
Item a Ven	ta Io	cinoru	ım L	ondin	io	
				mp	m.	cxxviii sic
Sitomago.						xxxii
Combretonio						xxii
Ad Ansam Camoloduno						xv
Camoloduno						vi
Canonio .						viiii
Cæsaromago						xii
Canonio . Cæsaromago Durolito .						xvi
Londinio .						ΧV
						(Total 127)
	(ITE	кX.)			
Item a Clanov	venta	Med	iolanc	mp	m.	el sic
Galava .						xviii
Alone .			:			xii
Calacum .						xviiii
Bremetonaci						xxvii
Coccio .						XX
Mancunio.						xvii
Condate .						xviii
Calacum . Bremetonaci Coccio . Mancunio. Condate . Mediolano						xviiii
						(Total 150)
	(ITE		*			
Item a Segont	tio De	evam		mp	m.	lxxiiii sic
Conovio . Varis .						xxiiii
Varis .						xviii
Deva .						XXXII
						(Total 74)
	(Ітев	XII	.)			
	•		,			. (Wesseling per
				mp	m. (elxxxvi sic Muriduno).
[Vindomi.						VV
Venta Belgarı	ım					xxi
Venta Belgari Brige . Sorvioduni Vindogladia Durnonovaria						xi
Sorvioduni						VIII
Vindogladia						XII
Durnonovaria					٠	VIII
Muridono		*		•		xxxvi

(ITER XII.) -continued.

Isca Dumnuniorum . . . xvl

Leucaro							ΧV	
Nido							XV	
Bomio							XV	
Iscae leg.	ii.	Augr	ısta				xxvii	
Burrio		-					viiii	
Gobannio							xii	
Magnis							xxii	
Bravonio							xxiiii	
Viroconio							xxvii	
							(Total 2	72)
	(ITER	XIII	[.)				
Item ab I	sca	Calle	va		mp	m.	cviiii sic	
T)					•		viiii	
Blestio							xi	
Ariconio							xi	
Clevo							xv	
Durocorno							xiiii	
Spinis							XV	
Calleva							XV	

(Total 90)

(ITER XIV.) Item alio itinere ab Isca Calleya

	1011010	 20000	Cital	CTL			
			mj	m.	ciii si	С	
Venta Silu	rum.				viiii		
Abone .					xiiii		
Traiectus.					viiii		
Aquis Solis					vi		
Verlucione					XV		
Cunetione					XX		
Spinis .					XV		
Calleva .					XV		
						Total .	103)

(ITER XV.)

rtem a Caneva	ISCA	Dunn	mmoi	11111	
			m	0111.	cxxxvi sic
Vindomi					XV
Venta Belgarum					xxi
Prim					:

(ITER XV.)—continued.

Sorbiodoni .			viii
Vindogladia .			xii
Durnonovaria .			viii
Muriduno .			xxxvi
Isca Dumnunioru	ım .		XV

(Total 126)

The text of the *Itinerary* (Parthey and Pinder's edition) has been followed in the spelling of the names of the stations in preference to choosing between different forms that have been given to them. They are generally presented in the locative case, but sometimes in the nominative or accusative, and the name of the same place is in some instances differently spelt. Hence the proper form of the name is not always certain.

Another record of a somewhat similar nature is the Tabula Peutingeriana, a Roman Itinerary in the form of a rude map supposed to date from the third century, though the actual copy is not older than the thirteenth. Four places on the south coast of England are marked as Ysca Dumnoniorum, Lemanio, Dubris, and Ratupis, all of which are known; and two on the east coast, Ad ansam, and Ad taum, the former a station in Antonine's Iter IX., of uncertain position, and the latter unknown. From these, perhaps seaports, red lines are drawn inland marking roads, against which the names of 11 places and numerals are written. Most of the names have been identified with names in the Itinerary of Antonine, and the numerals seem to indicate the distances between the places. The map, though a mere sketch, throws some light on the relative positions of stations.

Other ancient authorities for the names and positions of places are the geographer Ptolemy, the Notitia, and the Ravenna list of place names. Ptolemy gives the positions of places by degrees of latitude and longitude, but it is very unlikely that the positions of places in this country, with a few possible exceptions, were fixed otherwise than by distances obtained from Itineraries or from travellers. His degrees are five-sixths of true degrees in magnitude, and when allowance has been made for that, the relative positions of some well-known places in the south of England are tolerably correct; while others are so much out as to throw doubt upon the accuracy of some of the degrees as we have them-Verulamium, for instance, is placed more than four times as far from London as it ought to be. In the north the errors are more general and greater.

The *Notitia*¹ is a list of civil and military officers with the names of their stations in the fifth century, methodically arranged.

The position of many places named in the list of the anonymous geographer of Ravenna is uncertain.

The spurious *Itinerary* attributed to Richard of Cirencester requires more notice.

This *Itinerary*, purporting to have been collected from fragments left by a Roman general, was published by Stukeley with an analysis of the treatise containing it (*De Situ Britanniæ*) in 1757, from a copy furnished him from Copenhagen by Bertram,

¹ Notitia utraque dignitatum cum orientis tum occidentis ultra Arcadii Honoriique tempora.

who afterwards printed it but never produced the original.

Stukeley accepted this Itinerary as genuine, fortunately after the publication of his Itinerarium Curiosum, as did Whitaker (who gave a copy of it in his History of Manchester), R. Gough, General Roy, Sir Richard Colt Hoare, Bennet Bishop of Cloyne, and others, though doubts were expressed about it from the first.

In 1800 an English translation of the treatise by Hatcher was published, with the text of the Itinerary and a commentary upon it by the Rev. T. Leman, aided by Archdeacon Coxe, Sir R. C. Hoare, and Bennet Bishop of Cloyne, and with these sponsors the Itinerary of Richard of Cirencester was generally looked upon as authentic in spite of the doubts of the more critical. Dr. Guest in 18501 spoke of it as "Bertram's clever fabrication" and as a "patent forgery."

In 1869 the spuriousness of the whole treatise was completely demonstrated by Professor Mayor, in the preface to an authentic work by Richard of Cirencester,2 edited for the Master of the Rolls. Of the Itinerary attributed to Richard, he says that it is in the main from Antonine's Itinerary, the routes broken, combined, and reversed; nine-tenths of the names in Antonine re-appearing with additions from Ptolemy, the Notitia, the Ravenna list, the Tabula Peutin-

Archaelogical Journal, vol. viii.
 Speculum Historiale de Gestis Regum Anglia, pp. 447— 1066.

geriana, and from Camden's, Baxter's, and Bertram's imaginations.

Unfortunately the effects of a fabrication believed in by antiquarians for so many years have been lasting. An editor's preface to a genuine treatise is not the best means of making generally known the spuriousness of another work attributed to the same author, and the fictitious names, stations, and roads of the so-called Itinerary of Richard continue to be given without a hint of the authority for them, which probably is often not known. Those responsible for the new Ordnance maps must presumably have been ignorant that it was proved more than 30 years ago to be a forgery, as they have engraved names of stations for which there is no other authority than that of those who, like Stukeley, Gough, Hoare, and others, took the names from the supposed Itinerary of Richard and found sites for them.

The first historical mention of a Roman road after Roman times is in the treaty of Wedmore, A.D. 878, in which Watling Street is named in defining the boundary between the dominions of Alfred and Guthrum. This was four and a half centuries after the departure of the Romans from Britain.¹

In the Laws of Edward the Confessor 2 four ways which are undoubtedly Roman roads are given by

¹ Dr. Guest, Archaeological Journal, vol. xiv., says that the Foss is mentioned in Anglo-Saxon Charters as early as the eighth century, and the Rev. Edmund McClure cites charters in which the Foss is a boundary near Baltonborough, Somerset, in 744; near Evenlode A.D. 779; and near Malmesbury A.D. 931.

² Lees Edwardi Regis, David Wilkin, p. 190.

name as protected by the King's peace: Watling Strete, Fosse, Hikenild Strete, and Erming Strete, of which it is said that two run lengthways and two across the kingdom. In the Laws of William the Conqueror, which in the preamble are stated to be the same as those of Edward, only three ways are named, viz. "Watling Strete, and Erming Strete, and Fosse," Hikenild Strete being omitted.

These names are still borne by Roman roads, but there is some doubt as to what roads they properly apply, and the uncertainty dates from early times. Henry of Huntingdon, who wrote in the first part of the twelfth century, and Ranulphus Higden, Monk of Chester, who wrote about 1344, described the course of the Four Ways, and while agreeing generally about Watling Street and the Foss, they differ altogether about the other two. Higden, in his Polychronicon, repeats a fable of Geoffrey of Monmouth, that the four ways were made by an imaginary King Belinus, and he describes the course of them. He gives the course of Watling Street with a fulness which seems to result from a personal knowledge. According to him it begins at Dover, goes through Kent, crosses the Thames on the west of Westminster, and passes by St. Alban's, Dunstable, Stretford, Towcester, Weedon, south of Lilleburne, by Atherstone, and thence to the Wrekin, crosses the Severn near Wroxeter, and goes by Stretton through the middle of Wales to Cardigan. As Dr. Guest observes, the King's peace could not have run into Cardiganshire in the time of Edward, but as far as Stretton, Higden describes accurately the

course of a Roman road, which he extended without particulars through Wales to complete King Belinus's road from sea to sea. Henry of Huntingdon takes Watling Street to Chester, which Higden the Monk of Chester does not.

Higden at first appears to identify the Foss with one of Geoffrey's roads, supposed to have been made by Belinus, beginning at Totnes and ending in Caithness; but he adds that according to others it begins in Cornwall, going through Devon and Somerset, near Tetbury and Coventry to Leicester, through a great plain towards Newark, and ends at Lincoln. The latter description from Devon to Lincoln is generally correct.

Erming Street, according to Henry of Huntingdon, runs from south to north through Huntingdon, for which there are other ancient authorities. Camden ² says the Roman road through Royston to Huntingdon was called Erming Street in the *Book of Ely*, and that near Stilton the road was called Erming Street in an ancient Saxon charter.³ Higden, following another of King Belinus's roads in Geoffrey of Monmouth's account, says that Erming Street tends from west to east, beginning at St. David's, and goes to Southampton, that is, roughly parallel to Watling Street, and extending from sea to sea. There can be little doubt that he referred to the line of Roman roads through Gloucester, Cirencester, Cricklade, to near Wanborough, and then south by Marlborough to Win-

¹ Polychronicon.

² Britannia, ii. 211.

³ Ibid. ii. 249.

chester and Bitterne near Southampton, a route which in Gloucestershire and North Wiltshire still bears the name of the Ermin Way.

The fourth road, called in the Laws of Edward Hikenild Strete, is generally supposed to be connected with the country of the Iceni. Dr. Guest 1 says that the earliest forms of the name in Anglo-Saxon charters are Icenhilde Weg or Icenilde Weg, that it is mentioned in an ancient parchment quoted by Dugdale probably not later than the fourteenth century as Icknild at Dunstable, and that Icenilde Weg is mentioned in a charter of the tenth century relating to estates between Blewbury and Weyland Smithy in the west of Berks, and that it is certain that in the tenth and eleventh centuries Icenilde Street was the name of the road leading on to Avebury, and also that an old charter describes an estate near Andover as bounded by Ickeneld Way. The name not long since survived in descriptions of boundaries of estates on the Roman road from Winchester to Cunetio. The Rev. E. McClure gives Ican-geat as the name in a charter A.D. 779; Icenhylte as a boundary near Great Kemble, and Icenhilde weg near Hardwaela (? Wherwell), Hants, in charters of A.D. 903; and Icenhilde weg near Wenbeargan (Wanborough) in a charter of the eleventh century. The name under various forms designates roads from the borders of Norfolk through Cambridgeshire, Bucks, Berks, Hants, and Wilts into Dorset.

¹ 'The Four Roman Ways,' Archeological Journal, vol. xiv p. 99.

Higden, however, gives the name of the fourth road as Rikenild Strete, which, he says, tends from the south-west to the north, and begins at St. David's and continues to the mouth of the Tyne, passing Worcester, Droitwich, Birmingham, Lichfield, Derby, and Chesterfield. Dr. Guest suggests that the Monk of Chester in passing along Watling Street would cross Riknild Street, and was led to adopt it as Icknild Street; however that may be, Riknild Street, as Higden describes it, can now be followed from Worcester to near Chesterfield, and can be traced as far north as Aldborough, and it has borne that name, or Rigning, Recnald, or Rignall, from early times to the present.

Confusion has arisen from an attempt to ignore Riknild Street as a road distinct from Iknild Street. Dr. Plot is a good deal responsible for this; he not only extended Icknild Street into Staffordshire, but he established the Iceni there as a ground for so doing.

These names are all applied to roads which seem to have little or no connexion with those to which they properly belong. Thus Watling Street is the name of a road running north from Kenchester in Herefordshire, of a road between Chester and Manchester, and of a road between Manchester and Blackburn. Leland calls the road crossing the river Wharfe at St. Helen's Ford, the road at Ald-

¹ In three of the four MSS. of Higden, collated and printed under the authority of the Master of the Rolls, the name is given Rikenilde, Rikenyldes, and in the fourth, which is said to be one of the earliest, Hikenil Street. Trevisa's English translation (1387) calls it Rykeneldes Strete.

borough on Erming Street, and the road by Greta Bridge on the way to Carlisle, Watling Street, and says that "Ancaster standeth on Wateling." Watling Street is the name borne by the road which runs through Northumberland into Scotland, where it seems to be the usual designation of a Roman road. The names Foss and Erming Street are also applied to roads having no connexion with the roads properly so called, and the wide distribution of Icknild Street under various forms has been noticed.

Akeman Street, Portway, Peddars Way, Maiden Way, Sarn Helen, are old names of Roman roads, but Latin names, such as Julia Strata or Via Julia, Via Devana, Via Badonica, are not Roman and generally modern.

The straightness of Roman roads is the characteristic which strikes ordinary observers, and has been, perhaps, too much insisted upon, while the skill and the comprehensive grasp of the features of the country displayed in laying them out has received too little notice. In an open country like much of the south of England, the general course of the Roman roads is often wonderfully direct, perhaps not deviating more than a quarter or half-a-mile from an absolutely straight line in 20 or 30 miles. But even here between the extreme points there are many pieces of straight road not quite in the same line, and where a difficulty, such as an unnecessary crossing of a river, or a steep hill which need not be passed over, could be avoided by leaving the straight line, it was generally done. Where steep-sided valleys had to be crossed the road winds down and up, and resumes the straight line on the other side. In a broken country, or along valleys, a winding course to suit the ground was usually followed, and in a hilly country straightness is sometimes not a characteristic at all. Considerations of a military nature sometimes caused difficulties to be faced which might have been avoided, and it is plain that high ground was generally preferred.

The directness and straightness of Roman roads seems to be largely a matter of convenience in setting them out. In many cases the general course may have been laid out from one end, perhaps with the help of a smoke signal, as the road from Lincoln to the Humber, the road from Notting Hill to Staines, and the 19 miles of Watling Street south-east of Chatham Hill. But there can be no doubt that the Roman engineers made use of a method well known to surveyors for laying out a straight line between extreme points not visible from each other, from two or more intermediate points from which the extreme points are visible. By shifting the intermediate points alternately all are brought to lie in a straight line. The general course of many roads must have been thus laid out.

Between the extreme points there are many straight pieces not quite in the same line, generally pointing to some landmark which can often be identified, either on the ground, or with the help of the Ordnance map with levels and contours.

Changes of direction from one straight line to

another, when the change is not at a station or some other point through which the road had to pass, almost always occur at points on high ground. There are several instances where a barrow or tumulus was the landmark, the road passing round it on nearing it. Silbury affords one example, and Brinklow, on the Foss, another.

The straightness is often less apparent in travelling along a Roman road than on a map. When the roads were enclosed, of course long after they were made, the usual width between the fences appears to have been about 20 yards, or even more, and where that width has been preserved the present road, perhaps not more than 12 or 15 feet wide, often winds from fence to fence. Hedges and trees overgrowing the sides, and other encroachments on the width are Parts have been taken in to adjacent fields, or long strips have been fenced off as separate enclosures on which houses have often been built. The original width between the fences has thus been often reduced to one-half or even one-third, sometimes on one side of the road and sometimes on the other; and especially where trees and hedgerows hinder the view of any length of road the straightness is far from being obvious. A way in which the original straightness has been lost is shown on heaths and commons where the ridge remains, and a carttrack runs sometimes on the ridge, and sometimes alongside it on one side or the other, as the best way along the neglected road has been followed.

Certain place-names constantly recur on or near

Roman roads. The more numerous are those connected with Street, such as Old Street, High Street, Green Street, Stretton, Stratton, Stretford, Stratford, etc. Others refer to the elevation above the surface, as the Ridge, Roman Ridge, Ridgeway, Long Causeway, Devil's Causeway, High Dyke, Atchling Dyke. Others to the paving or solid construction, as Stone Street, Stane Street, Stanegate, Stangate, Staney Street, Stoney Stratford, Stanford, and in Wales Sarn. "Street," however, must not always be taken as evidence of a Roman road, places so called having originated in modern times where houses have sprung up along roads. In Wales "Heol" and "Ffordd" take the place of Street in such names as Hên heol (old Street), "Heol lâs" and "Ffordd lâs" (green road), Hênffordd (old road).

Chester, Cester, Caster, Castor, Caistor, alone or in composition, refer of course to camps often on or near Roman roads. In the north, Birrens, Burwens, Burrens, Borrams, Borrowens are names given to the sites of Roman camps.

"Cold Harbour" is a name which in the south of England is found constantly accompanying Roman roads, the meaning of which has been a moot point. In the north, "Windy Arbour" takes its place, which seems fatal to more than one suggested derivation, and to favour the more natural explanation that a place of shelter is meant, of Roman or later times. Caldecot, a name of similar meaning, is nearly always found near the course of a Roman road.

"Toot" is claimed as a name connected with

Roman roads, and it is so, but it is not confined to them. The word is said on good authority to signify a place of look-out, and though some Toots, like that of Tothill Fields, Westminster, the Toot of Toot Baldon, or Toat Hill in Sussex, may have looked out along Roman roads, there are many others with no such connexion.

In studying the courses of the Roman roads of England, and the manner in which they were laid out, observation on the ground is greatly aided by a careful study of the Ordnance maps both of the old and the new survey. In these days of cheap and accurate maps, the imperfection of those at the disposal of earlier writers is apt to be forgotten. To go no further back than the eighteenth century, Stukeley appears to have had no map, and to have guessed his distances as he travelled, and he falls into mistakes in consequence. Thus in passing over the Foss Way from Lincoln to Leicester, by wrongly estimating his distances, he brings Margidunum to Willoughby, some ten miles too far south, and he says he "must with the Itinerary make an excursion to take in Vernometum," which he does by going to Borough, an earthwork seven miles away from the Foss road, with no sign of a Roman road to it. In making Borough Vernometum he, however, followed Camden. goes entirely astray between Silchester and Salisbury in his 7th Iter.

Horsley (1732) was evidently without a map from which he could ascertain distances. He relied on Ogilby's survey of the principal roads, originally published in 1675, and when that did not serve he sometimes trusted to the landlords of inns or others he met with. It is not surprising that his distances are often wrong, and his conclusions from them sometimes He measures by a "computed" English erroneous. mile, and finds that wherever he is sure of his distances the proportion of Itinerary miles to English computed miles is generally as four to three; and he gives a table of distances between Lincoln and Corbridge, and between Catterick and Carlisle in proof. But his computed miles are far longer than a statute mile. Thus the distance from Lincoln to Littleborough, which is 14 statute miles, he makes 10 computed miles, and from Littleborough to Doncaster, which is 211 statute miles, he makes 16 computed miles, and so on throughout, and if statute miles as measured on the map be substituted for the computed miles in his table, it will be found that Itinerary miles and English statute miles are about the same. According to the usual authorities, the Roman M. P. would be about eleven-twelfths of an English statute mile, but absolute accuracy is not to be expected in *Itinerary* distances, which were probably measured by pacing. There is sometimes a difference of a mile or two in the distance between the same stations in one Iter and another.

Modern maps not only give correct distances, but throw valuable light on other things. It is well known that the ridges of Roman roads were often made the boundary between parishes and townships; and boundaries follow roads which are certainly Roman for many miles together. On Watling Street, south of London, from Kidbrook over Shooter's Hill, and through Dartford, parish boundaries run along seven and a half out of 12 miles, and on the north of London parish boundaries follow Watling Street along the Edgware Road continuously for five miles, from Oxford Street to the river Brent, and again for two miles after an interval of one and a half miles, or for seven out of eight and a half miles. Watling Street marks the north-east boundary of Warwickshire for 22 miles continuously, and between Bath and Cirencester parish boundaries follow the Foss road almost continuously for another 22 miles. Parish boundaries run along the Roman road from the north of Lincoln to the Humber for 141 miles without a break, and almost continuously along Erming Street, south of Lincoln, for 18 miles, and many other examples might be given of undoubted Roman roads which are followed by parish boundaries. A boundary running straight along a road, track, or hedgerow, or across country, often indicates the course of a Roman road when all other trace has disappeared.

The form of the ground as shown by contour lines and levels on the modern maps often gives suggestive information as to the probable way in which the roads were laid out, where, as is often the case, modern enclosures, planting, or building prevent access to or a look-out from prominent points to which the course of roads appears to be directed.

The older Ordnance maps dating from early in the last century afford a record of ridges of Roman roads which have since disappeared, and generally seem to

be more trustworthy in such matters than the new survey, the maps of which mark Roman roads for which there is little or no evidence or authority.

In describing the courses of the Roman roads it will be best to follow as far as possible those which have generally recognized names, grouping with them such other roads as may be convenient. Thus with Watling Street will be described the three roads which meet at Canterbury, and the Sussex Stane Street; and the road will be followed from Wroxeter into Herefordshire, to Chester and Carnarvon, and to Manchester, Lancashire, etc. In the same way Erming Street will be followed into Scotland, though bearing the name of Watling Street in Northumberland, and the roads connected with it in Lincolnshire, Yorkshire, Durham, and Northumberland will be grouped with it. One very important group of roads, from London to Silchester and the west, has no authentic name of a road by which to distinguish it.

It will also be convenient to follow, in the first place, a road about the course of which there is no doubt, and which is in all respects characteristic. Watling Street, by which Pritain was entered, fulfils these conditions, and it does not appear that confusion will arise from beginning with it, a road passing through the middle of England. Erming Street will be taken next, then the roads to the east of it and Icknild Street, then the Foss and Ryknild Street, and then the road from London to Silchester, branching to Southampton, to Salisbury, Dorchester, and Exeter, and to Speen, Bath, Gloucester, and South Wales.

The Roman roads in connexion with these main lines will be followed up, but it will be impossible to notice all that are known, and the continual discovery by chance of remains of Roman roads shows how much remains unknown, which a judicious use of the spade might reveal.

CHAPTER II

WATLING STREET

(1) General Course.

(2) Dover to Canterbury.

(3) Dover to Riehborough and Canterbury.

(4) Stone Street.

- (a) Dover to Lympne.
 (5) Canterbury to Reculver and Thanet.
- (6) Canterbury to Rochester.

(a) Chatham to Maidstone.

- (7) Rochester to London.
- (8) Sussex Stane Street.
 (a) Branch to Clayton.

(9) London to Wroxeter.

(10) Wroxeter to Abergavenny.
(a) Sarn Swsog.

(11) Watling Street to Chester.

(12) Chester to Carnaryon.
(a) Sarn Helen.

(13) Chester to Wilderspool. (14) Chester to Manchester.

- (a) Nantwich to Kinderton; Kind Street.
- (15) Manchester to Oldham and the north-east.(a) Doctor Gate.

(a) Doctor Gate.

(b) Manchester to Buxton.

(16) Manchester to Wigan.

- (a) Wigan to Warrington.(b) Wigan to Walton.
- (17) Manchester to Ilkley and Aldborough.

(18) Manchester to Ribehester.

(19) Ribchester to Ilkley.

(20) Ribehester to Fulwood and Lancaster.

(21) Ribehester to Laneaster.

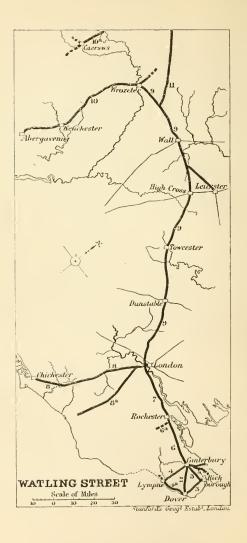
(22) Ribehester to Lowborough and Kirkby Thore.
(a) Overborough to Barnard Castle.

(23) Iter X. of Antonine.

(1) General course.—If the course of Watling Street from Dover to Wroxeter be followed on a map, it will be seen that it consists of II lengths of nearly straight road, which change in direction through considerable angles where they join. would appear that Canterbury was made for because it was the highest point on the Stour to which Roman ships could ascend from Portus Ritupis, the usual port of arrival in England. At Canterbury the direction of the road changes 40°, while between Canterbury and Dover, 15 miles, and between Canterbury and Lambeth, 522 miles, no part of the road is one and a half miles away from an absolutely straight line, although on the latter length is the crossing of the Medway. The Thames must have been crossed at a point determined probably by a ford, and then a new direction was taken to Brockley Hill, Elstree, so nearly straight that no part of the road deviates one-eighth of a mile from it. North of Elstree the next length of straight road continues to Verolamium, and the stations Durocobrivæ at Dunstable and Magiovintum at Fenny Stratford are passed through without any change of course, alterations in direction occurring on high points between them. The bend west to Towcester was probably made to avoid the low ground of the valley of the Tove, and then there is a turn through 25°, and the road for 28 miles to High Cross (Venonæ) is nowhere threequarters of a mile away from an absolutely straight line. The situation of High Cross on the summit of high ground is in itself a sufficient reason for its having been a point to be made for, and there is there a turn of 29°, and the road goes on to Wall (Etocetum), 25 miles, passing through the station Manduesedum near Atherstone, nowhere a mile out of a straight line. At Etocetum Watling Street is crossed by Riknild Street, and the four roads converge on different lines. From Wall to Pennocrucium, near Gailey, a length of 13 miles is nowhere a mile out of a straight line, and thence to Wellington for 16 miles no part of the road is 100 yards out of a straight line. From Wellington a length of six miles with a slight turn ends at Wroxeter, on the Severn, the lowest point according to Camden at which that river was fordable.

Between London and Wroxeter Watling Street keeps on high ground, from which rivers flow away on either hand. It is crossed nearly at right angles by Iknild Street, the Foss Way, and Riknild Street, but there seem to have been few Roman roads which branched out of this part of it. The most important branch is that which turns off towards Chester at about 14 miles east of Wroxeter, from which, four miles south of Chester, another road turns off at right angles to Carnarvon. These branchings-off may be supposed to mark the advance of Roman dominion first to the Severn, then to Chester, and then to Carnarvon. The continuation of Watling Street beyond the Severn and southwards along the Welsh border may mark another move onwards.

If, as it has been supposed, a British trackway previously existed along the course of Watling Street,



it is evident that the road was laid out and reconstructed by the Romans in their own manner.

There appear to have been two lines of road through Cheshire and Lancashire to the north, one by Northwich, Warrington and Wigan to Lancaster, and the other by Manchester, Ribchester, over the fells to the Lune valley, and then over the Westmoreland fells to Kirkby Thore and the Maiden Way. From Manchester and from Ribchester roads crossed the moors into Vorkshire.

(2) Dover to Canterbury.—From Dover Watling Street ascended the valley by River very much on a line with the present road. In 1719 Harris,1 apparently on the authority of Dr. Plot, wrote that between Buckland and Ewell the old road "lay fair and high where it joins the common road," but modern improvements have demolished it. To the south of Lydden, a piece apparently of the old road may be seen on the west side of the modern road at a higher level, and Harris describes it as plain enough to be seen at several places on the north of Lydden, where the modern road up the hill has since been constructed on a different line. At the top of the hill (455'), 2 a parish boundary runs along the modern road for oneeighth of a mile, and then on in the same straight line, rejoining the road beyond the small Roman Camp on Barham Down, the modern road diverging to the west for about four miles. Harris describes the re-

Hasted's History of Kent.
 The height above Ordnance datum, or mean sea-level, is thus indicated.

mains of Watling Street, apparently from Dr. Plot's observations, along this line, and it is one of the many instances which prove the dependence that can be placed on parish boundaries to show the lines of Roman roads of which no other trace remains.

From the top of Lydden Hill to Canterbury, Watling Street was laid out in almost a straight line for nine miles. On Barham Down, Harris, and later Stukeley,1 describe it as entire with a high ridge composed of chalk and flint blended together, and in use as the common road. The modern road, which has since superseded it, is followed by two short lengths of parish boundary, but near Higham a straight parish boundary on the north-east of the modern road may perhaps represent Watling Street. At the end of the last century it was to be seen entire and high on the west side of Bridge.2 Beyond, from Stone Farm to where the new Dover road branches from the old road, a parish boundary runs along the existing road for three-eighths of a mile. There are two lengths of parish boundary of a quarter of a mile and one-eighth of a mile along the middle of the old Dover road, which is doubtless on the line of Watling Street. It leads to Watling Street in Canterbury, a name by which it has been known from an early date down to the present time. When Canterbury was sewered the hard crust of the Roman road was found near the north and south gates of the Roman Durovernum.

(3) Dover to Richborough and Canterbury.—From

¹ Itinerarium Curiosum, 1776, p. 127. ² Hasted, iii. 725.

Dover to within a short distance of Richborough traces of a Roman road are plain. It creeps up a coombe by the cemetery on to the chalk down as a narrow sunk road, a parish boundary following it all the way up, and on nearly to Whitfield. On gaining the high ground (200') a straight road begins pointing to Woodnesborough (100'), and after winding slightly, it continues straight for six miles, except where interrupted for a quarter of a mile at Betteshanger Park, parish boundaries following it for more than half the distance. Woodnesborough is on the nearest high ground to Richborough, most of the intervening two miles being marsh still below level of high water. Portus Ritupis must have been on an island in the channel between Thanet and the mainland in Roman times, as it is now cut off by marsh-land below high water level. This road is shown on the Tabula Peutingeriana, and also one turning off from it to Canterbury which represents the road from Portus Ritupis. It would seem from this that one causeway across the tidal land between that station and the mainland served for both roads. It is curious that there are very few traces of the Roman road from Portus Ritupis, the usual port of entry into Britain, to Canterbury. Those recorded by Harris,1 as observed by Dr. Plot and himself in 1719, are but vague, and between Shatterling and Richborough they could find no further Stukeley, a little later, found no trace, and existing roads and parish boundaries give very little indication of the line of it. Between Shatterling and

¹ Hasted's History of Kent.

Ash a parish boundary runs along the road for half-amile, and another bit follows the road east of Ash, and thereabouts the two roads may have joined. The walls of Richborough enclose an area 160 yards from north to south, and 100 to 160 yards from the west wall to the cliff on the east.

(4) Stone Street.—A Roman road from Canterbury to Portus Lemanis, called Stone Street, is also plainly traceable. Camden describes it as paved with stones.1 Its course in rising up out of the Stour Valley from the west of Canterbury is no doubt that of the present road, along which the city boundary runs for one and a half It then makes straight for a point (600') on the high ground north of Horton, 10 miles off, and for that length the deviations from an absolutely straight line are very slight, and are in hollows where the intermediate points from which the road must have been set out are not visible. The centre of the road is a parish boundary for more than three-quarters of the 10 miles to Horton. If the straight line had been continued further it would have led down a steep hill, falling 200 feet in a quarter of a mile, where it would have been commanded by the high ground it had quitted. The road therefore bends to the eastward, and keeping on high ground (550' to 600') for a mile, makes almost a semi-circle before descending to the 400 feet contour, a parish boundary following it for most of the way. A straight course is then resumed, pointing to West Hythe, the present road following it, with parish boundaries along it for

¹ Britannia, i. 321.

more than half the way, through Stanford, and by Westenhanger railway-station to near New Inn Green. The present road bends to the east, but a hedge-row continues the line of the road for one eighth of a mile. No trace of the road then appears for three-quarters of a mile, and then at Shepway Cross the same line is taken up by a road, with a parish boundary along it, which descends to the old sea-shore at West Hythe. About half-a-mile to the west, below Lympne, are the Roman remains of Stutfall Castle extending down to the sea-level. The walls, of which portions remain, are said by Stukeley to have enclosed about twelve acres, "in form somewhat squarish." A good deal of the walls would seem to have been standing in Stukeley's time, 1 and also old foundations at West Hythe, where Stukeley with good reason placed the port. The construction of the military canal has since altered the ground.

The distance from *Durovernum* to *Portus Lemanis* in Iter IV., 16 M. P., agrees with the mileage from Canterbury to West Hythe.

Boundaries along roads suggest a Roman road from Watling Street at about three-quarters of a mile south of Canterbury, by Nackington and Street End, to Stone Street near Hermansole Farm.

Stone Street affords a good example of straightness of direction abandoned for a winding course when the form of the ground required it.

In the *Tabula Peutingeriana* no road is shown from Canterbury to *Portus Lemanis*, but one is shown from

¹ Itinerarium Curiosum, p. 132.

Dover, of which perhaps there are traces from Shorncliff to Shepway Cross. Further on are Court at Street and Stonestreet Green, so that this, the ancient place of assembly of the Cinque Ports, appears to have been at the crossing of Roman roads.

A Roman road is considered probable ¹ onwards by Smeeth, Ashford, and Charing, to Maidstone, but parish boundaries afford no evidence of it.

- (5) Canterbury to Reculver and Thanet.—A Roman road from Canterbury towards the north-east appears to have crossed the Stour at Fordwich. A parish boundary follows the present road from the river at Fordwich through Sturry and for two miles on through Westbere. At about three-quarters of a mile from Sturry the road to Reculver branched off, represented by the present road through Up Street, which a parish boundary follows for two miles near Hoath. The present road through Westbere, Up Street and Sarre is supposed to be in the course of a Roman road across tidal land to the Isle of Thanet.
- (6) Canterbury to Rochester.—From Canterbury northwards, the course of Watling Street through Harbledown is uncertain, the road having been re-made, but from Harbledown Church the centre of the present road is the parish boundary, which seems to show that the modern road winding down the hill is on the site of Watling Street. At Harbledown Lodge a piece of straight road two and a half miles long, with a parish boundary along it for three-quarters of a mile, begins and leads to the high

¹ G. Payne, F.S.A., Archaeological Survey of Kent, 1888.

ground (317') at Dunkirk. Between this point and the high ground (255') on Chatham Hill a length of 19 miles of straight road was laid out. From Dunkirk to Norton, six miles, and from Key Street to Chatham Hill, seven miles, the road lies in one straight line, and the intervening six miles in the lower ground deviates less than a quarter of a mile from the same line. Parish boundaries follow the road at intervals for nearly seven miles out of the 19, and are now the chief vestiges of Watling Street. Harris in 1719, and Hasted in 1790, however, described the old road as being still visible between Harbledown and Boughton Street, and between Sittingbourne and Chatham.

Half-way between Canterbury and Rochester was the station *Durolevum* in Iter II. of Antonine, and from Sittingbourne a Roman road is supposed to have gone to Maidstone, where many foundations of buildings and interments testify to Roman occupation, but no evidences of a road are afforded by parish boundaries.

From the Star Inn on the top of Chatham Hill a parish boundary runs for two and a half miles across country to near Lidsing, and appears to represent a Roman road to Maidstone by Boxley and Penenden Heath, where there is a parish boundary, and again for half-a-mile, and a quarter of a mile along the road beyond. A Roman road from Chatham to Maidstone is marked in the *Archaelogical Survey of Kent*, continued on to Ightham, and as probably going on to

¹ Archwological Survey of Kent.

Westerham and Limpsfield, and from Westerham to Keston and Lewisham. Parish boundaries afford no evidence of these roads west of Maidstone.

The course of Watling Street through Chatham was described in 1897 by Mr. G. Payne, F.S.A.1 From near the foot of Chatham Hill, to which parish boundaries follow the main road, the latter now continues on through the High Street of Chatham, on land reclaimed from the estuary of the Medway. Watling Street, however, kept on higher ground to the south, nearly in the line of New Road, and on by Old Street Road, and at the back of St. Bartholomew's Hospital, and by Nag's Head Lane, to the south-east gate of the Roman station Durobriva at Rochester. A section of the road where it was exposed in Chatham exhibited one foot of small flints on the subsoil of brick earth, then a layer of mortar or grout, above which was a bed of gravel two feet thick grouted with mortar, and then flints to the present surface. It is probable that the gravel grouted with mortar is the uppermost layer of the Roman road remaining, from which a paving of some sort has been removed.

The south-east gate of *Durobriva* has been proved to have been on the High Street of Rochester, which follows the line of Watling Street to the site of the north-west gate, opposite the modern bridge, and the site of the Roman bridge across the Medway. The Roman walls, as traced by Mr. Payne, enclosed an area measuring 450 yards from the south-east to the north-west, and in width from 150 yards at the south-

¹ Archaologia Cantiana, vol. xxiii. p. 1.

east to 350 yards towards the north-west. In digging the foundations of the Technical School near the Guildhall in 1892, the Roman road was found: it consisted of a roughly-prepared bed of sand, earth, and flint, one foot three inches thick on the natural clay, on which was six inches of chalk rammed, then one foot of round and angular gravel, on which was six inches of flints laid in, and then another one foot two inches of round and angular gravel, making a thickness of four feet five inches, over which there was seven feet of earth and débris. No paving was found.

Piles of the Roman bridge over the Medway are said to have been met with in the foundation of the modern bridge in 1847.

(7) Rochester to London.—On the Strood side of the river a causeway on piles has been traced almost from the bridge nearly to the foot of Strood Hill. It was cut through opposite Station Road in laying a drain in 1897. In the river mud, met with at about eight feet six inches below the present surface of the road, were remains of oak piles about four feet long with timber cills laid across them; upon these was a layer of flints and rag with fragments of Roman tiles, three feet six inches thick, then five inches of rammed chalk, then seven inches of flint broken fine, covered with nine inches of small pebble gravel mixed with black earth; and upon this was found a paved surface, six to eight inches thick, of Kentish rag of polygonal shape fitted together, and jointed with fine gravel.

¹ Archeologia Cantiana, vol. xxi. p. 10.

The width of the causeway was about 14 feet, and there were four ruts in the paving, three on the south side about three inches apart, and one on the north side, six feet three inches from the outer track on the south side. The paved surface was again met with where High Street is joined by North Street. A causeway branching off opposite Station Road, and inclining downwards past Aveling and Porter's Works to the water's edge, was also exposed in pipe-laying. It perhaps led to a ford or ferry which was superseded by a bridge. A boundary follows the line of the causeway from the river to the north end of High Street, Strood, and turns along Strood Hill.

The London road turns off at the north end of High Street after having followed the Roman road for 43 miles from Dover, and the course of Watling Street continues straight on up Strood Hill, where there is a bit of parish boundary, and then along the north of Cobham Park, followed by parish boundaries for three and a half miles. There are traces of the ridge in Cobham Park close to the present road, and for a quarter of a mile from the cross-roads at Scales Hill. At the cross-roads there is a change in the general direction on to Springhead, but the road is not straight, and it is generally narrow, and sunk below the adjoining land. Harris, in 1719,2 says that the old road was visible between Cobham Park and Springhead with hedges

¹ G. Payne, F.S.A, *Archaelogia Cantiana*, vol. xxiii., and information from Mr. Banks, City Engineer.
² Hasted, i. 501.

standing on it, sometimes on the one side and sometimes on the other of the existing road. Parish boundaries follow it for nearly half the distance, and it may be noticed that where the ridge is visible the boundaries follow the road and not the ridge.

At Springhead, half-a-mile west of where the Gravesend railway crosses the road, there is a decided bend, and here considerable remains of a Roman town have been found. It may possibly be Vagniaca, the distance from Durobrivæ corresponding. The road, followed by a parish boundary, ascends to Swanscombe Wood, and from this point (200') to Shooter's Hill (400') there is a straight road for 101 miles, with very slight turns on high ground, only interrupted where the road drops down to cross the river at Dartford and at Crayford. Parish boundaries follow it almost continuously to Dartford, and through Crayford, and from Welling to Shooter's Hill. About halfa-mile east of Dartford the modern road from Rochester through Gravesend rejoins Watling Street, and on the common close by, the bank or ridge of the latter is evident, eight yards wide and two or three feet high. At the foot of East Hill, Dartford, the paved surface of the Roman road was discovered in 1897 at two feet six inches below the surface of the present road. It consisted of stones set in gravel, like the pavement at Strood. In 1790, according to Hasted,1 it was plainly visible on Bexley Heath and through Welling.

From Shooter's Hill the straight line is continued

1 History of Kent, i. 211.

with a very slight change in direction for one and a half miles further. Harris (1719) says that the road half-a-mile from Shooter's Hill was very plain and high with ditches on each side of it, and Stukeley observed that some of the agger was left in his time, and that from the top of Shooter's Hill it butted upon Westminster Abbey. This is so, and a straight line of road from Swanscombe, ten and a half miles east of Shooter's Hill, points direct to the passage over the Thames to Westminster, at Stangate, eight and a half miles further on.

Near Kidbrooke End the straight line ends, and the road bends to the south, and parish boundaries which have followed the straight road continuously for four and a half miles from Welling follow the road on over Blackheath, where in 1719 Watling Street was pretty plain. Further into London it cannot now be traced, but Stukeley 2 notices a Roman road in St. George's Fields, and Bishop Gibson 3 describes it as visible in 1772.

There is no doubt that the original course of Watling Street was by a ford or ferry across the Thames at Stangate to what was Thorney Island. The discovery of a Roman sarcophagus,⁴ a mosaic pavement, fragments of Roman buildings, and Roman bricks in recent years has afforded proofs of the Roman occupation of the island which afterwards became the site of Westminster. With the building of London Bridge

¹ Harris.

² Itinerarium Curiosum, p. 119.

³ Camden, i. 240.

⁴ Now in the Chapter House.

the traffic was diverted, and roads were made to it, one perhaps branching from Watling Street in about the course of Old Kent Road and Tabard Street, and joining near St. George's Church the Roman road from Chichester, which has now to be described.

(8) The Sussex Stane Street. - Chichester, the Regnum of the Itinerary of Antonine, is still surrounded by walls, which in position, and partly in construction, are Roman. They enclose an irregular area 770 yards from the east to the west gate, and 440 yards from the north to the south gate; as if a considerable town already existed when the walls were built. The Stane Street left Chichester by the east gate along the line of the street now called St. Pancras. It makes straight for nine miles to high ground (686') on Bignor Hill, the modern road following its course nearly all the way to beyond Halnaker. The ridge is plainly visible on Halnaker Down, beyond which the present road takes the line for a quarter of a mile, and then the ridge is again traceable in the woods to the north of Eartham, where it is known as Stane Street. Towards Bignor Hill the ridge is covered by a hedgerow, and on the open down beyond it is conspicuous, five to six feet high, and two to two and a half yards wide, now of a rounded profile. On each side of the ridge, about thirteen yards apart, are the remains of trenches. A cross section of the road here has been given by Mr. P. J. Martin, who shows two stoned roads inside the trenches separated by a vallum two yards wide rising

¹ Sussex Archaeological Collections, xi. 127.

ten feet above the surrounding surface. There does not appear to be any sign of a stone coating on the side spaces, but the *vallum* or ridge between them was coated with gravel, some of which remains. It is possible that there are here the remains of a road with a middle and side spaces.

On Bignor Hill (686') the nine miles of straight road ends. Looking towards Chichester the spire appears almost in line with the Roman road, and in the opposite direction Box Hill on the east of the Dorking gap in the chalk, through which the course of Stane Street lies, can be seen. The road then leaves the high ground, slanting down the steep north-eastern side of the down. It is to be seen in Grevatt Wood, about a mile east of Bignor village, and according to Mr. Martin it has been traced to the north-west of Watersfield and Coldwaltham. The new Ordnance map shows it by a dotted line in this direction passing through Hardham camp, and across half-a-mile of land subject to floods to Pulborough Bridge. There is no trace of a causeway in this direction, but the present road is carried across the meadows between Hardham and Pulborough Bridge for 600 yards on a causeway which is very nearly in a line with Stane Street on the north of Pulborough, and may very possibly be of Roman origin. A continuation of this line southwards would however lead into the low ground bordering on the river Arun again, and there must have been a turn near Hardham if the present road to Pulborough Bridge represents Stane Street Portions of the road between Hardham and Watersfield are in a straight line in the direction of Grevatt Wood.

From Pulborough (100') to Tolhurst Farm the modern road appears to occupy the line of the old road, and for three miles it points to high ground (230') on Toat Hill towards the north, and southwards to a point (400') on the west side of the gap in the South Downs near Amberly station. Near Tolhurst (or Stallhouse) Farm the direction changes slightly to a point on high ground on Toat Hill about a quarter of a mile west of Hayes House, the road passing through Billingshurst and Five Oaks. From the high ground (? 250') west of Hayes House to the south of Slinfold there is a good view along the line of the road in both directions, to the South Downs 13 miles to the south-south-west, and to Leith Hill and Anstiebury 10 miles to the north-north-east, the chalk hill to the east of Box Hill 15 miles distant appearing beyond the shoulder of the latter. It seems probable that from this high ground the general direction of the 18 miles of almost straight road from Hardham to Minnick Wood near Anstiebury was laid out by the method of ranging a straight line between two extreme points from two intermediate points, by shifting them alternately until they lie in a straight line with the extreme points. The general line having been thus got, intermediate landmarks were made use of as points of direction; but so close is the road to an absolutely straight line that no part of the 15 miles from Tolhurst Farm to Minnick Wood is one-eighth of a mile away from it. The

modern road occupies the line of the old road through Billingshurst and Park Street to Rowhook, whence a Roman road is indicated on the new Ordnance map, on what evidence does not appear, branching in the direction of Guildford. From Rowhook the line of the old road is followed for two and a half miles by hedgerows and lanes to a public road called Stone Street Causeway, which passes through Stone Street, Ockley, to Bucking Hill Farm. Manning states that the causeway in Ockley parish had, in 1814, lately been dug through, and found to be four and a half feet thick of flints and other stones laid alternately and bedded in fine sand or gravel.1 About a mile north of Bucking Hill Farm, in the same line, the old road has been since found beneath the surface. Opposite Minnick Wood the crown of the causeway four feet wide was found at less than two feet from the surface; the sides were broken up, but the width did not appear to exceed 15 feet. There was a thickness of one foot of flints set in mortar on sand beneath.² So lately as September 1898 it was again exposed near the same place in a trench for laying a water main.

Hereabouts, about half-way between Anstiebury and Holmwood station, the direction appears to change rather more towards the west, and the course is uncertain. Not many years ago the old road could be seen a little to the west of Folly Farm, a mile and a quarter further on, beyond which the line lies a

History of Surrey, vol. iii. p. xlv.
 Surrey Archæological Collections, x. 105.

little to the west of the modern road to near the south end of Dorking. Aubrey says 1 that the road went "through Darking churchyard, which they find by digging graves." The same line appears to be taken up on the north side of Dorking by the modern road, the east side of the Dorking gap having apparently been taken as a point to make for from the high ground near Minnick Farm. In 1861 a length of 200 yards of the ridge was to be seen in a meadow near Burford Bridge close to and parallel to the turnpike road.² From Juniper Hall the old road seems to have wound up in about the line of Downs Road to the east of Mickleham, skirting the heads of the chalk coombes to Mickleham Down, on which the ridge is traceable. Further on, on Leatherhead Down, it is still very much as described by Aubrey, and fortunately it is fenced in and likely to be preserved. He describes it as in some places 10 yards broad and one and a half yards deep. The mound is now in places upwards of four feet high, measuring from the surface of the Down on the lower side, and six yards wide across the top. The upper part appears to be made of flints, and tertiary pebbles are visible in places. The old road here appears to have for a long time borne the name of Ermyn Street. Beyond Leatherhead Down a lane and hedgerow occupy the site of the road, the lane sometimes being upon and sometimes at the side of the mound. The old coating is visible in places, consisting of flints and tertiary

¹ Survey, vol. iv. p. 187. ² C. Warne, Proc. Soc. Antiq., 2nd Series, vol. i. p. 311.

pebbles; the latter, which must have been brought to the road, appear to have given the name "Pebble Lane" to the lane, which continues on in the same straight line to high ground (410') near Thirty Acres barn. Towards Epsom and Ewell the line is lost, but in 1876 it was conspicuous for 200 yards in a field adjoining the Reigate road at Ewell.1 On the north of Ewell by North Cheam and Pilford Bridge, the modern road in a straight line seems to follow it to Morden, and it seems to be continued by the present road through Tooting, Balham Hill, Clapham Rise, and Kennington Park Road to Newington Butts. From Clapham Rise (50') to Newington Butts the road points straight for two miles to the south of London Bridge. Watling Street must have been crossed near the Elephant and Castle. Newington Causeway and Stones End are names suggestive of the course onwards, but they lie rather off the straight line, in which, however, High Street Borough lies.

This road appears to have been joined by another on approaching London, the course of which through Sussex was described in 1780,2 when it was being dug up for the construction of the Brighton turnpike road. From Clayton, one mile south of Hassocks station, and seven miles from Shoreham, it was traced to St. John's Common, where it was 18 to 20 feet wide, of flints eight inches thick. It passed to the east of Butler's Green to Ardingly Church, by Wakehurst Place, and along the London road to

¹ Roach Smith, *Journ. Archivel. Assoc.*, vol. xxxii. p. 481.
² Vine, *Gent. Mag.*, vol. li.

Selsfield Common in a line pointing to New Chapel. A parish boundary along or near the road for a mile and three-quarters to the south of St. John's Common, and along the London road for half-a-mile, are the only evidences now left. It would seem to be taken up by the road to Godstone, passing Cold Harbour and Stratton, and it is said to have gone by Caterham and Coulsdon. From the Brighton road near Purley railway-station a parish boundary follows a rough bank along the east of Russel Hill, and runs along Merebank to Waddon Court, with Cold Harbour close by, and seems to mark the course, which continues on in the same line to the Wandle between Waddon and Beddington, and on in the same direction to the railway. The road was formerly visible on the west side of Broad Green,1 from which the course appears to be by Streatham to Stane Street. At Woodcot, on this line of road, Camden and others have placed Noviomagus, a station ten M. P. from London on Iter II., which rejoins Watling Street by a course which is not known.

Part of a supposed Roman road from Newhaven to London has been described, from Isfield, five miles north of Lewes, passing east of East Grinstead, and through Lingfield Camp, on what evidence is not apparent; the maps afford none.

(9) London to Wroxeter. — The earlier Roman London appears to have extended eastward from Lambeth Hill and Old Change (a little to the east of St. Paul's) to Miles Lane, Clement's Lane, and

¹ Manning and Bray.

Birchin Lane (a little to the west of King William Street); and from Cheapside and Poultry to Thames Street. The area thus enclosed was a rectangle about 800 yards by 400 yards, or perhaps rather less. The present Watling Street runs through the western half of it, and if, as Sir Christopher Wren supposed, it represents the Prætorian Way of the Station, it is suggestive of a still earlier station through the middle of which it would have run, extending southwards only as far as the brow of the slope to the river, marked by the line of Knightrider Street, Great St. Thomas Apostle, and Cloak Lane; and eastwards perhaps to Walbrook. This would enclose an area about 240 yards by 530 yards. From the west gate the Roman road must have turned towards the north to cross the Fleet. On the south side of Cheapside, Wren sunk 18 feet through made ground and then came upon a Roman causeway of rough stone firmly cemented, with brick and rubbish at the bottom, and four feet thick, on which he founded Bow Church steeple.2 For various reasons he thought that the causeway ran along the north boundary of the older London, and his conclusion has been confirmed by its discovery, in 1765, at the middle of Birchin Lane. Outside the eastern wall, where the latter crossed Eastcheap (where the statue of William IV, now stands), a raised causeway of gravel seven feet six inches in depth, and 16 feet wide, supported by walls of rag-

¹ The evidence for these boundaries is given in a paper by A. J. Kempe, in the *Gentleman's Magazine*, 1842, part i. p. 267.

² Parentalia, p. 265.

stone with layers of Roman tiles was displayed in 1831. It inclined to the north-east in the direction of Aldgate, and many cinerary urns on either side showed it to have been outside the station. The Roman bridge over the Thames, on the site of Old London bridge, was also outside the earlier boundary. It is supposed to date from the second or third century, after the extension of the city.

The enlarged Londinium extended east and west for about a mile and a quarter, from the Tower to the Old Bailey, and northwards from Thames Street for about half-a-mile to London Wall. From the Tower, by Aldgate, Bishopsgate and London Wall streets run inside the course of the Roman Wall, and Minories and Houndsditch follow the ditch outside it as far as Bishopsgate. From the west end of London Wall the Roman wall turned south, and then west, and then south again by Newgate to Thames Street, the latter marking the line of the southern wall. The irregular shape seems to show that the walls enclosed an area already occupied by buildings. Both Newgate and Aldgate stand on the courses of the roads from the gates of the older city to the crossing of the Fleet and to Old Ford respectively. London was connected with the original Watling Street by a road which, after crossing the Fleet, followed the line of Holborn, Oxford Street, and Bayswater Road, and continued on to Staines and Silchester. The road from the Fleet to Tyburn is referred to in a charter of Edgar as the Wide Here Street, i.e.

¹ Gentleman's Magazine, 1833, p. 421.

military way. High Holborn is followed by a parish boundary and lies in a straight line with the older part of Oxford Street, and with the Bayswater Road. From Tottenham Court Road parish boundaries follow the straight road to Notting Hill. The original Watling Street coming from Thorney was crossed by this road at Tyburn, and the crossing of the two ancient roads very possibly fixed that as the place of execution.

Watling Street on leaving Thorney had to cross three-quarters of a mile of marsh, even now below the level of high tides, extending to the rising ground of Green Park. Tothill Street suggests a "toot hill" looking out over the ford and causeway, of which the course is unknown. It is likely that when the brow of the rising ground was reached the straight line was entered upon which continues to Brockley Hill, and if so the course of the road is now covered by the houses of Mayfair from Piccadilly near Down Street to near the top of Park Lane.

The first certain trace is at Tyburn. From that point, Edgware Road, and the continuation of it, occupy the line of Watling Street to Brockley Hill, 10½ miles distant. From Kilburn to Brockley Hill, eight miles, the road is in a line between Brockley Hill (416') and Sydenham Hill (350'), 17 miles distant to the south-east. It may have been set out from Brockley Hill in a line with Sydenham Hill, on which the Crystal Palace is now visible from Brockley, or it may have been set out from intermediate points,

¹ A mound existed in the middle of the seventeenth century.

which may very well have been Shootup Hill, and near Hendon. At Kilburn there is a slight turn to the east, but only enough to throw the Oxford Street end of the road 100 yards away from the straight line. There are slight deviations all along the modern road, which appear the greater from the encroachments which have been made, but from the Marble Arch to Brockley Hill the road is nowhere one-eighth of a mile out of a straight line. Parish boundaries run along the road from Oxford Street to the Brent, five miles, and from the Hyde to Edgware, a mile and a half.

The Roman paving has recently been cut through in a trench for laying a telephone tube along the Edgware Road. Beneath the wood paving and the concrete foundation, on about a foot of brick rubbish, there was generally found four inches to a foot of ordinary soil, but sometimes the brick rubbish rested immediately on the Roman paving. The latter was found to consist of large black nodular flints, weighing from four to seven pounds each, on a bed of rammed reddish-brown gravel of thickness varying according to the inequalities of the clay surface below. A large opening opposite Market Street showed that the gravel was supported by dwarf walls of gravel concrete a foot high, at the sides of a trench cut in the clay. On the levelled surface of the gravel, lime grouting appears to have been laid, in which the flints were set, every advantage having been taken of the protuberances of the nodules to dovetail and interlock them. The workmen found that it gave them much

more trouble to break up than the modern concrete floor above. The trench extended for half-a-mile from the south end of Edgware Road, and the paving was cut through all along except where the trench was too near the footway. The width of the paved road appeared to be 24 feet. The flints are from the chalk of Hertfordshire, and the gravel is such as is found at Radlett. A block of Totternhoe stone from near Dunstable, a boulder of granite, and a sandstone block, possibly from the boulder clay, occurred in the paving.¹

Many Roman remains have been found on Brockley Hill, the site of a Roman station, *Sulloniaca*. From it a road is supposed to have branched off in the direction of Watford, King's Langley, Berkhampstead, and Tring,² but parish boundaries afford no evidence of it.

From the station on Brockley Hill onwards Watling Street has a remarkable double bend, curving first to the north-east through Elstree and then back again, making a reversed curve one mile and a quarter long. From the north end of the curve a straight line runs to Verulam in a line with a point on high ground on the top of Elstree Hill (470'), which is half-a-mile to the east of the point on Brockley Hill, to which the road from the south is directed. The effect is to ease considerably the ascent of the hill coming from Verulam. That the course of the Roman road was

James G. Wood, M.A., F.G.S., in Home Counties Magazine, vol. iv. p. 238 and p. 259.
 Sir J. Evans, Archeological Survey of Hertfordshire, 1892.

along the double bend is shown by parish boundaries following it all through and along the straight road beyond, and it is another instance of that straightness which has been so much insisted upon, having been abandoned when there was cause for it. From Aldenham onwards Watling Street is now a narrow road, with signs that it has been encroached upon. The Midland Railway runs alongside it for two miles near Radlett station. At Park Street the straight line is again broken by a slight bend to avoid more than one crossing of the river; the road resuming the same line when the difficulty has been passed. At St. Stephen's Church the road from Watford to St. Albans is crossed, and there are some traces of Watling Street on in the same line for three-eighths of a mile to the walls of Verolamium.

The area enclosed by the remains of these walls is a rough oval about 1500 yards from south to north and 850 yards from east to west. Watling Street, which passes through it lengthways, was dug up and robbed of its materials as far as St. Michael's Church in 1800. Near the south side of the church it is crossed by Camlet Way, of which nothing is known in either direction.

On the north side of the Roman city Watling Street can be traced through the fields in line with the modern London and Holyhead road, which joins it about two miles north of St. Alban's and thence

¹ J. W. Grover, *Journal of Archaeological Association*, 1870. Mr. Grover points out that Verulam and Pompeii are very much of the same shape and size, the former being rather the larger.

follows the course of it nearly all the way to Weedon. The direction is at first between the higher part of Verulam (336') and a point on high ground (416') beyond Bylands Farm, four miles distant. There is then a curve to the west, with a parish boundary continuing along the middle of the road to another straight line two miles long, for the greater part of which Watling Street, as a narrow lane, lies to the north-east of the modern road, passing over a hill which the latter avoids. At Markyate Street the modern road rejoins Watling Street, and winds in a shallow valley with county and parish boundaries along the middle of it to Dunstable.

Horsley placed Durocobrive at Dunstable, and it would seem correctly, judging from the distances apart of the stations as given in the Itinerary, although there is no river or water. Here Icknild Way crosses Watling Street, which runs straight through Dunstable for five and a half miles to a knoll (445') beyond Hockliffe, having parish boundaries along the middle or side of it for the last three and a half miles, and then goes on straight in nearly the same line for four miles to high ground (508') half-a-mile south of Little Brickhill, parish boundaries following it all the way. The course thence down the hill is rather uncertain, modern road improvements here as in other places having interfered with the old road, but from one mile south of Fenny Stratford (Magiovintum) parish boundaries run along the middle of the road, which goes straight for seven miles, crossed by the North-Western Railway one mile north of Bletchley station,

and then, with a slight turn on high ground, on for nine miles in almost the same straight line through Stony Stratford to Towcester, with parish boundaries following it for most of the way.

In Camden's time ¹ the ridge of the old road was very conspicuous between Stony Stratford and Towcester. From Fenny Stratford strips of waste begin to be frequent at the sides of the road. Nearly all the way from London the width is 20 yards or more between the fences where the road has not been encroached upon, but encroachments are frequent, sometimes on one side and sometimes on the other, and the modern road in some degree loses the appearance of straightness to a traveller passing along it.

At Towcester (Lactodorum) Watling Street passes through a Roman camp, three sides of which can be traced in the town, the east side being now bounded by a branch of the river Tove. It is about 480 yards long in the direction of Watling Street, and 200 to 400 yards wide. On leaving the Roman station there is a decided change in direction, and the road for 28 miles is in straight lengths, making up approximately an arc of a circle of which no part is as much as three-quarters of a mile away from the chord. It is not difficult to trace how the line was laid out from intermediate points on high ground. The first point is near Pattishall (480'), four miles from Towcester, to which the road is straight, with a parish boundary along a mile of it; beyond, the

¹ Britannia, ii. 265.

present road is not straight, and a parish boundary which does not follow it in places may be the line of Watling Street. At Weedon the Holyhead road, after having followed the course of the Roman road for 45 miles, turns off to Daventry; and Watling Street, about 20 yards wide between the fences with a road 12 to 15 feet wide, continues on in the same general direction. It bends to avoid the Nene river, parish boundaries following it for half-a-mile. After the North-Western Railway has been crossed, a straight line begins which is in line between high ground over Weedon Tunnel (400') and Watford Gap (500'), and for three miles out of six parish boundaries run along the middle of the road. On the west of Norton Park the road, followed by the parish boundary, turns out of the straight line to the east and back again to it in half-a-mile. In the field through which the straight line thus quitted passes, a shallow pit, in the summer of 1900, afforded fragments of Roman pottery, mortaria, etc., and about 18 inches below the surface there were traces of a pavement of flat stones too thin to be part of a road. Somewhere here, according to the distances in the Itinerary, should be the site of Bannaventa, which Camden and Stukeley place at Weedon, three miles to the south, and Horsley at Borough Hill near Daventry, two miles away from Watling Street.

The same straight line is resumed, parallel to and less than half-a-mile west of the North-Western Railway, after crossing which the present road, 12 to 15 feet wide, winds between fences 20 yards or more

apart. Near Watford in 1712 Watling Street is said ¹ to have run very high, and to have been seven yards wide. The ridge is still to be seen between Weedon and Norton Park, especially where a fence runs along the east side of it for some distance.

From near Watford Gap, with a slight turn, there is a straight line to Gibbet Hill (429') seven miles distant. For half-a-mile the modern road follows the line of the old road, but from the cross-roads from Ashby St. Leger to Crick, Watling Street is now grassed over for two and a half miles. For one and a half miles there are hedges on both sides, 23 to 25 yards apart, and there is little or no trace of a ridge. Beyond, the old road is in a grass field with a hedge on one side; a brown track in the turf marks the line all along, and as the ground falls the ridge is more evident. On the north of the road from Rugby to Crick it is as much as five feet high and eight yards wide. Stukeley found the ridge hereabouts very high for miles together,2 but it has since evidently been dug into for the sake of the gravel. A little further on there is not much ridge, but a stream that runs alongside has cut into it in places, exposing gravel a yard deep, with a layer of large cobble stones at the base on the clayey subsoil. A little further on the present road from Kilsby joins, and the hedges are 25 yards apart, with a hard road 12 or 15 feet wide between them. A parish boundary has followed the road all along, and here it becomes a county bound-

¹ Morton, Natural History of Northamptonshire, p. 501. ² Itinerarium Curiosum, p. 113.

ary, and for the next 21 miles Watling Street is the boundary between the counties of Warwick on the south and Northampton and Leicester on the northeast.

At Gibbet Hill (429') there is a slight turn to Cross-in-Hand (429'), and then another length of straight road three and a half miles long reaches High Cross (440'), the station *Venonæ* at the intersection of Watling Street and the Foss.

Where Watling Street crosses the river Avon, about two miles east of Rugby, *Tripontium*, which appears in Iter VI. as eight M. P. from *Venonæ*, has been placed; the position agrees with this distance from High Cross, but it is to be noticed that from *Venonæ* to stations further south the distance is three M. P. longer than it is by Iter II., or by measurement. It is possible that *Tripontium* was not on the direct line of Watling Street.

This part of Watling Street is now an unimportant thoroughfare where it is not grassed over and disused. It is generally enclosed by hedges 20 yards or more apart where there are no encroachments, and the modern road is not more than 12 or 15 feet wide. Towards High Cross the hedges are as much as 30 yards apart, a cart-way winding from side to side between them. Though the general direction of the road is straight from point to point, the straight line appears to have been slightly departed from in crossing streams and in hollows. Encroachments, sometimes on one side, sometimes on the other, and the devious course of the present road, detract from

the appearance of straightness as one passes along the road. Though little used for road traffic, this part of Watling Street still serves as a main line of communication for one of the principal telegraph routes.

At High Cross there is a considerable change of direction to the westward, and the road makes for Wall (Etocetum) 25 miles off, by straight lengths between intermediate points on high ground, none of which is as much as a mile out of a straight line from High Cross to Wall. For nearly eight miles from High Cross the road runs straight in the direction of high ground (300') south of Highamon-the-Hill, keeping to the north of the river Anker, and then there is a very slight turn more towards the west, and another straight line seven miles long to Hall End (343') begins. Near Mancetter a straight road joins, pointing for five miles to Leicester, and continued on in the same line by other roads, which represents a Roman road from Leicester. At Mancetter, the station Manduesedum, a rectangle 233 yards by 166 yards, is passed through longitudinally, half the camp being in one county and half in the other. Beyond Atherstone, at Hall End, there is a bend more to the west, and a straight road runs by Wilnecote railway-station, and through Fazeley, for six miles to high ground near Hints (400'), from which there is an extensive view in both directions. A change of direction occurs a quarter of a mile further on, on the north side of a large tumulus (380'), and thence the road went straight to Wall (Etocetum) (369').

From High Cross to within two and a half miles of Wall a turnpike road was constructed along the line of Watling Street, and for 10½ miles a county boundary follows it to near Atherstone. A highway continues the line on from Weeford Gate to within three-quarters of a mile of Wall.

The straight line of Watling Street on the east of Wall is crossed by Riknild Street, which makes a considerable turn at the point of intersection. At Wall (Etocetum), commanding an extensive prospect, more particularly to the south and east, there is a decided change in the direction of Watling Street, which runs straight due west for four and a half miles to high ground (500') on the west of Brownhills, with a parish boundary following it nearly all the way. Camden describes a fair, bold and uninterrupted ridge running from Wall till it comes to the river Penk, and in Stukeley's time the ridge was perfect for a great length, but it has since been destroyed in making the modern road.

On the high ground (500') west of Brownhills the direction changes to west-north-west, and with a very slight turn on high ground (389') south of Cannock, continues in the same line for eight miles, with parish boundaries along it in places, to the river Penk. Hereabouts, 12 M. P. from Wall, and two miles to the south of Penkridge, must have been the station *Pennocrucium*. The road then turns due west, and for 13 miles to Oakengates is nowhere more than 200 yards out of a straight line, which was probably laid out to

¹ Britannia, ii. 496.

pass on the north side of the Wrekin (1335'). It is made up of several straight lengths between points on high ground, and for nine miles parish boundaries run along the middle of the road, and continuously for five and a half miles to Oakengates. Stukeley says that the old road was "laid very broad and deep with gravel not yet worn out, where it goes over commons and moors," and was raised a good height above the soil,1

On this straight length of road, 12 M. P. from *Pennocrucium* and 11 M. P. from *Uriconium*, according to the *Itinerary*, was the station *Uxacona*.

Through Oakengates and by Wellington the course is rather uncertain, but on the south-west of Wellington the London and Holyhead road joins Watling Street, and for two miles follows the course of it in a straight line pointing to the top of Overly Hill (462'), with a parish boundary along the middle. The modern road skirts round the north of the hill, but the old road at the beginning of the last century ran straight on over the hill and was used by coaches. Now only about 250 yards remain on the top of the hill, where it is narrowed from 20 yards to about four yards by a long strip of garden with a house on it; and beyond that a hedgerow and footway indicate the line of the old road. From where the modern road diverges to where it again joins Watling Street parish boundaries follow the old line of Watling Street almost continuously, and run along the modern road, after it rejoins Watling Street. From the top of Overly Hill the 1 Itinerarium Curiosum, p. 60.

site of *Viroconium* or *Uriconium* at Wroxeter three miles distant is plainly visible, and Watling Street with a slight turn goes straight to it.

The later walls of *Viroconium* appear to have enclosed a rough oval about 1380 yards from north to south, and 1000 yards from east to west. Watling Street enters it at the north-east, and the ford across the Severn is opposite the village of Wroxeter at the south-west of the Roman city. Camden ¹ mentions the foundations of a bridge which Bishop Gibson says were still to be seen in his time, about 1700.

Parts of Itinera III. and II. of Antonine's *Itinerary* make up the whole length of Watling Street from Dover to Wroxeter. They are here arranged in order, with the names of the Roman stations, and their distances in M. P., and the modern names with the distances in miles. (See p. 79.)

It will be seen that the *Itinerary* distances make up a total the same as the total in English miles, and that the intermediate distances agree fairly well.

(10) Wroxeter to Abergavenny.—The name Watling Street is borne by a road from Wroxeter in a southwesterly direction. It crossed the Severn opposite Wroxeter, and after leaving the Severn valley and crossing Cound Brook the course is followed by a lane passing to the east of Pitchford, through Frodesley and Longnor Green, and then a parish boundary follows it for two miles, and the ridge is traceable, having a fence upon it for a considerable distance. A lane continues the line along the east side of the

¹ Britannia, iii. 5.

	М. Р.		STATUTE MILES.
ITER III. Portus Dubris ad Durovernum	xiv	Dover to Canterbury	15
ITER II. Durolevo Durobrivis	xii xiii}	Rochester	26
ITER III. Londinio	xxvii	London	29
Sulloniacis Verolamio	xii ix xii xii xvii xii xvii xii xvii xii x	Brockley Hill Verulam Dunstable Fenny Stratford Towcester near Norton Park High Cross Mancetter Wall Gailey Redhill	13½ 8½ 8½ 12 11¼ 15½ 11 14 15½ 11 18 11 15 12¼ 11 1½ 10½
	P. 220	Miles 220	

railway past All Stretton and Church Stretton railwaystation, and at Little Stretton the ridge appears with a cart-track on one side. The general section of the road hereabouts seems to be eight inches of gravel on a layer of stone one foot deep and raised two or three feet above the surface. For a mile the main road follows the course with a parish boundary along it. At Marshbrook Station it is crossed by the railway, and is followed by a lane to Wistanstow and Stretford Bridge,

¹ Shropshire Arch, and Nat. Hist. Soc., N.S. x. p. 173.

to the south of which another lane with a parish boundary along it for three-quarters of a mile takes up the line past Craven Arms station, half-a-mile west of which the railway crosses over it, and it can be seen ascending the hill in the direction of Clungunford. It passes through Leintwardine, near which, perhaps at Brandon, was Bravonium of Iter XII., 27 M. P. from Viroconium, and turning east of south by Stanway to near Wigmore, passes through Aymestrey to Mortimer's Cross. From Wroxeter thus far, about 33 miles, the character of the road is different from that of Watling Street proper, due perhaps partly to the more broken nature of the country. There are no long pieces of straight road, but parish boundaries follow it and indicate the line. From Mortimer's Cross a lane with a parish boundary along it runs straight pointing to high ground (400') near Bush Bank, eight miles distant, immediately to the east of which Bayley Hill rises to 775 feet. The straightness of the road, which here bears the name of Watling Street, is deviated from at the crossing of the river Arrow near Stretford, where it is joined by the modern road. To the south of Bush Bank the present road occupies the course for two miles, the direction changing slightly to avoid the high ground (700') of Nupton Hill. Then the present road turns towards the east, while the Roman road seems to have bent in the opposite direction, its course in about a mile being indicated by a lane which, near Tillington, joins a road bearing the name of Watling Street, leading straight to Magnæ, the camp near Kenchester, passing through

Credenhill, and by Credenhill railway-station, from which a parish boundary runs to the east side of the camp. The station Magnæ, about half-a-mile east of Kenchester, on the north of the river Wye, is now represented by irregular earthworks about 500 yards from east to west by 300 yards, of which Stukeley gives a complete plan.1 A footpath and a lane due south by Old Weir House seem to indicate the course of the Roman road to the Wye, from the south bank of which a parish boundary continues the same line for more than half-a-mile, and then a hedgerow, and a road called Stone Street, carry on the same line for three miles further. Near Woodyatts Cross some of the pavement of the road remained lately. The road went on by Brampton and Carey's Gate to Abbey Dore, where a section of it made in 1893 is described as being 13 feet wide, pitched with pieces of local limestone larger than a man's head, and showing two distinct wheel-marks four feet apart.2 It was again laid bare at Abbey Dore railway-station in 1901, of the same width and 18 inches below the surface, with deep ruts in the paving. Farther south the course is obscure. Iter XII. of Antonine passes over this road coming from Caerleon by Burrium (Usk) and Gobannium (Abergavenny) to Magnæ and on to Viroconium. The Itinerary distances agree with the mileage between these places.

Through Magnæ a Roman road ran east and west, which will be reverted to (p. 364).

¹ Itinerarium Curiosum, pl. 85. ² Archeological Survey of Herefordshire, 1896.

From Wroxeter it is probable that a Roman road went to Caersws, an undoubted Roman station three miles west of Newtown, Montgomeryshire, and 34 miles in a straight line from Wroxeter. The natural access to it would have been from Wroxeter, and a road to it would be in the direction of Higden's continuation of Watling Street to Cardigan, but there is no trace of it.

Westward from Caersws the Ordnance map shows a Roman road for four miles to Rhyd-y-Carw on the river Taranon. A Roman road in continuation of the Brecknockshire Sarn Helen is supposed to have reached Caersws from the south, and to the north of it the course of Sarn Swsog was described in 1806 by the Rev. Walter Davies 1 in great detail as far as the river Vyrnwy near Dolanog, about 14 miles. The Ordnance maps show it for three miles, beyond which the local names in the description do not help in an attempt to follow the course. The road was visible on the hills, where large side stones appeared, and the hard surface of the road could be felt by thrusting a stick down through the grass and moss. The width was five yards, and the space between the sides of large stones was filled in with stones and gravel, the middle being somewhat raised.

A paved road called Devil's Causeway, generally referred to as being near Pitchford, but really three miles south of it, is described by Hartshorne ² as branching from Watling Street on the west of the

¹ Hoare's Giraldus Cambrensis, p. elviii. ² Salopia Antiqua, p. 133.

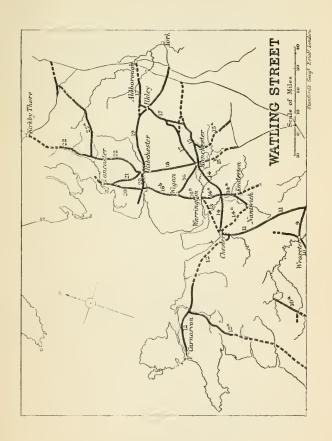
Severn, and passing through Acton Burnell, to the east of Cardington, and to Rushbury, where it turns to the south-east over Wenlock Edge to Tugford and Nordybank camp on the Brown Clee Hills. The paving of a local gritstone is very distinct for halfa-mile in the road near Causeway Wood Farm, but the road generally has nothing of the character of a Roman road. It points towards Worcester, from which a Roman road is said to have formerly been traced in a north-westerly direction.

CHAPTER III

WATLING STREET--continued.

(11) Watling Street to Chester.—Higden, the Monk of Chester, though he describes the course of Watling Street with considerable fulness, does not say that it led to Chester. Horsley 1 had been informed that Watling Street, or a branch of it, went by Newport and Whitchurch from Wall to Chester, and that it appeared in several places. It would seem, however, that the road struck northward from Watling Street at the boundary between the counties of Stafford and Shropshire, close to where Uxacona must have been. At one mile west of Weston-under-Lizard the Newport road is followed by a parish boundary for three-quarters of a mile from Watling Street, which is here a parish and county boundary, and three and a quarter miles further on the road bears the name of Pave Lane, and is marked on the new Ordnance map as a Roman road, leading through Chetwynd Aston to Newport, three miles north of which the modern road, pointing straight to Newport, is followed for a mile by parish boundaries. Standford Bridge, over the river Meese, a road called the Long Ford is entered upon, which continues for eight miles by Hinstock to Bletchley, parish boundaries

¹ Britannia Romana, p. 117.



following it for most of the way. Beyond Bletchley the course is lost, but it seems to have gone through Whitchurch to Malpas, whence the modern road, followed for two miles by parish boundaries, runs on straight to Tilston. A mile further on is Stretton, where Horsley placed Bovium, and then there is no trace for five miles. The line is picked up at Aldford, where a paved causeway is said to be visible in the river Dee at low water.1 Between the Dee and Chester, Stukeley observed the remains of the Roman road. It runs straight for four miles to Chester through Eaton Park, where it is still to be traced, and along the Eccleston Road, where the payement was broken through in 1884 for a considerable distance. The road appears to have crossed the Dee between Dee Bridge and Chester Castle, in the direction of Bridge Street.

The south wall of the Roman *Deva* is supposed to have extended westward from Newgate, from which northwards the present city wall follows the line of the Roman wall. If Bridge Street is on the course of the middle road dividing the camp into two equal halves, the breadth of the early station was about 400 yards, compared with 450 yards at Caerleon and Caerwent; and with 435 yards at the similar station at Gloucester. Following the proportion of those stations, the length of *Deva* would be about 470 yards, which would bring the north wall to near the Deanery, and the principal cross street, represented by East gate and West gate, would be in

¹ Ormerod's Hist. of Cheshire, p. 584.

the same relative position as in the above-named stations. There is no doubt that the city was enlarged in Roman times, and how far the present walls of Chester are on the lines of the Roman walls has been a subject of controversy.

There are some traces on the maps of a road due north of Wroxeter. A highway runs straight for one mile to Uckington Heath, which is continued by a footpath on to the river Tern. A parish boundary continues in the same line for one and a half miles, and then highways lie in the same general direction for a mile and a half, and the same line is taken up a mile and a half further on from Poynton Grange to Shawbury on the river Roden, and on to Morton Corbet. A Roman road in this direction perhaps went on by Stanton and Bury Walls to join the road from Usacona to Deva.

(12) Chester to Carnarvon.—From Deva Iter XI. of Antonine goes by Varae and Conovium to Segontium. The road appears to have branched from the road leading to Chester from the south after it had crossed the river Dee near Aldford, thus avoiding the Saltney Marshes on the south and west of Chester. The course according to Mr. Shrubsole is along the present road by Poulton Hall, Pulford, and Dodleston to Hawarden, where a road branched to Bala. The pavement has been found in a few places, and at Hawarden the course can be traced for several hundred yards, passing near the castle, by the church, and through the

¹ Archaol. Cambrensis, 5th Series, vol. ix. p. 257.

vicarage grounds. Mr. Shrubsole continues it by Kesterton to Greenfield and Flint, and thence to Caerwys, where he places Varae, 32 M. P. from Deva, and 201 miles from Chester by the course followed. Camden, probably led by sound, placed Varae at Bodfari, where there are no traces of Roman occupation; and Gale altered the Itinerary distance to 22 M. P. to suit a direct course from Chester. Conovium is placed at Caerhun on the river Conway, where the site of a Roman camp could formerly be traced, and from which in 1846 1 a raised turf road was traced, by Bwlch-y-Ddwyfarn, and along the hillside above Llydiart-y-Mynydd towards Aber. This road is shown on the Ordnance map for four miles to Maes-y-gaer near Aber, a large camp apparently not Roman. Traces of the road are lost on reaching the enclosed ground, and the name Henffordd (old road) near Aber seems to be the only indication of the course to Segontium, near the mouth of the river Sciont at Carnarvon, where the Roman station is plainly traceable.

Sarn Helen.—From Conovium a Roman road known as Sarn Helen ran due south. The course is described in 1864 2 to be along the foot of the cliffs on the west side of the vale of Llanrwst as far as Trefriew, where, however, it was then obliterated, and over the moor behind Gwydir, crossing the valley of the Llugwy between Bettws-y-coed and Swallow Falls, and then over the moors, where

¹ Archaol. Cambrensis, vol. i. p. 72. ² Ibid., 3rd Series, vol. xi. p. 215.

there are remains of the paving, to the village of Dolwyddelan. The railway to Festiniog seems to have effaced it for a mile and a half beyond, and then Sarn Helen is plainly traceable over the moors, passing on the east of Manod Mawr, and by Bwlch-y-fran (or Bwlch-carrig-y-fran) to Rhyd-yosbalen, leaving Festiniog about a mile to the west. Camden 1 mentions this part as being paved with stones, and Pennant 2 noticed it near Festiniog "quite bare, exhibiting the rude stones of which it was made." In his time it appears to have been visible on to Tommen-y-mûr, a Roman camp measuring about 300 yards by 200 yards, from which Sarn Helen is traceable south to Trawsfynydd, and by Rhiewgoch to Dolmelynllen, and on to Dolgelly. It is supposed to have passed the mountains to the east of Cader Idris, and to have gone on south to join the other Sarn Helen, which, after an interval of 30 miles, can be followed through Llanio to Carmarthen, and towards Llandovery.

(13) Chester to Wilderspool.—A Roman road is supposed 3 to have left Chester by the north gate, now represented by "The Street" or "Back Street" from Hoole, in the direction of Helsby Hill; and to be traceable towards the ford at Bridge Trafford. It is continued on by Denham, Frodsham, and Preston-on-the-Hill, beyond which the present road carries on the line for three miles towards Wilders-

¹ Britannia, iii. 169. ² Tour in Wales (edited by Prof. Rhys), vol. ii. p. 286. ³ Watkin, Roman Cheshire, p. 55.

pool. It would there have crossed the Mersey with Kind Street to Wigan and the north.

(14) Chester to Manchester,—The Roman road from Chester to Northwich and Manchester, called Watling Street, was on the line of the present road for four miles to Stamford Bridge, and then along a highway with a parish boundary for another mile, pointing straight to Edisbury Hill (460'-550') in Delamere Forest. After an interval of a mile, a road with a parish boundary along it for three-quarters of a mile east of Salter's Brook takes up the line. Mr. Robson traced the road through Delamere Forest before it was effaced by disforesting operations.1 At the west of the forest he describes the ridge as being more or less distinctly marked for half-a-mile, nine or ten yards across, with a well-marked crown, and shallow ditches and traces of mounds beyond them on each side. There was a thickness of 18 inches of solid gravel. Traces appeared after a mile and a half in the same course. At Edisbury Hill there is a slight turn, and the line is taken by a lane, and where that joins the road to Delamere railwaystation the Roman road was cut through two feet beneath the surface in laying the Vyrnwy water-main.2 It is visible on the east of the road, and in about a mile and a half the Northwich road rejoins it for a short distance, and the ridge is traceable onwards on the north of the road to Sandiway, from which onwards the present road seems to follow very nearly

¹ Trans. Hist. Soc. Lanc. and Chesh., 1851, p. 71.
² Watkin, p. 38.

the course of the Roman road on to Northwich, where remains have been found in several places.

Mr. W. T. Watkin 1 supposes that a road branched at Nettlefold to Kinderton, near Middlewich. The supposed junction consists of two sunk roads, not ridges, and the evidences of a Roman road to Middlewich appear to be but slight. He also gives the course of a Roman road from Chester, by Waverton and Beeston Castle to Wardle and Nantwich, and on to Chesterton. The line of the road was plainly to be distinguished in 1810 for two and a half miles on the west of Beeston Castle,2 on the north of which there were lately some remains of a paved road, but the evidence of a Roman road in this direction is inconclusive.

The connexion of the Roman roads of Cheshire and Lancashire with the south is not very plain. It would seem to have been by the road leading to Chester by Hinstock and Whitchurch, which has already been mentioned, but there is no trace of any connexion between this road and Nantwich, nine miles distant. Between Nantwich and Middlewich there are evident traces of a Roman road. About a mile north-north-east of Worleston Station,

¹ Roman Cheshire, p. 32.

² Bishop Bennet in *Lysons*, vol. ii. 432. Bennet, Bishop of Cloyne, is said to have walked over most of the Roman roads of England at the beginning of the last century, when many traces remained which have now disappeared. Unfortunately nearly all that is known of his observations is contained in *Lysons' Magna Britannia*, which includes only nine English counties,

near Red Hall, the road was found in laying a watermain a few years since two feet below the surface, consisting of a hard concrete two feet thick, and it was cut through at another place near Minshull Vernon, 18 inches thick of gravel almost as hard as concrete, and 15 feet wide. There was no sign of either road on the surface. The course is indicated by roads and lanes with parish boundaries along them by Park Hall-near which the ridge was quite plain in 1810-by Occleston Green, and Sutton, and on to Middlewich, where it seems to have joined another Roman road from the south. There are some remains of the ridge of the latter on the south of Middlewich, and a quarter of a mile of it is shown in the same line on the new Ordnance map near the railway junction at Sandbaeh. It may have continued on by a road which was thought by Ormerod to have gone to Chesterton, and on perhaps by Meir and Rocester to Derby, but there are no evidences of it remaining, except perhaps parish boundaries here and there, and a Windy Arbour near Red Street.

At Kinderton, half-a-mile north of Middlewich, on the south bank of the river Dane, Whitaker 1 and others place *Condate* of the *Itinerary*. That there was a station there is shown by the remains of a Roman camp, and the meeting of at least three Roman roads, but that it was *Condate* is unlikely; the distance from Manchester would be, going by Kind Street, 23 miles, instead of 18 M. P., as both Iter II. and Iter X. give it.

¹ Hist. of Manchester, vol. i. p. 145.

Kind Street.—From the river Dane north of Middlewich, Kind Street, or King Street, runs straight for four miles to Broken Cross near Northwich, parish boundaries following it for two and a half miles. It is 20 yards between the fences where not encroached upon, and towards Kinderton it is raised above the adjoining land. Camden says 1 that the road between Middlewich and Northwich was raised with gravel to such a height as easily to be known for a Roman work, and gravel being very scarce all over those parts it was being carried away from the road. That process appears to have been continued, and there is now little of the ridge remaining. It is visible in the fields to the north of Broken Cross, and a parish boundary follows the line for a quarter of a mile on from Wade Brook to Over Street, on the road from Chester to Manchester, one and a quarter miles east of Northwich.

Kind Street continued on to Wilderspool on the south of the Mersey opposite Warrington. On the north of the Chester and Manchester road it has been traced near Wincham brook, and a footway follows the line, and near Great Budworth falls into the road to Stretton. The Roman road was cut through in widening the highway on the south of Lower Stretton, and in Stretton, and farther on it was laid bare between the road and Appleton Hall. It was of gravel, and 18 to 20 feet wide.² Parish boundaries run along the present road for three-eighths, of a mile and three-quarters of a mile.

¹ Britannia, iii. 43. ² Watkin's Roman Cheshire, pp. 66, 67. There are remains of a Roman camp at Wilderspool, measuring 141 yards by 140 yards, and a causeway leads to the ford across the Mersey at Latchford to Warrington.

On the east of Northwich the present Altrincham road bears the name of Watling Street, but there is reason to think that the Roman road followed a line of highways straight on from Northwich to near the south-east of Pickmere, where it was laid bare in draining at about two feet below the surface, composed of gravel paved with boulders. Beyond, the present road is partly upon it for several miles, and it seems to have fallen into the Altrincham road near Over Tabley.

Where Kind Street crosses Watling Street on the east of Northwich, Horsley with reason places *Condate*. According to Iter II. it is 20 M.P. from *Deva* and 18 M.P. from *Mamucium*, which are doubtless Chester and Manchester, 36 miles apart, compared with 38 M.P. The intersection of Kind Street is exactly midway, and if *Condate* were to the west of that the distances would agree fairly well.

From Over Tabley the Roman road from Northwich to Manchester seems to have followed the course of the present road to Bucklow Hill, where a parish boundary begins to follow the road. At three-eighths of a mile further on there is a slight turn, and the general course of the Roman road is straight to near Old Trafford. It may have been directed towards some point (1300' to 1500') on the moor to the south-east of Todmorden, some 27 miles

distant. Parish boundaries follow the present road, which is straight except where the river Bollin is crossed. Where the present road turns towards the east to Altrincham, the Roman road continues straight on up Bowden Hill into Dunham Park, where there seems to be a very slight change in direction, and from which the road can be seen for some miles in both directions. In 1751 the road was very plain in Dunham Park and to the west of it.1 From the railway on the north of Dunham Park to the Mersey at Crossford the present road is straight in the same direction for three miles, with a parish boundary along it, and the same line is taken up for a mile by the road through Stretford. Between the Mersey and Stretford remains of the road were visible in the meadows about the middle of the eighteenth century.2

From Stretford to Manchester, and on as far as Ancoats Lane, an interval of three and a half miles, there were no traces of the road in Whitaker's day. In 1885 a section of the Roman road was exposed for three-quarters of a mile in the Chester Road, which showed that after passing through Stretford it turned to the north-east, and subsequent discoveries of the road in Manchester prove that the course of it was in the same straight line as Chester Road, and the known course from Ancoats Lane to Oldham. The road was laid out from the turn at Stretford towards high ground (1000') on Austerlands, more than 12

¹ Percival, *Phil. Trans.*, xlvii. p. 216.
² *Ibid.*, *loc. cit.*

miles distant, and it probably marks the Roman advance from the west against the Brigantes inhabiting the highlands of the middle of England. The section in the Chester Road showed a foundation consisting of a thick bed of gorse, ling, and brushwood, upon which was a layer of boulders, of a total thickness of three to four feet.1 A section seen to the south of the Central railway-station in the same line consisted of three inches of stiff clay on the pre-Roman surface, covered by five inches of burnt brick, small stones, charcoal, fragments of pottery and nails, on which boulders $8'' \times 6'' \times 4''$ were bedded, about eight inches in thickness, and then eight inches of gravel with two inches of rubble stone and clay over it, making a total thickness of 26 inches. The road passed about 100 yards south of the walled castrum near the confluence of the Medlock and the Irwell, the Mamucium or Mancunium of the Itinerary. It was a rectangle with rounded corners, 175 yards by 140 yards, the walls of which were still to be seen in Whitaker's time. The last remains were removed about 50 years ago, but the course of them can now be traced. A short branch road on the north of the Medlock led to the east gate. Whitaker tells us 2 that it was cut down to the base in 1765, and was found to be 14 yards wide, and one and a half yards deep of strong gravel mingled with boulders.

¹ C. Roeder, Lanc. and Ches. Antiq. Soc. Proc., 1899, p. 119. ² History of Manchester, by J. Whitaker, 1771, Pt. I. p. 120. It may here be said that in referring to him it is necessary to distinguish between his statements of fact, and what he so often says must have been.

(15) Manchester to Oldham and the north-east.— Beyond Ancoats Lane the ridge was 16 to 17 yards wide, and three-quarters of a yard high in gravel, with a quarter of a yard of marl laid upon it, and it was visible to Butler's Lane, where the width was five or six yards.1 Ridgeway Street now marks the course for half-a-mile onward, and it continued by what was formerly called Roman Road to Newton Heath Church, which stands on the site of the old road. Beyond, the construction of the canal has destroyed all traces of the road, but near Failsworth it appears with houses on one side, and is called Roman Road, and Street Lane, and is still to be seen as a lane across grass fields, the ridge remaining 10 yards wide and three or four feet high. Further on, across swampy ground, the ridge is narrower and higher for several hundred yards, and here Whitaker tells us 2 that he found that the moss had been trenched on each side of the road, and that the larger and more solid plates of turf had been laid on the original surface over a base 12 or 14 yards wide, from which the road was carried up to a crest three or four yards wide finished by about a yard of gravel. The ridge beyond has disappeared, and further on the lane is below the surface, but near the Hollinwood Cemetery the ridge is very evident, seven yards wide and two to four feet high. All trace of the road is then lost, after being plainly visible for a mile. The same line is taken up a

¹ Whitaker, loc. cit. p. 120. ² Manchester, vol. i. p. 125.

mile further on, near Alexandra Park, Oldham, by a street called Honeywell Lane on the old Ordnance map, and then Oldham intervenes.

In Whitaker's time it was visible on to Glodwick to the south of Oldham, and also at Wellihole a mile further on.

After an interval of two miles the road is again to be seen in the same straight line on High Moor Austerlands (1000') for half-a-mile. From this spot the view to Manchester is unimpeded except by smoke, but in the opposite direction there is no prospect, and the road no longer keeps a straight course. It curves round by Doctor Head to Delph, and on to Castleshaw, where there are remains of a Roman camp. According to Percival 1 it proceeded direct to Clowes Moor, where it can still be traced over Stanedge tunnel (1300'), and then turning to the north-east, it passed to the north of Marsden to Slack, where numerous Roman remains have been found. About three miles beyond Marsden a parish boundary follows bits of an old road along the north of the present road to Brighouse for a mile and a half, past Slack to Outlane. The present road continues on in the same line, followed for a mile by the parish boundary, and here, on Lindley Moor,2 the ridge was formerly visible for a mile, raised considerably above the adjoining ground, and about 12 yards wide. It has been supposed that a Roman road went onwards through Rastrick, Brighouse, and Cleck-

¹ Phil. Trans., vol. xlvii. p. 216.

² Watson, Hist. of Halifax, 1775, p. 39.

heaton in the direction of Leeds and York. There seems to be little or no evidence of a road in that direction, and it may have gone to Woodlesford as Warburton shows it on his map.

At Rastrick a Roman road joins which branches from the road from Manchester over Blackstone Edge near Ripponden. From Rastrick westward the course is followed by the present road by Elland Lower Edge, through Elland to Greetland, and Greetland Wall Nook to Ripponden Bank. The old road descends by a direct course to Ripponden, and continues on by Old Lane to the Manchester and Ilkley road at Westgate Head. Traces of the paving are to be seen in various parts, and it was taken up in Old Lane about the middle of the last century.

From Slack a Roman road has been traced due north? by Sowood Green and Stainland, over Greetland Moor from near Turbury, across the river Calder at Sterne Mill, over Skircoat Moor, passing on the west of Halifax to Illingworth, and by St. John's to Causeway Foot and Causeway Top. At the lastnamed place the straight line of road from Illingworth northward to beyond Denholm is joined at an angle of about 45° by the road from Manchester by Blackstone Edge. At Hill Top near St. John's a portion of the Roman way a quarter of a mile long remained in situ not many years ago, paved with boulders, 20 feet wide, and with ditches at the sides. By

¹ Leyland, Jour. Brit. Archael. Ass., vol. xx. (1864) p. 208. ² F. A. Leyland in Watson's Hist. of Halifax, 2nd edition, 1854, p. 141.

some the road from Blackstone Edge has been supposed to follow the straight line northward from Illingworth, instead of the course which will presently be described.

Slack has been supposed to be the site of Cambodunum in Iter II. of Antonine, 18 M. P. from Mancunium. It is more than 20 miles from Manchester, and as the Itinerary distance from Calcaria to Mancunium is 10 miles less than the actual distance in a direct line, the intermediate station could not be fixed by measuring from either place, if we knew which road Iter II. follows. It may be by Slack, or by Elland, or by Adel and Sowerby.

Warburton's map of Yorkshire, made from actual survey in 1720, bears the following note where this

1 The map of Yorkshire, by John Warburton, Somerset Herald, F.R.S., F.S.A., was made to a scale of two and a half miles to an inch from a survey by compass bearings and measured distances, the field books of which remain among the Lansdowne MSS, in the British Museum. Several volumes (Lansdowne MSS, 909-914) of Warburton's notes and memoranda contain references to Roman roads, and show that his map was produced after observation in all parts of the county. He had previously surveyed the Roman wall, and had published a map of Northumberland from actual survey, upon which Roman roads are laid down. The map of Yorkshire was published by subscription in 1720. A note on it says that "The Roman military ways are shown by two unequal black lines, and when discontinued or broken off are not visible." The map shows that the meaning is that a pair of lines, a thick and a thin line, indicate a Roman road visible, and where the lines are broken, the road is not visible. Warburton's map is now very scarce, but there are copies in the Bodleian Library, and in the Bradford Free Library. A map of Yorkshire by Overton and Bowles, 1728, and other maps of the Ridings published about 1750 by E. Bowen, are evidently copied from it, the curiously expressed road enters Yorkshire near Oldham:—"This Roman way goes from York to Manchester, but disappears in places," and it is shown by a broken line, as not being visible, by Almondbury and on by Thornhill and Ossett to Woodlesford, where Riknild Street crosses the river Aire. There is no further evidence of a road in that direction. Castle Hill, Almondbury, has no claim to be a Roman station, as it was supposed by Canden to be.

Doctor Gate. - At Doctor Lane Head, on the east of Austerlands, a Roman road from the south joins this road, coming from Melandra Castle, a walled Roman camp 122 yards by 112 yards, seven and a half miles distant, on the south side of the river Etherow, about three-quarters of a mile west of Dinting railway-station. The road is shown in places on the Ordnance map, passing through Mossley. It continued from Melandra on by Glossop, and joined the Roman road from Buxton to Sheffield (Batham Gate) near Brough. In 1722 the track of it for a good part of the way was still used, set with large stones, and with drains on each side where it passed over mossy ground.1 The present road from Glossop to Sheffield has superseded it, but parts remain, known by the name of Doctor Gate.

Manchester to Buxton.—The Roman road from Manchester through Stockport is said to have crossed

notes relating to Roman roads being repeated verbatim, except that a reference by Warburton in one of them to his map of Northumberland is omitted.

1 Archeologia, vol. iii, p. 237.

the river Medlock at Old Ford, and to have fallen into the present Stockport road at Longsight. The road through Levenshulme to Stockport has long been called High Street, and beyond, the present road is followed by a parish boundary from Stockport Great Moor to Hazelgrove, beyond which the course is uncertain. The road on to Buxton probably went by High Lane, and up the valley of the Goyt, where a parish boundary follows the road. Beyond Wythen Lache a lane with a parish boundary along it is succeeded in the same line by the main road to Buxton. Whitaker and others seem to refer to a road by Adlington, but there appears to be no evidence of it.

Whitaker 1 says that a road appears to have branched off from the road from Manchester to the north-east near Ancoats Lane, by Streetfold near Harpurhey, and Street Bridge, and Street Gate, near Royton, in the direction of Littleborough, but nothing now seems to be known of this road.

(16) Manchester to Wigan.—According to Whitaker, a road to Blackrod branched from the road from Northwich, crossing the Irwell near Old Trafford, beyond which he admits that the road was wholly invisible as far as Hope Hall.² His account of this road has been questioned. Sibson ³ makes the road, of which the ridge was still to be traced for nearly a mile between Hope Hall and Chorlton Fold, leave

Mancunium by the west gate, and cross the Irwell in

Hist. of Manchester, vol. i. p. 191.
 2 Hist. p. 154.
 3 Baine's Hist. of Lancashire, 1836, vol. iii. p. 573.

the line of Regent Street, Salford, at Wodensford, described in an old writing as a paved causeway. It cannot now be traced for the two and threequarter miles to Hope Hall, nor to beyond Chorlton Fold, but it was found in constructing the railway from Eccles to Wigan near Worsley at about a foot below the surface, about seven yards wide. A small piece, said to have been very perfect, near Brick House on Mawdesley (? Mosley) Common is not now traceable. Further on it was found near Cleworth Hall, half-a-mile east of Tyldesley, and in the lane between Chowbent and Hindley, and on the south side of Hindley Vicarage, where it was two feet below the surface, formed of stone and gravel. The course is crossed by the Lancashire and Yorkshire Railway on Amber Common, two miles from Wigan, where Sibson describes it as being 14 yards broad and one yard thick of earth and gravel. Wigan agrees with the Itinerary distance of Coccium from Mancunium, 17 M. P.

Wigan to Warrington.—From Wigan Sibson traced a Roman road south to Warrington, and north to Walton-le-Dale on the south of the Ribble near Preston. The former road is described as crossing the river Douglas at Haddon Bridge and going nearly straight to Nearer Nagwood, and then, with a turn to the east, straight to the top of Whitehill (242'), where there is a change of direction to Old Heywood. The ridge is described as being very perfect in several places; it was discovered in Ashton-in-

¹ Gent.'s Mag. 1862, part i. p. 419.

Makerfield, and it is still visible in Nagwood and in the plantation on the east side of the road at Haydock Lodge, where Sibson saw a complete line of road for 200 yards, of earth covered with a layer of red freestone with a coat of gravel over. The road was traceable on to Warrington, crossing the Orford Brook at Longford Bridge. It probably crossed the Mersey at Latchford, a ford which was in use until Warrington Bridge was built, to Wilderspool and Kind Street.

Wigan to Walton.—The road from Wigan to the north, according to the same authority, was found one and a half miles from Wigan, and was traced back towards the town. Standish Wood Lane seems to occupy the course of it, which was easily traced up the hill to Standish, beyond which it continued through Welsh Whithill, Euxton Burgh, Rose Whithill, and Bamber Green, to Walton, probably the site of a camp at the passage of the Ribble.

(17) Manchester to Ilkley and Aldborough.—From the north gate of Mancunium a road communicated with Hunts Bank, now occupied by the Cathedral and Chetham College. In Whitaker's time the ridge was visible, five yards wide, bordered with large stones. It followed the course of Byrom Street as far as Quay Street, and then turned in the direction of the Cathedral; traces were found in Wood Street, and it was discovered in 1898 beneath the foundations of the old deanery in Dean's Gate, where it consisted of a layer of sandstone flags on five inches of clay and rubble, overlying six inches of gravel, below which

were four inches of blackish soil, bricks, charcoal, and scoria resting on the original soil.1 The road continued in the same line to the east side of Victoria Station, and then, with a slight turn, crossed the river Irk at Scotland Bridge. Stukeley 2 found that the Roman road went across the churchyard to Scotland Bridge, and then ascended the hill and proceeded with its original direction, north-east, to Rochdale. According to a MS. of the Rev. J. Watson,3 it went through Blackley (beyond which the present straight road probably occupies the course for one and a half miles) to the east of Alkrington Hall, and by Middleton Hall and Trub Smithy to the east of Rochdale, where Whitaker tells us a Roman road had lately (1771) been dug up, and to the south of Littleborough. The Roman road appears to have passed by Lydgate, about a mile east of Littleborough, and on to the remarkable paved causeway over Blackstone Edge, about two miles east-north-east of Littleborough. The track now appears a little to the south of the Halifax road near the fourth milestone from Rochdale, and the paving of the causeway soon becomes plain, ascending in a straight line for more than half-a-mile to the top of Blackstone Edge. The paving is in regular courses across the road, and seems to be bedded on rubble upon the rock; it is now several feet below the level of the

¹ C. Roeder, Proc. Lanc. and Ches. Antiq. Soc., 1899, p. 119. ² Iter. Borcale, p. 29, 1776. ³ Quoted by Mr. Earwaker in Manchester Guardian, Dec. 5,

^{1883.}

surface of the moor, the peat which covered it having apparently been removed. It is about 18 feet wide, and is bordered with stones set on edge, and in the middle there is a line of large blocks hollowed out so as to form a longitudinal trough 14 inches wide and eight or nine inches deep, the bottom of which is rather higher in the middle than at the sides. Higher up the hill the trough ceases, and a paved causeway twelve feet wide branches off on the north, at an angle of 20°, and continues for a short distance in a westerly direction at a flatter gradient. The trough stones reappear above the branch, and a rut in the paving two feet four inches from the centre of the trough is soon very plain on the north side, in places three or four inches deep. Higher up a rut appears on the south side, well marked, with traces of the rut on the north side, both at the same distance (two feet four inches) from the middle of the trough. Appearances suggest two wheel-tracks of about two feet gauge, with one wheel in the trough, rather than one track of four feet six inches gauge as has been suggested. Above the catchwater drain which crosses the causeway, the latter is as high or higher than the surface of the moor, and there are traces of side trenches, but higher up the pavement is again several feet lower than the surface. Towards the summit the pavement is a good deal broken up, and the bare rock appears. There is no middle trough, but the large flat stones forming the pavement are slightly grooved by wear in the line of it. The causeway bends towards the north at the summit (1300'), where

the pavement is partly covered by peat. On the descent on the Yorkshire side the trough stones again appear, and the causeway runs in a straight line for half-a-mile, and then winds down Blackcastle Clough. Towards the Halifax road the paving has been removed, but the course of the road can be easily followed. On the Yorkshire side it is known as the Devil's Pavement.¹

The road is plainly traceable for two miles; it ascends from the west with an average gradient of one in seven, and at one part is as steep as one in five. The trough in the middle has given occasion for much speculation, and for doubts whether the causeway is Roman.² Of its Roman origin there can be not much doubt, but it has probably been altered to serve as an incline for bringing stone down from a large quarry at the top. The quarry remains; the growth of peat in the bottom and over the sides testifying to its antiquity, and there is no record of its having been worked.

Warburton's map bears the note at the Yorkshire boundary—"This Roman way extends from Manchester in Lancashire unto Aldborough near Borrow bridge, is all paved with stone and near eight yards wide." His notes in the Lansdowne MSS. describe

The various opinions about the trough, and the Roman or other origin of the causeway, are summarized by Dr. H. C. Marsh in the *Journal of the Archaeological Association*, vol. i., N. S., p. 259.

N. S., p. 259.

2 It is remarkable that Horsley, who passed over Blackstone Edge, only mentions the causeway to express his surprise to find how much it was below the surface.—*Brit. Rom.*, p. 291.

the course from Ilkley southwards, and both map and description prove to be fairly accurate. The course of the road through Yorkshire was investigated by Mr. Leyland in 1864, and the information collected by him and others has lately been summarized by Mr. Norton Dickon.

At Bailings, about three-quarters of a mile to the east of Blackcastle Clough, the course of the Roman road leaves the present Halifax road and follows a lane on the north of it for two and a half miles by West Gate Head, where a road already described branched to Rastrick, and thence to Lane Head and Fosson Lane, where some remains of the paving lately existed. It then turns northwards, by Mill Bank and through Sowerby, and on to the river Calder by Finkle Street, where some of the pavement not long ago remained. The ford across the Calder was still paved with large blocks of stone, to the width of about 20 feet, within the memory of men living in 1834, and the road ascended in a north-easterly direction by Hollin Hall, where part of the causeway was visible not long before, to Newland, where the road turned to the north, and the course is along the high ground by Clough Head, Sentry Edge, Balklam Edge, and Hamilton Hill to Hunters' Hill (1300'). From this point traces of the road are marked on the Ordnance map in a north-easterly direction for two miles to the road from Illingworth at Causeway Top. The pavement was entire at the junction of the

¹ four. Brit. Achaol. Ass., vol. xx. p. 208. ² Bradford Antiquary, vol. iii. p. 239.

Ogden and Skirden brook until it was removed about 50 years ago to make fences, and more of the road was destroyed when the Ogden reservoir was made. Northward from Causeway Top the present road is followed by a parish boundary, and continues straight on for half-a-mile, and then turns off, but traces of the ridge are marked on the Ordnance map straight onwards for three-quarters of a mile as far as Denholme Church. It was faintly discernible near Cold Spring House, one and three-quarter miles further north, in 1885,1 and the course on appears to be, as described by Warburton, by Ellercarr to Harden Moor, where it was described in 1745 as a paved way about 12 feet broad, neatly set of such stone as the place afforded, which could be traced where the ground was pretty hard, a ridge appearing higher than the surface of the earth, in some places being only covered with grass, though sometimes the causeway was met with several feet below the surface in digging peat.2 It could then be seen in several places on the moor pointing to the Moor House above Morton, on the north of the river Aire. Whitaker gives much the same account in 1771.3 The socalled Fairfax's Intrenchments on the Ordnance map may represent the Roman ridge on Harden Moor, but nothing is now to be seen there, nor onwards across the valley of the Aire. Whitaker was informed that a raised paved road, overgrown with turf, appeared on

¹ Collyer and Turner, Ilkley, Ancient and Modern, p. 135.

² Richardson, in *Hearn's Leland's Itinerary*, vol. i. p. 143. ³ *Hist, of Manchester*, vol. i. p. 138.

Rumbles Moor, and it is stated ¹ that a paved road was destroyed about fifty years ago near Upwood, a mile to the north of the Aire. No traces are now known on Rumbles Moor or on Ilkley Moor.

The result of Mr. Leyland's inquiries was to show that up to the middle of the eighteenth century the road was fairly passable for foot-passengers along the whole distance from Littleborough to Ilkley, but was then in many places in a ruinous condition, in some places enclosed, in some places incorporated with the highway, and in others the paving had been taken up and used for building. In 1864 the road within the parish of Halifax (about ten miles) had ceased to exist as a highway, though it was traceable, by the help of information from old inhabitants, very much on the line along which Warburton marks it as visible on his map of 1720.

From about five miles to the west of this road, on the north of the Calder valley, an ancient road known as The Long Causeway can be followed for more than six miles in the direction of Burnley. There does not seem to be any evidence that it is a Roman road.

A Roman road is marked by broken lines, as not being visible, on Warburton's map, leaving this road at right angles on Ilkley Moor—probably the "ancient road" marked on the Ordnance map. It seems to cross by Menston to the Chevin, and to join York Gate, a Roman road which can still be traced in the direction of York.

The road from Manchester must have descended to

¹ Norton Dickon, p. 220.

Ilkley by much the same course as the present road. The Roman station, supposed to be *Olicana* of Ptolemy, was on a steep brow overlooking the river Wharfe, between two tributary brooks. Whitaker describes it as an area about 160 yards by 100 yards round the church, the enclosing walls being traceable all round. The site, viewed from the riverside, is still well defined, although the rivulet on the west side has been filled in.

The Roman road is supposed to have crossed the Wharfe on the east of Ilkley Bridge. The paved way is to be found under the sod from near Middleton Hall, and it can be traced along the course marked on the old Ordnance map on the east of Ing Gill to Raw Shaw, where a Roman road is shown branching in the direction of Addingham. About a mile further on it turns towards the east on the south of Round Hill (1341') in a straight line over Blubberhouses Moor, where it bears the name of Watling Street, and is still faintly traceable. In the middle of the eighteenth century it is described 2 as being paved with stones uncommonly large, and edged with stones still larger. The road can be traced in the same straight line across the Washburne valley to near Crag Hall, where the line is taken up by a road, also called Watling Street, for two miles, and then by a footway on a ridge in the fields. The paving of the road, of native boulders, was here taken up about 1848. At Whitehall Nook (600'), where seven miles of straight

Whitaker, *Hist. of Manchester*, vol. i. p. 195.

² Ibid. p. 193.

road ends, a small portion of the road nine feet wide, fenced on both sides, remained in 1882.¹ The course of the road, bending more towards the north, crosses the river Nidd near Hampsthwaite Church, and a little further on, in Holly Bank Wood, there were remains of the pavement in 1894.²

Warburton's map shows the road as visible as far as the river Nidd, and continues it by broken lines, as not being visible, on by the south of Ripley to

Aldborough.

(18) Manchester to Ribchester.—The Roman road from Manchester to Ribchester branched off from the last road near where the Cathedral now stands, at an angle of 65°. It crossed the river Irk at its confluence with the Irwell, and passed through Strangeways very much on the line of the Bury road. At Broughton a fragment was visible in 1851. The course appears to have been straight from Hunts Bank to Bowstock Hill (890'), ten miles distant, the road over which has for centuries borne the name of Watling Street. A description of the road by Mr. Just in 1839 and 1842 3 notices slight traces at the corner of Kersall Moor, and one mile south of Prestwich the Bury road joins the line and follows it through Prestwich. A mile further on Higher Lane, on the Ordnance map, is on the line of the old road, but building seems to have altered this, and

¹ Grainge, Hist. of Harrogate, p. 33.

² Speight's Nidderdale, p. 380. ³ Trans. Lit. and Phil. Soc. Lanc. and Cheshire, vols. vi. and vii.

destroyed other traces existing 50 years ago. North of Radcliffe the line is preserved by a parish boundary for seven-eighths of a mile from Spenmoor to Blackburn Street. There are traces beyond, and then the line is taken up by Watling Street over Bowstock Hill, with a parish boundary along it for one and a half miles. From the highest point (890') the course of the road is seen through Radeliffe, five miles to the south, and to the high ground beyond, and looking northward the road is seen five miles off mounting Rushton Height (1062'), to which, with a very slight turn, the course is now directed. There were lately remains of the ridge of the Roman road between the Bolton road and the Wanves Reservoir, which is on the line of road, and there are traces here and there by Edgeworth and on to Pike House; the same straight line is then taken up by the present road, on the west of which, just beyond, a trace of the ridge is to be seen. From Grimehills Moor, over Rushton Height, and through Blacksnape, the present road follows the course of the Roman road, which seems to have been once wide between the enclosing fences, and to have been encroached upon by houses and enclosures, so that, seen in detail, the straightness is somewhat lost. Before enclosures at the beginning of the nineteenth century the ridge was everywhere conspicuous.1 On Rushton Height, from which the whole length of Longridge Fell, 12\frac{3}{4} miles off, is plainly visible to the north, there is a very slight

¹ Dr. T. D. Whitaker, History of Whalley, vol. i. p. 28.

turn, and the general course of the road lies in a straight line to Jeffrey Hill (900') on the east end of Longridge Fell, three miles north of Ribchester. Beyond Blacksnape a parish boundary follows the present road for a quarter of a mile, and then the present road turns off to the west to join the line again in rather more than a mile. Mr. Just there noticed a stony line across the fields, marking the course of the old road. From Ranter's Row to the outskirts of Blackburn the present road follows the course of the Roman road, which was opened in 1890 at Lower Darwen. It was traced on further by Mr. Just over ground now covered with building. On the north of Blackburn, in 1839, there was a bold ridge on approaching Revidge, and it was visible beyond Revidge Lane. A footway appears to indicate the line towards Higher Waves, where remains lately existed. The line is taken up by a lane on Top-of-Ramsgrave (730'), from which Rushton Height to the south, and Longridge Fell to the north, beyond the vale of the Ribble, are plainly visible. Traces of the ridge remain near Midge Hole Farm, and a lane to Stubby Head, and another lane, and a line of hedges, seem to mark the course to the river Ribble about a quarter of a mile to the east of Ribchester.

For the whole distance from Manchester to the Ribble, 25 miles, no part of the road is three-quarters of a mile out of a perfectly straight line, the greatest deviation being at the top of Rushton Height (1062'), and on the top of Bowstock Hill (890'), where slight changes of direction occur.

After crossing the Ribble, the road from the south probably joined the road from the east, and the two crossed the Boyce Brook and entered Ribchester together. The site of the Roman station is on the west side of Boyce Brook, which flowed round the east and north side of it. It appears to have extended from the churchyard to the Ribble, and to have been a walled rectangle about 200 yards by 143 yards.

(19) Ribchester to Ilkley.—The Roman road from Ribchester eastward crossed the Ribble at the ford at Little Town. There is a piece of the ridge south of Salusbury Hall, and three-quarters of a mile to the east of it another piece, which bends to the north-east and points towards Hacking Hall (200'). The ridge appears again at Dole Farm, and then Kenyon Lane takes up the line. East of Dinckley Brook the ridge is again visible, and there are traces of it to the south of Hacking Hall. It then turns due north-east in a line straight towards high ground (410') a quarter of a mile north of Worston on the east of the river Ribble, and where the railway crosses it the ridge is visible, and for more than half-a-mile on Standen Hey, where a road takes up the line. In old deeds the road hereabouts is called Brede Street.1 A bit of the ridge remains on the west of the Clitheroe Road at the cross-roads, and half-a-mile further on it is very plain on both sides of the Pendleton Brook. In 1850 Mr. Just saw a section there, 21 feet wide, of flags on gravel, the flags not of any definite

Dr. Whitaker's History of Hallamshire, vol. ii. p. 100.

shape or size, but nicely fitted. A plantation of trees now covers it. The ridge, with a fence and lane along it, is followed by the municipal boundary of Clitheroe for two miles to the east of Chatburn, with a very slight change of direction after Worston has been passed. Then there is a turn through 45° to the east, and the ridge is visible on the south of the road to Downham, and with a slight 8 curve it keeps on the crest of the hill to Hey House; from which the ridge follows a straight line across Smithies Brook and continues, in about the same line, to Howgill. A lane then takes up the line, and at Brogden the ridge again appears. Brogden Lane and The Old Lane carry on the line to the canal at Greenber, and traces of the ridge are shown on the Ordnance map on the east of the canal and further on; and the road appears to run straight on to the high point at Thornton Rectory. To the east of Thornton, beyond some rubbish-tips, the Roman road can be traced up a hill, along the top of which the paving can be seen beneath the turf. At about three-quarters of a mile east of Thornton railway-station the railway cuts into the old road and occupies its course for a quarter of a mile. It then appears on the south of the railway, which cuts through a rectangular camp (176 yards by 116 yards), called Burwen Castle, situated on the west side of a stream a quarter of a mile west of Elslack station. The road can be traced on the south side of the railway further on for more than a mile, and the pavement was found there in some draining operations in the spring of 1899.

¹ Trans, Hist. Soc. Lanes. and Cheshire, vol. iii. p. 7.

It seems to have followed much the same course as the railway now does to Skipton station, and from about three-quarters of a mile east of Skipton a track on the slope of Skipton Moor seems to mark the course from Shale plantation, along the south of Howgill and Edge plantations. Then, bending southward, the ridge can be seen over Addingham Moor to a highway called "The Street," about half-a-mile south of Addingham, along which traces are visible in several places. About a mile further on remains of the road were exposed close to the north side of the railway. Whitaker 1 described the road in 1771 as being traceable for three miles to the west of Ilkley, and very conspicuous on the moor in Old Addingham township for a mile. There is now no trace through Ilkley, where, according to Whitaker, the present main road is on the line. Traces of the Roman road are shown on the Ordnance map just to the west of Ben Rhydding, and onwards by The Mount towards Scalebor Park. It appears to have crossed the lower ground near Burley Junction, and to have ascended by Chevin End, but no traces are visible. The old Ordnance map marks the Roman road on Guiseley Moor, which is now enclosed, and the traces have disappeared. Further on, the road can be seen on Carlton Moor, and it can be followed on by Green Gates to the Roman Camp (about 110 yards by 88 yards), half-a-mile north of Adel, and onwards to Bramham, Tadcaster, and York.

Warburton's map of 1720 bears the note where this

1 Manchester, vol. i. p. 193.

road enters Yorkshire from the west—"This Roman Way goes to York, and for the most part is visible, being paved with stone throughout."

(20) Ribchester to Fulwood and to Lancaster.— A road went westward from Ribchester along the north of the river Ribble. A raised agger was noticed by Just¹ near the parsonage, where it is still visible, but nothing beyond for two miles, and it is possible that this road turned off from the road to Lancaster. At Stubbins Nook the road is visible, and a lane is in the line, and there are traces east of Marsh House, and between Tun Hook and the Clitheroe road, all in one straight line. There is then a change of direction, and on the west of the railway the road bearing the name of Watling Street runs to Fulwood Barracks and on to Withy Tree and the North-Western Railway, beyond which there are traces of a road called Dane's Pad to Kirkham.

On the north of Fulwood Barracks, Niggery Lane, marked "ancient causeway" on the Ordnance map, runs north-west; it would join the road west from Ribchester about three-quarters of a mile east of Fulwood Barracks. A parish boundary in continuation runs due north for half-a-mile, and then joins a road and follows it for one and a quarter miles to a bridge over Westfield Brook. The course can be traced on over Sparling Brook, and it perhaps joined the Roman road from near Preston to Lancaster, which is described by Sibson as going by Cadley Causeway, through Broughton, Barton, and Bils-

¹ Trans. Hist. Soc. Lancs. and Cheshire, vol. iii. p. 3.

borough, and along Fleet Street in Claughton, and through Burrow. From a quarter of a mile north of Barton and Broughton railway-station a parish boundary follows the present road for three miles. The only other sign of a Roman road appears to be "Windy Arbour," near Forton, four miles north of Garstang.

(21) Ribchester to Lancaster.—A Roman road left Ribchester in the direction of Lancaster by Dale Hey to the cross-roads, two miles from Ribchester. About three-quarters of a mile further on the course of an ancient causeway is shown on the Ordnance map, running across country for a mile and a half to Derby Arms, and then following a highway to the south of the river Loud. The course is uncertain onwards, but passing Windy Arbour it seems to have crossed the river Brock to Snape Rake Lane, where a paved road was well preserved in 1897.¹

About a mile further on a parish boundary joins the road at Stanegate, and follows it for one and a half miles across the river Calder at Oaken Clough, and on to Grizedale Brook, to the south of which there are remains of the Roman road. From Grizedale Brook the road was traced on by Mr. Jackson past Gregory's Barn and Fell End Farm to Burns Farm, and from that to Street he found it in good preservation for a considerable distance. At Street there are remains of a bridge over the river Wyre, about 80 yards below the present Street Bridge, which, if not Roman, appears to mark where the Roman road crossed. An "ancient causeway" is marked on the

¹ S. Jackson, Lanc. and Ches. Antiq. Soc. Trans., 1897, p. 221.

Ordnance map along the road beyond, which leads to Methurst, about half-a-mile east of the railway at a mile south of Galgate station, not far from which it probably fell into the road from the direction of Preston to Lancaster.

Little is known of Roman roads to the north of Lancaster. A paving of cobbles, grouted with lime, four to four and a half yards wide, was dug up in 1882 for a length of 130 to 140 yards, which pointed to Scaleford, on the river Lune, and on the north of the river a supposed Roman road was uncovered in 1892 on the road from Lancaster to Kirkby Lonsdale, at about four and a half miles from Lancaster. A little further on a parish boundary follows the road for a mile, but there is no further trace beyond. There appears to be no indication of a Roman road in the direction of Kendal, a mile south of which, near Natland, there are remains of a Roman camp, measuring about 176 yards by 132 yards.

According to Rauthmell and R. S. Ferguson,² a Roman road from Lancaster crossed the sands of Morecambe Bay for about seven miles to Wyke, in Cartmel, and across Cartmel Sands (three miles) and Duddon Sands (two miles) to the west coast of Cumberland. A Roman road is said to be visible in Cartmel, and in Furness between Conishead and Duddon Sands, but the crossing of the wide, treacherous sands by a road appears to be inconceivable.

¹ Lanc. and Ches. Antig. Soc., vol. xi. p. 184.

² Archaelogical Survey of Laneashire, and Trans. Cumberland and Westmoreland Antig. Soc., vol. iii, p. 64.

(22) Ribchester to Lowborough and Kirkby Thore.-The course of the Roman road from Ribchester to the north is a little east of north for half-a-mile; it then turns north-north-west for three-eighths of a mile to avoid the ravine of the Stidd Brook. There are traces of the ridge alongside the present road, which is called Stony Gate Lane. At Cock House the road turns to the north-west and back again with a sharp angle to the same line, which is that of the road on the south of the Ribble between Rushton Height and Jeffrey Hill. The ridge at once appears, and the road, with traces of the ridge, continues on to Jeffrey Hill (900'), at the west end of the Longridge Fell. There is there a turn of nearly 60° to the north-east, and the course is in a line with a point (825') on the west flank of Marl Hill in Bowland Forest, and also, as Mr. Just remarked, with the top of Penyghent (2273'), 25 miles distant. There are traces of the ridge in this line as far as the river Hodder, which is crossed a quarter of a mile east of Doeford Bridge. Gough says 1 that over Longridge Fell the Roman road, appearing green when the fell on both sides is heathy or morassy, was called Green Lane. North of the river Hodder the line of the old road is taken up by a lane for two miles from Doeburn, with pieces of the ridge remaining. The lane then turns off, but the ridge is marked on the Ordnance map (1847) as continuing on in the same line for a quarter of a mile. After entering Bowland Forest there is no trace for three miles, and then at Gamble Hole the ridge

¹ Camden, iii. 393.

appears in a new direction, pointing southward to Brownsholme Heights (950'), a little to the east of the last trace of the ridge, and northwards to the top of Croasdale Fell (1433'). The ridge is visible in this line on to Low Fell, to the east of which it passes, and then turns to the north-west up Croasdale. A road without traces of a ridge continues on over Whitendale Fell and round Bottonhead Fell (1784'), where the ridge was formerly conspicuous.1 Further on, a quarter of a mile of ridge is shown on the Ordnance map pointing a little west of north, and there is another bit in the same line near the source of Hindburn Beck. In 1824 the ridge was visible seven yards wide on to Ivah, where the present road appears to take up the line; the original pavement was laid bare at Low Gill, half-a-mile further on, early in the century,2 and remains were visible to the west of Tatham Church. The present road appears to be on the line for half-a-mile beyond Tatham Church, and there are several traces of the ridge beyond in the direction of Old Wennington, and between that and the river Greta, the line passing about a mile west of Lower Bentham. On the north of the river Wenning, Rauthmell³ in 1746 saw the causeway ploughed up. It was a deep bed of large pebbly gravel seven yards wide, and was paved with large, broad, flat stones. The Greta was crossed by a bridge, the abutments of which are said still to remain.4

¹ Just, loc. cit., vol. i. p. 80.
² Ibid.
³ Antiquitates Bremetonances, 1824 ed., p. 211.
⁴ W. T. Watkin's Roman Lancashire, p. 81.

North of the Greta the course is straight between a hill (250') one and a quarter miles east of Greta Bridge on the north of Cantsfield Beck, and high ground (412') at Gate House, four miles to the north, which is plainly visible from the hill near Cantsfield. A piece of ridge several feet high remains, and a lane with a parish boundary along it for three-quarters of a mile is in the line to Overtown, on the west of which, at Overborough, the station Bremetonacae has been placed by Camden and others.

Warburton's map of Yorkshire shows a Roman road branching near Overborough, which he calls "The Devil's Causeway," crossing the moors to Askrigg. It now bears the names of Cam High Road and Priest Bank, and can be followed from Gayle Beck, near Ribble Head, over Cam Pastures (1900') and Wether Fell, where parish boundaries follow it for two miles and a half, and thence in a straight line for three miles to the Roman fort at Brough, on the south of the river Ure, near Askrigg. Warburton continues it on by broken lines from Askrigg to Feetham, and thence by hard lines over Hope Moor, and to the Roman road to Carlisle, beyond which it is shown to Barnard Castle, where it falls into the straight road from Bowes to Streatlam Castle, which points in the direction of Bishop Auckland. According to Warburton, a Roman road was visible in his time from Barnard Castle to Streatlam, which is as far as he follows it, but it seems to have gone on and joined the Northumberland Watling Street on the south of the river Gaunlees.

From Overborough a road is supposed to have run through Kirkby Lonsdale to the Roman camp at Natland, a mile and a quarter south of Kendal, and thence on to Windermere, but there are no evidences of it from parish boundaries, nor are any traces of it known.

North of the Leck Beck a road called High Gate takes up the line of the road northwards to the county boundary at Windleburn, and then Wandles Lane continues it by Kirkby Lonsdale railway-station to Gate House (412'), looking south from which the course of the road from Botton Head Fell is in sight.

Beyond Casterton the course of the Roman road is perhaps along the lane between the railway and the modern road, through Borrowens and Applegarth, rejoining the latter road near Middleton Hall. In a mile the modern road crosses under the railway, and a lane continues straight on for one and a quarter miles to Fordholme on the river Rawthey, and the same line is taken up by a track on the high ground on the east side of the Lune valley, passing Howgill, Low- and High-Carlingill. The Roman road seems to have crossed the river Lune at Salterwath, a quarter of a mile from which, on the south of the Borrow Beck, at its confluence with the river Lune at Lowborough, is the Roman camp, a rectangle (160 by 100 yards) close to the railway and between it and the Lune, which, it has been suggested, is the station Alona. It is said that in 1853 there were the remains of walls, and of the abutment of a Roman bridge across the Borrow, 1

Just, Brit. Archæological Journal, vol. viii. p. 35.

The present road seems to follow the course of the old road for a mile north of the camp, and it could be traced in the Tebay gorge and in Crosby Ravensworth parish. A parish boundary for one and a quarter miles is continued by a track in a straight line for two miles over Crosby Ravensworth Fell, and by a road through Crosby Ravensworth to King's Meaburn, but beyond that there is no trace; the road probably went on to the camp at Crackenthorp, or to Kirkby Thore, joining the Roman road from Catterick to Carlisle, and continuing northwards by the Maiden Way.

There seems to be no trace of a road on from Lowborough in the direction of Kendal.

(23) Iter X. of Antonine.—It has been supposed that Iter X. of Antonine passed over the road that has now been followed. It is not known where either Clanoventa, where it begins, or Mediolanum, where it ends, are, nor is there certainty as to the position of any other stations except Mancunium and Condate. Camden suggested that Coccium was at Ribchester, and supposed Overborough to be Bremetonace, from its distance from Ribchester, and Horsley and others followed him. Horsley, who had first placed Clanoventa at South Shields, afterwards fixed it at Lancaster, and the way in which he dealt with the Itinerary distances is remarkable.

In Gale's copy, in Wesseling's edition, and in that of Parthey and Pinder, there are only two differences,

¹ R. S. Ferguson, Trans. Cumb. and West. Antiq. and Arch Soc., iii. 64.

each of one M. P., in the distances between stations in Iter X.; but Horsley, to suit his localities for the stations, alters five Roman numerals out of the eight in the Iter. The Itinerary distance of Coccium, 17 M. P. from Manchester, which agrees with the distance either to Blackrod or to Wigan, he makes 27 M. P. to suit Ribchester; he alters the distance between Coccium and Bremetonacæ from 20 to 25 M. P., and the distance between Bremetonaca and Calacum from 27 to 32 M.P., and in two other places changes the distance from 18 to 28 M. P. to suit his positions of the stations. He thus increases the length of the Iter from 150 M. P., which is the length stated in the heading, and is the sum of the intermediate distances, to 189 M.P. Taking the Itinerary distances as we find them, and putting Coccium at Wigan, it will be found that, following the road from Wigan to Walton-le-Dale, and thence to Ribchester, it is 23 miles compared with 20 M. P. to Bremetonace, a considerable difference; but from Ribchester to Overborough on the river Leck it is 29 miles compared with 27 M. P. from Bremetonacæ to Calacum; and from Overborough to Lowborough at the confluence of Borrow Beck with the river Lune, 17 miles compared with 19 M. P. from Calacum to Alona, the river names and the names of the stations in both cases bearing some affinity. This arrangement of the stations was suggested by Mr. W. T. Watkin in 1883.

CHAPTER IV

ERMING STREET

(1) General course.

(2) London to Braughing.

(a) to Bishop's Stortford and Stane Street.

(b) to Great Chesterford.

(c) to Sandy, etc.

(3) Braughing to Godmanchester.

(4) Godmanchester to Castor. (a) to Bourne, etc.

(5) Castor to Lincoln.

(a) to Horncastle and Caistor.

- (6) Lincoln to the Humber and the East Riding of York-shire,
- (7) Lincoln to Tadcaster.

(a) to Adel.

(b) Rudgate.
(S) Tadcaster to York.

- (9) York to Stamford Bridge and Malton; Wade's Causeway.
- (10) Stamford Bridge to Bridlington.
 (a) Malton to Wetwang.
- (II) York to the north-east and north.

(12) York to Catterick.

(13) Catterick to Kirkby Thore.

(a) Maiden Way.

(b) Stanegate.
(14) Kirkby Thore to Brougham.

(a) to Windermere and Ravenglass.

(15) Brougham to Carlisle.

(a) Carlisle to Papcastle, Egremont, and Maryport.

(16) Comparison of *Itinerary* distances and mileage. Lincoln to Carlisle.

(17) Carlisle to Netherby.

(a) Longtown to Wall of Antonine.

NORTHUMBERLAND WATLING STREET.

(18) Scots Corner to Lanchester.

(a) Chester le Street to the Tyne.

(19) Lanchester to Chew Green.

(20) Comparison of *Hinerary* distances and mileage. Catterick Bridge to Riechester.

(21) Devil's Causeway.

- (22) Chew Green to beyond the Wall of Antonine.
- (1) General Course.—Erming Street, according to some, extended to the south coast, and part of the road from London to Chichester, which has already been described, bears the name, but until London Bridge was built there could have been no direct connexion between a road south of the Thames and Erming Street. Others have denied that the Roman Erming Street came as far south as London. Dr. Guest I was of opinion that Erming Street from London to Huntingdon was not Roman, because there are no Roman remains on it, and because if there had been a paved road there would have been an Iter on it, whereas of the three from London to Lincoln, two go by Watling Street and one by Colchester. He, however, says that there is evidence that it existed in the time of Edgar, and he shows it in his map of the "Four Roman Ways." Dr. Guest's view was adopted and more widely disseminated by J. R. Green, who wrote 2 that the lower portion of Erming Street did not exist in Roman times, the fastnesses of the forest being so impassable that the road-makers did not attempt to penetrate them. The evidence on the ground, and that afforded by the Ordnance maps, is quite against this view.

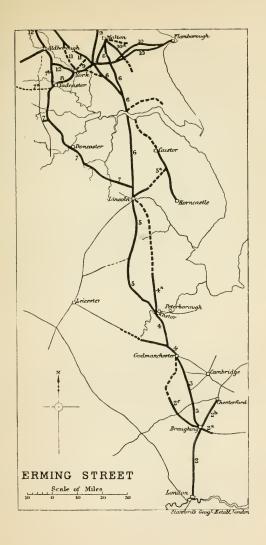
¹ 'The Four Roman Ways,' Archaeological Journal, vol. xiv.
² The Making of England, p. 49.

The course of Erming Street from London is direct northwards to Royston, except a bend to the east and back again to the same line. On this bend, near Braughing, three roads branched off, one eastward to Colchester, one in north-easterly direction to Chesterford, and another to the north. To avoid the Fen country Erming Street turns towards the north-west at Royston, crossing the river Ouse at Huntingdon, the Nene four miles west of Peterborough, and the Welland at Stamford. Then by a turn to the north it gains a ridge of high ground along which it continues through Ancaster and onwards in almost a straight line due north for 48 miles to the Humber. At Lincoln it is joined by the Foss Way, and about four miles further north a road branches off to the west-north-west by which access was given to York and the north without the necessity for crossing the wide tidal Humber. Avoiding the lower courses of the Trent, the Idle, the Don, and the Aire, this road curves round until after crossing the last-named river at Castleford it takes a northerly course. In about eight miles the road to York, apparently the more important road, curves off, but a road northwards continues on to Aldborough, Catterick, and Bishop Auckland. A few miles after the river Swale has been crossed near Catterick Bridge, a road branches off north-west, and crosses the fells to the Eden valley and Carlisle, and on to the Clyde at the west end of the Wall of Antonine. The road to the north continues on under the name of Watling Street, and after crossing the Tyne near Corbridge, and the Roman

Wall about three miles further on, it takes a tolerably direct course to the north-west over the Cheviots to the south side of the Forth and on to Stirling and Perth. A little to the north of the Wall a road branches off to the north-east which is traceable to Tweedmouth. The minor branch roads will be noticed in the following detailed description.

(2) London to Braughing.—The course of Erming Street lies to the east of the earlier Londinium. It may be that it left by the east gate to avoid the marsh or fen which Sir Christopher Wren discovered outside the north wall. Through the enlarged city the course is undetermined, but there appears to be evidence that neither Gracechurch Street nor Bishopsgate Street are on it. Near where Shoreditch Church stands, Erming Street was crossed by the Roman road passing to the north of London in the line of Old Street, from Tyburn to Old Ford, and from that point the course in a straight line for between five and six miles is represented by Kingsland Road and the continuation through Stoke Newington and Tottenham to Edmonton. There are short lengths of parish boundary along the middle of the road at Haggerston, and Stamford Hill, and for more than half-a-mile at Stoke Newington. The modern road turns to the east beyond Edmonton, but Erming Street appears to have gone straight on over Hounds Fields and Forty Hill to near Maiden Bridge. Brickyards and buildings have effaced what traces there were over Hounds Fields, and there is little to mark the course further on. The

¹ Parentalia, p. 265.



line seems to have crossed Charter Hatch Lane where a track remains at some old houses, and to have passed to the east of the course of the New River at Goat Lane. About half-a-mile north of Maiden Bridge the present road takes up the line and continues straight for nearly a mile along the west side of Theobalds Park, which then juts out and masks the line of the old road for a quarter of a mile. The present road resumes the line near the north entrance to the park, where Temple Bar has been re-erected, and continues in the same general direction with slight windings, due to enclosure of ground attached to houses, to near Cheshunt Great House. The road straight on is now stopped, but a track and footway are shown on the new Ordnance map continuing on to a lane in the same line nearly to Cheshunt Park. After an interval of a mile and a half the same line is again taken up for a quarter of a mile by a lane west of Cold Hall. Broxbourne Bury then conceals the course for a quarter of a mile, but at Martin's Green it begins to be plainly represented for nearly two miles by a broad green track through the woods, called Elbow Lane, to Little Amwell, where the modern road from Hoddesdon to Hertford joins it for three-eighths of a mile, and then turns off to the west. To this point (300') the general course of Erming Street is straight from Bishopsgate for 20 miles, and from it the high ground between Buntingford and Royston, where almost exactly the same direction is resumed, is plainly visible. The course of the old road is continued by lanes from where the

Hertford road turns off at Little Amwell nearly to the Ware and Hertford road in the Lea valley. Parish boundaries which have followed Elbow Lane and the Hertford road for more than a mile and threequarters to Little Amwell, continue along the lane in the same line for a quarter of a mile, and again from the Ware and Hertford road to the Lea, on the north of which in Bury Fields Roman remains have been found. Gough 1 notices a ford in the river just above Ware, and on the north side a piece of land pointing to it called Causeway Acre. North of Ware the Great North Road takes the course of Erming Street, and in about a mile there is a slight change of direction on the highest ground (260'), and a straight length begins which continues for three miles over High Cross Hill to near St. Edmund's College (310'), pointing to the site of the Roman camp (300') at Braughing. At Wadesmill, where the river Rib is crossed, the road has been altered to improve the gradient, and the straight line has been somewhat deviated from, and the same is to be noticed at many other places where the road has been improved. Beyond St. Edmund's College the present road begins to descend into the valley of the Rib, and it is probable that the Roman road continued on in the same course for two and a half miles to the station at Braughing. The site of this is on the promontory formed by the confluence of the rivers Rib and Ouin, on the west of Braughing. Traces of a camp were visible formerly, but the hill is now enclosed and planted.

¹ Camden's Britannia, vol. ii., p. 68.

At or near this station several roads branched off. The course of one to the east is indicated for two miles by a parish boundary, which runs straight from the river Rib between Puckeridge and Braughing, along hedges and by the side of the woods to Horse Cross (379'), where it joins the present road to Bishops Stortford. There is no parish boundary beyond, nor anything in the present road to suggest a Roman road, but beyond Bishops Stortford it is continued by the Essex Stane Street, which will be reverted to.

A road seems to have continued on from Braughing to the north-east, in the direction of Great Chesterford, of which the first indication, some four miles from Braughing, is a lane with a parish boundary along it pointing straight to the camp at Braughing. After an interval of a mile and a half a lane with a parish boundary continues the same straight line for about a mile and a half from near Butts Green to Coopers End, and in three-quarters of a mile the same line is taken up by a parish boundary, and then by a lane, and by a parish boundary to Elmdon Lea, together a mile and a quarter. These all lie in one straight line pointing to high ground (about 370') near Strethall, two and a half miles from Great Chesterford, to which a lane leads, followed for some distance by a parish boundary. The Roman road continues on in the same direction through Newmarket, following the course of Iknild Street.

There are also traces of a road branching near Braughing towards the north-west. A lane on the north side of Hamels Park is followed by a parish boundary for a quarter of a mile, and the line is taken up by a parish boundary three-quarters of a mile further on. Neither of them is very straight, but two miles from Erming Street a track begins which is continued by Back Lane, a parish boundary following both, for three and a half miles to Hare Street, and after an interval of about a mile, lanes and roads continue the line to Baldock on the Iknild Way. North of Baldock a straight road with the county boundary following it for two miles, and a parish boundary for a mile and three-quarters farther, goes on by Stratton to near Biggleswade. Bishop Bennet 1 traced it on straight to Chesterfield near Sandy, and on to Godmanchester. A dotted line on the new Ordnance map is marked Roman road for four miles from near Sandy to Crane Hill, beyond which the county boundary for half-amile, and afterwards a lane with a parish boundary, continue the same line, but the course of the Roman road further north seems to lie to the east of this, and to be continued by a lane with a parish boundary along it going by Weald to Toseland, where pieces of the ridge appear, and then by a lane with a county and parish boundary along it for upwards of two miles, leading to Godmanchester.

(3) Braughing to Godmanchester.—Northwards from Braughing, Erming Street is represented from near Coles (254') by a straight road with a parish boundary along it for three and a half miles, through Buntingford to near Corney Bury (334'), where there is a considerable turn, and where the same straight

¹ Lysons, Magna Britannia, vol. i. p. 27.

line is taken up which was departed from near Ware. Two lengths of straight road, very nearly in the same line, with parish boundaries nearly all the way, then extend for five and a half miles to high ground (360') half-a-mile south of Royston. Thence a straight road runs through Royston, where Iknild Street crosses Erming Street, for eight and three-quarter miles to a point (250') near Coombe Grove, from which another length of straight road almost exactly in the same straight line for five miles reaches to Caxton Gibbet (216'), parish boundaries following the road nearly all the way.

Five miles north of Royston a Roman road branches to Cambridge; parish boundaries follow it for half-amile, a quarter of a mile, and a mile and a half, to Lords Bridge, from which it is continued along a lane by Barton to Cambridge. This road will be noticed again further on.

From Caxton Gibbet another Roman road seems to have gone to Cambridge, parish boundaries following the present road for most of the way.

Northwards from Caxton Gibbet, the present road, following the course of Erming Street, is straight for five and a quarter miles to Kings Bush (140'), which commands a view beyond Caxton, and to high ground beyond Huntingdon to the north, and from which a straight course was laid out pointing to Green End (120') near Great Stukeley two miles north of Huntingdon. The improvement of the gradient of the present road down the hill into the valley of the Ouse has impaired the straightness of the road, and

through Godmanchester and Huntingdon the straight line of the Roman road was apparently departed from to avoid the river.

The Roman road from Sandy which joined Erming Street at Godmanchester has been noticed (p. 135). Another is plainly traceable coming from Cambridge along the edge of the Fen country, followed nearly all the way by parish boundaries. The ridge remained here and there in Stukeley's time. It is part of a road coming from the direction of Colchester to which Dr. Mason, Woodwardian Professor about 1750, gave the name Via Devana, supposing that it led to Chester. The name has been perpetuated on the Ordnance map.

It will be observed that the course of Erming Street, which has now been followed from London to Godmanchester, has the characteristic features of a Roman road. The general course for the first 20 miles is almost straight, and parish boundaries follow it, as they continue to do when the road turns away eastward into the valley of the Rib, where Roman roads branch from it to the east and to the north-east and to the west, and at Corney Bury the same straight line which was departed from near Ware, is again taken up for five and a half miles after an interval of 10 miles in which the road turns eastward and back again. From Royston to Godmanchester, a length of 20 miles is made up of pieces of road so nearly in the same line that no part is more than three-quarters of a mile away from a straight line, and with parish boundaries following the road for most of the way. The construction of the modern Great

North Road has here as elsewhere obliterated nearly all other traces of the Roman road.

(4) Godmanchester to Castor. - There are reasons for supposing that the site of the Roman station at Godmanchester is the rectangle on the west of Erming Street which is indicated by streets and lanes. There were remains of the walls in the middle of the eighteenth century. The wide causeway across the low ground on the south of the river Ouse in continuation of the street in Godmanchester, is probably on the line of the Roman road, but the course of the latter is uncertain until the straight line is resumed on the north of Huntingdon, where there is a quarter of a mile of parish boundary along the present road, and perhaps traces of the ridge, though the cutting down of the hill to improve the gradient has modified the original straight course. From Great Stukeley (128') a straight road two and a half miles long, with a wind to the east in the hollow beyond and through Little Stukeley, leads to Alconbury Hill (162'), where there is a change of direction of about 40° by a round turn towards the east. It seems likely that here a road branched off to the west, of which the first appearance is about two miles distant near Buckworth, where a straight road pointing to Alconbury Hill begins, which a parish boundary soon joins and follows for a mile and three-quarters, the road continuing on in the same direction for three-quarters of a mile. In a mile and a half the same straight line is again taken up by a lane which in half-a-mile is joined by a parish boundary, and a straight road

continues in the same direction for two and a half miles to Titchmarsh, parish boundaries following it for a mile and a half. Titchmarsh is nine miles from the nearest trace in the same direction of Gartree Road, a Roman road from Leicester, which at Cottingham, and one mile south of Corby, is pointing direct to Titchmarsh.

From Alconbury Hill Erining Street takes a direct course for nine miles. Near Sawtrey it descends to low ground (18' to 30'), and winds slightly for about a mile until the straight line is recovered at the park of Conjugton Castle, and is followed to a point (91') half-a-mile north of Norman Cross and nine miles from Alconbury Hill. Hereabouts, not far from Stilton, the road was still laid with pitched stones in 1712,1 and Stukeley2 found the road perfect with a ridge upon the open fields for a long way together, and in some parts still paved with stone. With a turn through 25° towards north-west, the course is straight from the turn north of Norman Cross for 10 miles to a point (176') between Walcot Hall and Burleigh Park. For three and a half miles the Great North Road with a parish boundary along it continues to follow the line, but to the north of Chesterton on approaching the river Nene it turns off to the west after having followed the course of the Roman road for 56 miles continuously. The ridge of Erming Street is to be seen running straight on, passing diagonally through what Camden styles the evident

¹ Moreton, Natural History of Northamptonshire, p. 502. ² Itinerarium Curiosum, 1722, p. 81.

traces of a ruined city. It is of an irregular polygonal form, about 770 yards long from south-east to northwest, and 400 yards broad, and is surrounded by the remains of a rampart and ditch. Stukeley, who often visited it while the turnpike-road to Wansford was being constructed along the west side, describes the ploughing up of interments, stone coffins, urns, coins, etc.; and the uncovering of the masonry foundations of the south gate, and part of the wall inside a broad ditch. The foundations of buildings could then be traced, and many loads of stone, tiles, and bricks were carted away every year. The elevated crest of the road continued to the bank of the river Nene, which was crossed by a timber bridge on stone piers, the remains of which were removed when the river was made navigable.1 On the north of the river, to the east of Castor railway-station, the ridge remains conspicuous. The sides have been dug into for the sake of the materials, and the recesses so formed have been levelled by the plough, but viewed from the line of the road it presents the outline of a bank eight yards wide at the top and as much as five feet high. A parish boundary follows it for 300 yards to the road to the station, and here between Erming Street and the village of Castor many Roman remains have been found, among them a milliary dedicated to Florianus, A.D. 276, on which is M. P. L. (or LI.), which is the distance to Lincoln.² Stukeley supposed

Diary, April 16, and Letter to R. Gale, May 12, 1739. Surfees Soc., vols. lxxvi. and lxxx.

2 At Castor a black glazed pottery ware was manufactured

which is found at many Roman sites.

that there were traces of a Roman camp round the churchyard at Castor, but they are not now apparent.

A Roman road must have branched off hereabouts which went due north, crossing the Welland at West Deeping. There is now no trace of it near Castor, but its course is indicated from near Upton for a mile by a parish boundary, and then by a lane, and a road in the same line called King Street, which crosses the Midland and Great Northern Railways one mile west of Helpston station, and runs through West Deeping. and straight for eight miles to Kates Bridge, a parish boundary following it most of the way. Stukeley 1 considered this to be the original stem of Erming Street, and the road by Stamford a branch of later date. But so far from being a branch leaving the former at an angle as he states, the road to Stamford runs straight by Castor for 10 miles, and the Sleaford road branches at an angle of 30° from it. It seems more likely that the road keeping to the high ground was the original road, and that the other was made later in connection with the Car dike,2 and the reclamation of the Fens. King Street is supposed to have continued on by Bourn, along Mareham Lane to the east of Sleaford, and thence by Digby, Scopwick, and Branston to Lincoln. From Castor also must have branched the remarkable road across the fens to Norfolk, which will be mentioned further on.

¹ Itinerarium Curiosum, p. 84. ² A drain constructed by the Romans along the edge of the Fens to intercept the upland waters. It can be traced from the south of Peterborough to Lincoln.

(5) Castor to Lincoln.-The ridge of Erming Street continues on, remaining conspicuous for more than half-a-mile, though a good deal of it has been dug away. In one place the whole has been removed, and a hollow one foot six inches deep is left in place of the ridge, which close by remains four feet high. It would seem that here earth, to a depth of one foot six inches at least, was removed by the Roman road-makers and replaced by a better material which was worth removing with the ridge. Professor Babington 1 records that he saw hereabouts the foundation of the road formed of large slabs of stones, set in mortar made with pounded tiles. Nothing of it is now to be seen. Towards the Peterborough road the ridge is eight yards wide at the top, and four feet high. This road, with a parish boundary along it, takes the line of Erming Street for a quarter of a mile, and where this is the case the ridge has almost entirely disappeared, after being conspicuous for a mile, affording an instructive example of the manner in which the ridge of a Roman road becomes effaced. A narrow lane with a parish boundary following it then continues the line of Erming Street on for a mile and a quarter, and then for a mile there appears to be no trace of it. On the south of Southorpe the present road is on the line for a short distance, and then, through a pasturefield, a trench four yards wide and two or three feet deep shows where the materials of the ridge and its foundation have been dug out. In the next field the line of the ridge is shown by an undulation in the surface of

¹ Ancient Cambridgeshire, 1883, p. 54.

the pasture; and in arable land beyond all traces are lost except that a footway follows the line. A track along the west side of Walcot Hall, with no trace of a ridge, leads on to a road with a parish boundary along it, and then the ten miles of straight course ends, and there is a turn, which the parish boundary follows, through about 35° to the west. An undulation across arable land with a footpath on the top, and a parish boundary, mark the line of the ridge, which is hardly observable further on where a fence wall takes the middle of it. Through the plantation enclosing Burleigh Park the ridge is plain, but in the cultivated land inside it is completely effaced. A footway with a parish boundary along it marks the course for a mile, and in the west of the park the ridge is plain for more than half-a-mile between the drive and the ha-ha, some four or five feet high, but cut away and narrowed. It is in the same straight line, and has a parish boundary along it. On the west side of the park there is a turn of about 30° back towards the north, and the course of Erming Street makes straight for a point (345') north-east of Exton Park, six miles distant. Pre sumably this turn to the west through Burleigh Park was taken to reach a convenient crossing of the river Welland about half-a-mile above Stamford. Stukeley 1 found a very high ridge on the west of Burleigh Park, descending to the river, and he complains in a letter quoted by Gough 2 that "the overseers of the highways had in a sacrilegious manner digged it up to

¹ Itinerarium Curiosum, p. 84. ² Camden's Britannia, ii. 292.

mend their wicked ways withal," and he gives a cross section of the ridge, showing a foundation two inches deep of small pebbles and blackish stuff 20 feet wide, upon the native stony ground, and a ridge made of stony ground three feet thick in the middle. Nothing now seems to remain but a parish boundary along the course there, and there is no trace of Erming Street across the meadows by the Welland, but on rising out of the valley a road takes the line, and after crossing the Tinwell road the ridge is observable under the present road. North of the road to Oakham the ridge was very plain for a mile until the land was enclosed about 30 years ago, and the sides were sloped down. It can still be seen as an undulation in a pasture field, and on through arable land until it approaches the road from Stamford to the north, alongside which the ridge is almost entire for more than a quarter of a mile between the remains of old thorn hedges 15 to 20 yards apart; it is cut through in several places to give access to fields from the modern road. A section was well exhibited in 1900 in a quarry at the top of the hill. It showed a ridge eight yards wide at the top, having on the west a sort of terrace or side road five yards wide, about four feet lower than the top of the ridge, and three feet above the surface of the field. In the top of the ridge was about a foot of fine rubble, under which was a layer of packed stone nine inches thick upon one foot six inches to two feet of light stony sand and earth resting on one foot six inches of dark clayey soil which appeared to be the original surface

overlying the stony subsoil. Stukeley 1 gives a good view looking north along the road which shows the terrace or side road on the west, and on the east the slope of the ridge unbroken, with a road then in use along the foot of it. The modern North Road descends the hill towards Casterton in a cutting, and, after it rejoins the line of Erming Street, a county boundary follows it for more than half-a-mile. Casterton, where there are some remains of a camp, the straight line which has been followed from Burleigh Park is swerved from to avoid the river, and is not altogether resumed until Tickencote Hall is passed. Then the road is straight for three miles, raised four, five, and six feet high with a width of eight yards, and with a parish boundary along it, after which there is a turn of about 30° towards the north, by which the road is kept upon the high ground. From this turn (345') to Lincoln, 35 miles, Erming Street preserves the same general course, which though made up of many straight lengths is nowhere more than one and a half miles away from a straight line. The North Road follows it for three miles through Stretton as a wide raised road with a parish boundary along it for half-a-mile, and then leaves the line, which is shown by a hedgerow on the east of the road with a parish boundary and a county boundary along it for a mile. Horsley tells us that in 1732 High Dyke was very magnificent between Stamford and Colsterworth,2 and the Roman ridge was no

¹ Iter Boreale, Plate 14. ² Britannia Romana, ii, p. 433.

doubt incorporated in the modern road. At a point (394') about a mile east of South Witham the North Road rejoins Erming Street, and there is a slight turn more to the north. Near North Witham the North Road finally leaves Erming Street, which continues straight on as a rough track as far as the road to Bourn, and then with little to mark its course for two miles to near Easton, where it is taken up by a highway now called High Dyke, which passes a quarter of a mile east of Great Ponton railway-station, and with a slight turn, on to the cross roads near Somerby. It is a narrow metalled road between fences 20 yards apart, and with a slight turn near Somerby (400'), continues with a parish boundary along it to Coldharbour, where the present road turns off to the east, and High Dyke goes on for six and three-quarter miles to beyond Ancaster, parish boundaries following it. It is a wide rough grass-grown road as far as Londonthorpe, beyond which a metalled road follows it. Horsley found the ridge very high for six miles before he came to Ancaster, and traces still remain. At Ancaster Erming Street passed through a Roman camp which can be traced on the north of the cross roads in the town, measuring about 300 yards by 230 yards. From the north of Ancaster railway-station, with a slight turn, a straight wide road called High Dyke road, with parish boundaries nearly all the way along it, runs for seven and a quarter miles to near Wellingore, and then, with a very slight turn, with parish boundaries along here and there, on for five and a half miles over

Navenby Heath and Boothby Heath to Waterloo Farm, three and a half miles south of Lincoln. From Ancaster the course lies on high ground overlooking the valley of the Witham on the west and the fens on the east. Stukeley 1 found the road very bold and perfect on Ancaster Heath, and Horsley² describes it as very visible over most part of the heaths from Ancaster to Lincoln. The heaths have since been enclosed, and the road a good deal altered. At Waterloo Farm High Dyke road ends, but fences continue the line of Erming Street on in the direction of the present road at Bracebridge, where the Foss way crossed the river Witham and joined it. Stukeley saw the profile of the road on the descent of the hill, 10 yards wide. The straight High Street seems to mark its course onwards to the Roman Lindum. In a length of about 1000 yards south of the crossing of the Great Northern Railway, a concreted causeway was uncovered in four places during the construction of sewers. It was from two feet six inches to three feet nine inches below the surface, and the concrete, eight inches to five feet thick, was on made ground from two to nine feet thick.3 Further on, near the river Witham, the swamp is said to have been crossed on a piled foundation similar to that discovered on the north of the Medway, at Strood on Watling Street (p. 53). On the north of the river a portion of the Roman

¹ Itinerarium Curiosum, p. 87.

² Brit. Rom., vol. iii. p. 433. ³ Drury, Jour. Arch. Ass., xlvi. 221.

road was discovered nearly a yard below the surface, consisting of 10 to 14 inches of concrete of rubble stone on six inches of gravel.¹

The first Roman Lindum on the hill above appears to have been a rectangle of about 400 yards north and south, and 430 yards east and west, extending from Newport gate to the brow of the steep hill, and including the castle and the cathedral. Another rectangle in the lower ground, of rather larger size, was afterwards added, extending southwards to the Stone Bow.

It is not certain that Iter V. of Antonine passes over any part of Erming Street south of Lincoln. Camden, from a fanciful derivation, placed *Durolipons* at Godmanchester, in which he was not followed by Gale or Horsley, but the authors of the commentary on the fabricated *Itinerary* of Richard of Cirencester adopted the site, and it appears to have been generally accepted. But the distance from Godmanchester to Lincoln by Erming Street is but 70 miles, while that from *Durolipons* to *Lindum* is 91 M.P.

From the east gate of the upper city of Lindum a Roman road appears to have branched off in a north-easterly direction. A straight road is followed for four miles from the city boundary by a parish boundary which continues on in the same straight line for another mile to Langworth, beyond which the road takes up the line again for a short distance. It probably communicated with a road called High Street, which follows a ridge of the Wolds for 24 miles north-

¹ Gent.'s Mag., 1838, vol. ii. p. 181.

wards from Horncastle to beyond Caistor. At Horncastle in Stukeley's time the remains of walls enclosing a rectangular camp, about 180 yards by 107 yards, were "manifest the whole compass round, and in some places pretty high." High Street leaves the Lincoln road in about three miles, and passes by Stainton. It is not straight, but parish boundaries follow it continuously for 15 miles to two miles beyond Caistor.

(6) Lincoln to the Humber and the East Riding of Yorkshire. - From the north of Lincoln (216') the continuation of Erming Street, under the name of High Street or Humber Street, goes on to the Humber. For 24 miles the road runs in a straight line to near Appleby Lodge Farm (124'), one and a half miles north of Broughton, parish boundaries following it for 140 miles continuously. From the point near Appleby Lodge Farm, the road continues in nearly the same direction, and where the present road turns off to Winterton the same line is carried on by a track for two miles further, where at the northern end of the higher ground between the Trent and Ancholme rivers, and between Winteringham and Winteringham Ings reclaimed from the Humber, is the site of the Roman station which was ploughed up about 1716, when many antiquities were found.2 In 1700 High Street to the Humber was described 3 as consisting of nothing but earth cast up where it ran over open country and heath, but where it ran through

¹ Itinerarium Curiosum, p. 30. ² Ibid. p. 95. ³ De la Pryme, Phil. Trans., No. 263, p. 561.

woods as being also paved with great stones set on edge very close together. It was thus paved through Scawby Woods, and for a mile onwards to Thornholme Moor, and was seven yards wide. The paving lately remained in several places.

From Winteringham there was a passage over the Humber to Brough, where there are remains of a camp, and where on Castle Hill in a field called "The Burrs" numerous coins and other Roman remains have been found. Warburton's map of Yorkshire (1720), which has been already mentioned (p. 100), shows a Roman road visible from near Brough eastwards to Rowley, and by broken lines to Wawne Ferry over the river Hull, and thence, turning almost at right angles in a south-easterly direction towards Patrington. It must have crossed "carrs" and fens not much if at all above the level of the sea, and no traces of such a road now appear.

Towards the north, a Roman road followed the course of the present road through South Cave, to the north of which, at Drewton Bridge, it was found in 1851; a concrete-like layer, six inches thick, and five to seven yards wide. It passed by South Newbald, through Sancton, and where the present road turns towards Market Weighton, it continued on in the same direction along Humber Street and West Street to Londesborough Park. In 1736 the Roman road had lately been found in the park, "very hard and of a material very scarce in that country." The paving

¹ Gent.'s Mag., 1852, part i. p. 483.
² Drake, Eboracum, p. 32.

was bared for the whole width of 24 feet, and on it were to be seen the marks of wheeled carriages,1 and it is said that masonry is still to be seen where the road crosses the boggy ground near the ponds.2 The ridge is marked on the Ordnance map for one and a quarter miles through the park, and for half-amile on the north of it over Nunburnholme Wold, from which a bridle road continues the line to Warter, where numerous Roman coins and ornaments have been found. From Warter the course is in a north-westerly direction along a wide, straight road for a mile and a quarter, and on to high ground (620') on Coldwold. It then descends into Millington Dale, where an ancient paved road remains, and Roman foundations and pavements have been found. The ridge is traceable for about a mile further on in the same direction on Millington Head, and again over Calais Wold to Garrowby Hill (805'). A survey made in 1744 for the Earl of Burlington shows this part of the Roman road with considerable accuracy. After crossing Garrowby Street, which leads from York towards Bridlington, the Roman road northwards follows a line of entrenchments, and then the present road seems to mark the course of it, keeping on the high ground, and passing round the head of Scotton Dale, and thence in a straight line, followed for a mile by a parish boundary, to a high point (751') on Leavening Wold. It then turns more to the north again, and passing through Burythorpe, joins the road from

Drake, Letter to Stukeley, Surtees Soc., vol. 80, p. 359.
 Rev. E. M. Cole, Trans. E. Riding Antiq. Soc., vol. vii. p. 44.

Stamford Bridge to Malton, about two miles and a half from the latter place. This line of road from the Humber keeps on the wolds, avoiding the low-lying moors which stretch between the wolds and the river Derwent; and from Millington Head to Leavening Wold the course for six miles is along the waterparting between the Vale of York and the dales opening towards Holderness, in which tributaries of the river Hull rise.

The general line of Erming Street northwards is taken up by the Roman road called Wade's Causeway, extending to the coast near Whitby. There is, however, some uncertainty as to the connexion, and it will be more convenient not to follow the road farther until it is approached from York.

The course of a Roman road is shown by a dotted line on the Ordnance map, branching from the road which has now been followed near South Newbald, and joining the present road from Weighton to York near Shipton. This no doubt indicates the road described in 1852 as being very visible in several places to the south of Market Weighton, and as far as the Mile House on the road to Holme. The present road follows the course of the old road by Thorpe le Street for five miles, having a parish boundary along it for a mile and a half. The course of the Roman road was traced on in 1892 over Barmby Moor Common as a raised mound, and towards Black Dyke a layer of concrete was found, at a foot below the surface, 15 feet wide and nearly a foot thick. The

¹ Gent.'s Mag., 1852, part i. p. 83.

course onwards was marked by boulders in a straight line across the fields, by Peacock House, Whinberry Hill, and High Catton Common to Hunger Hill Moor, High Catton Grange, pointing apparently to about a mile to the east of Stamford Bridge. Warburton's map marks the road as visible and following nearly the course of the present road through Market Weighton to Barmby Moor Inn, and thence over the low-lying moors and across the river Derwent at Kexby to Dunnington and York.

(7) Lincoln to Tadcaster.—With the rise of York, a way to the north without the inconvenience of a passage two miles wide across the Humber became necessary, and the road by Doncaster was made. It is followed by Iter V. (London to Carlisle) and Iter VIII. (York to London), and the Roman milliary now in the cloisters at Lincoln dedicated to Victorinus (A.D. 265-7) is supposed to give the distance, 14 M. P. to Segelocum, the first station on it. This road, which is called Erming Street when it gets into Yorkshire, branches out of the straight Humber Street almost at right angles at a point three and a half miles north of Lincoln. Camden says that it was called Old Street, and that the ridge was very conspicuous.2 For two miles the course is now across fields with traces of the ridge remaining, after which it joins Tillbridge Lane and continues in exactly the same line for eight miles to Littleborough, passing close to Stow Park railway-station. A causeway leads to the Trent, which

¹ Cole, Trans. E. Riding Antiq. Soc., vol. vii. p. 38.
² Britannia, ii. 337.

was crossed by a paved ford. Gale saw it entire in the middle of the eighteenth century, a causeway 18 feet wide held up by piles. It was removed as a hindrance to navigation in 1820, and a man who was engaged in the work said that the ford was paved with rough, square stones, and on each side were oak piles 10 or 12 feet long, with timber cills across from one to the other. On the west bank of the river, Littleborough, the Roman Segelocum, or Agelocum, is situated. From Littleborough there is a highway in a line with Tillbridge Lane to near Sturton le Steeple; and between the latter place and North Wheatley, and on by Clayworth and Everton to Bawtry, there are roads which may indicate the line of the Roman road. At Bawtry the river Idle is crossed, and Erming Street turns to the north, followed by the North Road, and county and parish boundaries along this, for three and a half miles, indicate that it is on the line of the Roman road. After crossing the river Torne at Rossington, the old road seems to have gone straight to Doncaster (Danum), the North Road turning off one and a half miles further on. From Doncaster, where no traces of the Roman Danum now appear, the North Road is on the line of Erming Street for a mile and a half as far as Bodles. It is on a causeway which may be the Roman ridge widened out, and it is followed by a parish boundary. At Bodles the modern roads branch right and left, and the Roman ridge continues on in the same straight line for a mile, pointing to Leys

W. T. Watkin, Archaeolog. Jour., vol. xliii. p. 12.

Hill, parish boundaries following it. At first the ridge is not conspicuous, then it becomes a narrow lane raised one or two feet above the adjoining fields, and further on the ridge appears three to four feet high and 15 feet wide. There is a turn towards the north a little south of Green Lane, after crossing which the ridge appears 17 to 18 feet wide and six feet high, carrying now only a field road. Where it is cut into at Green Lane the ridge exhibited in 1899 marl and stone in thin layers. It continues as great for half-a-mile to Tithe Leys, on high ground with a rock sub-soil and commanding an extensive view to the north-east. On entering Woodlands at Tithe Leys the parish boundary keeps on the higher ground to the east of the present road, apparently indicating the course of Erming Street. Beyond Woodlands the ridge is again very perfect, 15 feet wide and six or eight feet high, the side slopes overgrown with bushes. At the road from Brodsworth to Adwick le Street there is a turn to the north, and the ridge continues much the same for a mile until it approaches the Hampole road. It is a mere farm road, but so high above the fields that cart-ways slant obliquely up the side slopes, which are so steep that they must be built up with stone. It is difficult to say why so high a ridge was made on rock, on an upland overlooking everything, but this is not a solitary instance of a Roman road raised high in a similar situation. After crossing the Hampole road the ridge can be traced across the fields, a parish boundary following it until the Pontefract road joins it, and continues on in the same line

for another three-quarters of a mile, when the present road turns due north for half-a-mile and then north-west for a quarter of a mile to the Skel Brook, past Robin Hood's Well, and then resumes for half-a-mile the same line which it followed before it turned due north. The parish boundaries continue to follow the present road round this angle and onwards for a mile to the south end of the common, near the cross roads, where the present road leaves the boundary. This follows the ridge for half-a-mile, and then the road rejoins it, and runs on straight for one mile to the cross roads near Walton Wood (240'). Stukeley noticed a very high and perfect ridge hereabout.

To this point parish or township boundaries are continuous from Doncaster for eight and a half miles. There is then a turn, and the present road runs straight nearly to the river Went, the ridge of the old road remaining conspicuous. North of the Went a parish boundary again joins the road, and follows it for a mile and a half to Houndhill Hall, where the present road turns off to the north and the course of Erming Street is shown by a line of parish boundaries continuing on along fences, with traces of a ridge, for nearly two miles to Causeway Lane one mile west of Pontefract.

Causeway Lane appears to be a part of a Roman road running in a westerly direction by Street House and High Street, crossing Riknild Street; and which perhaps fell into the road by Marsden to Manchester.

The course of Erming Street continues northwards

¹ Iter Borcale, p. 76.

from Causeway Lane along a lane to Park Lane, where, half-a-mi'e east of Featherstone, the ridge is shown on the Ordnance map, but it is not now to be seen. There is no trace for two miles, and then from Round Hill, half-a-mile south of Castleford, Beancroft Lane, in a line with the road north of Castleford, marks the course to the station Legeolium, or Lagecium, supposed now to be occupied by Castleford railway-station. The river Aire was crossed a quarter of a mile west of Castleford Bridge, in the line of Rectory Street, where Stukeley saw the paved road.¹

From Doncaster the course of Erming Street is not very direct, but from Round Hill, south of Castleford, it is straight with very slight turns for eight and a half miles. On the north of the Aire and the canal, Erming Street, here called also Roman Ridge, is joined by the present main road, along which parish boundaries run continuously for seven miles to the river at Aberford.

Camden "travelled along the bold ridge of the Roman military way," and in 1731 Horsley saw it almost all the way from Castleford to Aberford. The modern road is generally 20 yards between the fences, and in some places wider, and the ridge upon which it runs is now about eight yards wide and as much as five feet high on the high ground. It would seem that the Roman ridge was widened on one side for the modern road, so that the foot of the slope extends to the fence on that side, while on the other side the original space remains between

¹ Iter Boreale, p. 76.

the ridge and the hedge, with trees and bushes on it in places. Across this space raised ramps give access to and from adjacent fields. At Hookmoor the modern road leaves the ridge, which continues straight on, but narrower, with the parish boundary following it. It is soon joined again by the modern road, which, it may be observed, is not raised above the ground where it is away from the Roman ridge, and the latter soon ceases to be noticeable north of Hookmoor. Aberford there is a slight deviation from the straight line, which is resumed on rising out of the valley, and is continued to Hazelwood Schools, a mile north of Aberford. There the ridge leaves the present road and curves eastward over Bramham Moor followed for half-a-mile along the north side by a parish boundary. Gough 1 describes the road on the moor as being "in many places exceeding perfect," and quotes Leland as saying that he never in all his travels saw so perfect a Roman road as this. An engraving in 1736 shows it as still in use by horsemen and packhorses.2 The moor is now enclosed, and the ridge is in part ploughed up, but is still plainly traceable. Where it is within the enclosure of Hazelwood it is about four feet high, with a rounded top about five yards wide. A section of the upper two feet, visible at the fence, showed it to be of pebbles and gravel in a marly clay, and loose cobble stones seemed to be remains of the paving. The ridge joins the Tadcaster road, which for a mile follows the line of the old road on the

Camden, vol. iii. p. 194.
 Plate in Drake's Eboracion.

original embankment widened, and then turns off to the north, the ridge and a parish boundary continuing on for three-quarters of a mile to Stutton Moor Lane, where there seems to have been a change of direction, but no certain traces of the Roman road appear further on towards Tadcaster.

There are, however, traces of ridges in other directions hereabouts which are somewhat perplexing. One, which is shown on the Ordnance map, runs due west by Bramham Moor Farm to Headley Plantation, and it is crossed by another which apparently connected the road to Tadcaster with the Roman road to the north by St. Helen's Ford. The Ordnance map also marks a Roman road west of Bramham along Stony Gate, turning to the south of Bardsey, and continued on by a dotted line to the Roman camp near Adel. Sir Charles Newton in his map of Yorkshire, prepared for the Archæological Institute in 1847, does not notice this road, but marks an ascertained Roman road passing east and west from Bramham Moor along the south of Bramham Park and on from Thorner to the Roman camp half-a mile north of Adel. It presumably continued on over the Chevin, south of Otley, where there are traces of a road bearing the name of York Gate, which has already been mentioned (p. 110).

Rudgate.—The road to the north by St. Helen's ford, called Rudgate, leaves the road to Tadcaster as mentioned above. It passes through the fields, where the ridge is traceable, and falls into the highway leading to St. Helen's Ford, now disused.

From the north of the ford the grass-grown road has a parish boundary along it, and from the turn to Thorpe Arch there is a narrow modern road between hedges about 14 yards apart. There are slight traces of the ridge further on, and the road is of varying width as it has been more or less encroached upon, and it is not very straight in general direction. From the cross roads about three-quarters of a mile south of the river Nidd, the ridge of the Roman road is visible on the west of the present road, in line with a road on the north of the river, and the same line is continued on by the road straight for one and a half miles to Providence Green. In 1736 the Roman road was very apparent, and there are still signs of the ridge, and parish boundaries follow the road. At Providence Green the road from Vork to the north seems to have come in.

(8) Tadcaster to York.—Tadcaster is no doubt the site of the Roman Calcaria, which must have been at Castle Hill on the south-west of the river Wharfe. The river was probably crossed to the north of the church in the line of an old street on the east of the river. About half-a-mile from Tadcaster the Roman road appears a quarter of a mile north of the modern York road as a wide grass-grown farm road, at one part with a hedge on one side only, and so continues in a straight line for a mile and a half with a parish boundary along it. It was formerly called "The Old Street." At Street Houses the present road takes the line, but soon leaves it, the parish boundary con-

¹ F. Drake, Eboracum, p. 19.

tinuing on across fields without any other trace of the old road for a mile, and then a lane with a parish boundary along it continues the line to Queen's Arms Inn. There the present road rejoins the old road, which kept on the ridge of high ground crossed by the Great Northern Railway about two miles from York. Parish boundaries follow the road for two miles from Queen's Arms, making seven miles of parish boundaries along the nine miles of road from Tadcaster to York. Blossom Street and Micklegate Bar are probably on the line of the Roman road, pointing to Stonegate, the street which passes through the Roman city Eboracum on the east side of the river Ouse. The original rectangle seems to have been about 550 yards from south-west to north-east, and if Stonegate represents the middle street, about 470 yards from north-west to south-east. The breadth in this direction is, however, sometimes stated to be 650 yards, the position of the Roman wall on the south-east being uncertain.

(9) York to Stamford Bridge and Malton: Wade's Causeway.—From the south-east gate of York a Roman road followed the course of the present road along a ridge of ground rising above the moors and curving round to Stamford Bridge. Parish boundaries follow the road almost continuously to Gate Helmsley, and then a parish boundary runs close alongside it to the river Derwent. In 1736 vestiges of the old road remained here and there. Warburton's map (1720) shows by broken lines a Roman road turning north-

¹ F. Drake, Eboracum, p. 34.

wards on the west side of the Derwent near Stamford Bridge, and passing by Whitewell to the east side of Castle Howard. There seems to be no trace of it now.

On the east side of the Derwent a Roman road is supposed to have turned northwards about a mile and a half from Stamford Bridge, following the course of Mook Street to Gally Gap, and continuing on to join the road which has already been traced northwards from the Humber (p. 151), on the high ground to the north of Thornthorpe. Thence in two and a half miles Malton is reached, an undoubted Roman station on the north bank of the Derwent.

From Gally Gap a road has been supposed to have branched, crossing the river Derwent near Firby, and continuing on between Malton and Castle Howard by a course not ascertained, to the river Rye at Newsham Bridge. After crossing the Derwent, this supposed road would fall into that marked on Warburton's map, but there are no traces of it, nor of a road from Malton joining it. Drake, in 1736, could find no traces of a road either towards York or towards Malton further south than near the river Rye, where he says the stratum appeared very plain, composed of large blue pebbles, some of a ton weight.1 Warburton's map marks the road as visible northwards from the river Rye, and Drake found it discernible in places. Remains have been found near Barugh, and Drake saw it at Riseborough. Warburton marks it through Welton and Cawthorne;

¹ Eboracum, p. 36.

the course cannot now be traced, but at the beginning of the last century it was visible in Cawthorne village, and was very distinct on approaching Cawthorne camps 1—a remarkable group of camps situated on a high ridge (650') overlooking a deep valley on the north.

There are four camps; the most westerly is rectangular, with a double ditch, and measures 133 yards by 120 yards from crest to crest of the rampart. There are entrances in the middle of three sides, the fourth being on the edge of the steep slope. Adjoining is a roughly oval camp, measuring about 280 yards by 110 yards, upon which one angle of the westerly camp encroaches, and to the east of it is a roughly square camp, about 186 yards by 183 yards, opening into another similar camp of rather larger size. The entrances to all but the first-named and strongest camp are covered on the outside by a curved prolongation of the rampart across them. The ground is now planted with firs, and covered up with high bracken.

The course of the Roman road northwards from these camps is much plainer. It is called Wade's Causeway, the story being that a giant of that name made it for his wife's convenience in going to the moors to milk her cows. The general course of the road for two and three-quarter miles appears to have been laid out in a straight line from the west of the Roman camps (650') to a point (825') on Pickering Moor, a quarter of a mile to the north of Stape.

¹ Young, History of Whitby, 1817, ii. p. 694.

It descended by a steep bank on the west of the oval camp, which appears to have been altered at the end in making the road. Drake shows it in this position in his plan of the camps, and states 1 that at the foot of the steep slope the causeway was very plain, 12 feet wide, raised in some places three feet from the surface, and paved with large stones. The paving was taken up within the memory of man to build walls. On the moor, to the north of the beck, enough of the stones remain to mark the course of the road on to the enclosures near Elleron Lodge, north of which, where the high ground on Pickering Moor is hidden by an intervening hill, the site of the Roman road, according to the Ordnance map, lies a little to the west of the straight line. It rejoins it again when Flamborough Rigg has been reached, and the ridge is traceable across the fields to Stape, where, in the garth of the first house come to, some of the paving remains, the rest having been taken up not many years ago. About 70 yards further on, near the chapel on the Stape road, the paving remains entire. There is no trace of the road across the steep valley of the Stape beck; it possibly bent to the west, and crossed where the present road passes the beck. On the moor towards the point (825') to which the course of the road was directed, the ridge is plain in the same straight line as before. It is called "The Auld Wife's Trod" (i.e. footway), and passes "The Auld Wife's Well," and the paving is to be found a few inches

¹ Eboracum, p. 35.

below the turf. The road then turns slightly towards the east, and for about 300 yards the pavement is entire at about nine inches below the surface of the moor. It is 17 feet wide, and on each side are ditches. In the enclosures near Keysbeck Lodge the paving has been removed for building walls, but the ridge can be traced. The pavement was described by a man who saw it taken up about 25 years ago, as of flat stones gathered from the moor, laid close and fitted together, the outside row on each side being set upright as a kerb. This entirely agrees with the paving which now remains. On the north side of Keys beck the pavement has been dug up to build the walls of enclosures, but beyond the enclosures of Keys beck House the ridge again appears for half-a-mile on the moor, pointing to the ford across Rutmoor beck at its junction with Keys beck. Over Wheeldale Moor the course of the road can be traced, and the paving is to be found a few inches below the surface for about half-a-mile where it has escaped being taken up to build enclosure walls. Nearer to the enclosures the road can still be traced almost on to Wheeldale Gill which it seems to have crossed near its confluence with Wheeldale beck. The road must have then turned north-westward, perhaps following about the same course as the present lane from the ford, to the high ground of Hazel Head, where traces remain. It is again traceable on the west of Julian Park House, and about a mile to the north of it. It seems to have slanted down Lease Rigg towards Grosmont bridge,

near which it crossed the river Esk, on the north of which some remains were to be seen in 1846 to the west of Grosmont Priory. It then turned more to the east and passed by Newbiggin and over Aislaby Moor. Drake in 1736 appears to have traced the road towards Dunsley Bay, but it is difficult to conceive why it should have gone there, with the more convenient harbour at Whitby close by. The supposition that it did so probably arose from the belief, originating with Camden, that Dunsley Bay is the Dunum Sinus of Ptolemy. But if his degrees of latitude and longitude be followed, Dunum Sinus in relation to York, would be at Filey or Bridlington. The last portion of the road visible in 1817 was where the Whitby road crossed it, near the third milestone. At that time several portions of the causeway were visible on Lease Rigg, and it is thus described 1-"The foundation is usually a stratum of gravel or rubbish, over which is a strong pavement of stones placed with the flattest side uppermost, above these another stratum of gravel or earth to fill up and smooth the surface, the middle higher than the sides, which are secured with a border of flat stones placed edgeways, the elevation was in many places two or three feet, there was sometimes a gutter on each side, and the breadth exclusive of the gutters was 16 feet. The causeway preserved generally a rectilinear course, avoiding marshes, precipices, and sudden descents."

Wade's Causeway exhibits the gradual destruction

¹ Young's *History of Whitby*, p. 706.

of a paved Roman road in operation. On the moors, away from "intakes" or enclosures, the paving is to be found beneath a few inches of soil very much as it was when Roman traffic on it ceased. Where pieces of the moor have been enclosed, the stones of the paving have been taken up for building walls, both from the road within the intake and for some distance outside. On the unenclosed moor enough is left to be mapped as traces of a Roman road, but within the intake cultivation soon obliterates all traces. In newer intakes an undulation in the ground shows the course of the road, but that can only be seen after a time where walls have been built across the ridge.

(10) Stamford Bridge to Bridlington.—From Stamford Bridge eastward parish boundaries continue to follow the present road, called Garrowby Street, for nine miles and a quarter. On Green Wold, seven miles from Stamford Bridge, the Roman road from the Humber northwards crosses Garrowby Street at the highest point (808'), and the high wolds are entered upon, cut into by deep, narrow dales, and traversed by long lines of intrenchments. For considerable distances Roman roads and intrenchments follow the same course; whether the roads took the line of older intrenchments, or have been intrenched after Roman times, is a question which must be decided by excavation, or by the careful observation of the evidence afforded when the earthworks are levelled, a proceeding continually going on. Confusion has certainly arisen in consequence of long intrenchments having been mistaken for Roman roads, and sometimes perhaps the contrary. Parish boundaries follow both Roman roads and intrenchments.

On Garrowby Hill the Roman road is described as running on the top of one of a double line of British intrenchments, which subsequently accompany it for over a mile. In about two miles the Roman road divides. The more southerly branch, under the names of Green Lane, Low Street, and York Road, follows a green road on the south of Fridaythorpe, along which a parish boundary runs to the Wetwang road, and then continues across the fields to the green road again, and follows it for three and a half miles. Where the Malton and Driffield Railway crosses it, a Romano-British cemetery has been discovered. About a mile further on an intrenchment is marked on the Ordnance map of 1898 for a mile and a half alongside the green lane, but it has been levelled, except for half-a-mile through the wood near Sledmere Monument. It there consists of a double ditch and rampart, or the ridge of a Roman road entrenched. To the east of Sledmere Monument what is in appearance the embankment of a Roman road without intrenchment remains for nearly 400 yards, six yards wide across the top, and as much as six feet high. Then for about 100 yards it has been levelled, and when it again appears it is complicated with intrenchments, which curve round the north side of Warren Dale opening out towards Holderness, and which the parish boundary follows. The course of the Roman road onwards is somewhat doubtful; by

¹ Mortimer, Proc. York Geolog. and Poly. Soc., 1891.

Some it has been supposed to have continued by Cottam Warren House and Dane's Graves to Kilham, following parish boundaries and intrenchments, and thence on by Wold Gate to Bridlington and Flamborough Head. Parish boundaries follow Wold Gate for five miles from Kilham to within two and a half miles of Bridlington. Warburton's map seems to show the course in the direction of a ridge which is called on a late six-inch Ordnance map "track of a supposed raised road," and on by "Intrenchments" about a mile to the north of Kilham, which are marked as an ascertained Roman road on Sir C. Newton's map, and by Rudston to Bridlington.

The other road, branching near Fridaythorpe, appears to be represented by the present road to Fimber, perhaps continued on by the bit of ridge to be seen north of Fimber station to what is marked "Intrenchment" on the Ordnance map, through Badger Wood. The Roman road was found further on in Sledmere Park at the end of the eighteenth century, and there seem to be some traces of the ridge along the road, called High Street, beyond Sledmere. In about a mile the present road turns to the right, but the course of the ridge can be traced on in the fields, and more evidently where the wood has recently been grubbed, and through the wood beyond. A Roman ridge intrenched with ditch and rampart, or a double intrenchment, is plain. After crossing the road from Cowlam to Lutton a ridge is visible for about 80 yards, and the parish boundary, which has been followed for a mile, continues on rather

further in the same line, marked "Intrenchment" on the Ordnance map, but it is now only a straight hedge. At four miles from Sledmere there is a slight turn in the ridge shown on the Ordnance map, and a parish boundary for three-quarters of a mile to the Scarborough road, and a ridge or intrenchment beyond, carry on the line in the direction of Filey, eight miles distant. The present road from Sledmere to Rudston, marked "Roman road" in the latest Ordnance map, runs parallel with the line which has just been followed, and about half-a-mile to the south of it. This road is followed for four miles and a half by parish boundaries, and from a mile and a half west of Rudston to Bridlington it is marked an ascertained Roman road in Sir Charles Newton's map.

Drake, writing in 1736, tells us that from Bridlington Bay the Roman ridge was very apparent for many miles over the wolds in the direction of York. His map shows a straight road through Rudston and Sledmere to Malton, towards which he says the stratum was easily traced by Wharram-le-Street to Settrington Brow. A road, supposed to be Roman, passes two and a half miles north of Sledmere and Wharram-le-Street, and by Settrington Brow towards Malton. The Ordnance map marks "Intrenchments" along it on the Wolds, and it is said to be traceable across the fields to Norton, on the south side of the Derwent, opposite Malton. This is perhaps the line of the road to Malton referred to by Drake. His map is very inaccurate in topography,

¹ Eboracum, p. 29.

and there is reason to think that he did not always distinguish between the ridge of a Roman road and an intrenchment. In 1862 1 a section of a Roman road was exposed at Norton at a depth of eight feet. It was 18 inches thick, and appeared to continue across the river in the direction of the large camp at Malton.

A road by Wharram-le-Street and Settrington Brow to Malton is more in the line of an "ascertained Roman road," on Sir C. Newton's map, from Malton to beyond Wetwang; and the track bearing the name of "The Broad Balk," running northwards from Wharramle-Street towards Settrington Brow, may represent it. Southwards the present road to Sledmere and Fimber railway-station is followed for two and a quarter miles by parish boundaries, and bears the name of High Street. It crosses Green Lane, or Low Street, near the Romano-British cemetery, and until the enclosures at the beginning of the last century, it ran straight on from the west of Wetwang, passing half-a-mile to the west of Tibthorpe, as a raised mound, and on to the west of Bainton. It can still be traced across the fields and in the hedgerows.2

There is much yet to be learned about the relation of the Roman roads and the earthworks of this part of the country. In the south of England, Wansdyke and other intrenchments have been proved to be post-Roman, Wansdyke plainly running for many miles along a Roman road; and it may very well be that

¹ Gent.'s Mag., 1862, part ii. p. 557. ² Cole, Trans. E. Riding Antiq. Soc., vol. vii. p. 43.

the Roman roads on the Wolds were made use of for defence against later invaders.

Iter I. of Antonine continues from York to Derventio, Delgovicia, and Pratorium. Stamford Bridge, on the Derwent, seven miles from York, is generally supposed to be the site of Derventio, and by distance onwards, either Malton, Warter, or the Romano-British cemetery to the north of Wetwang, would fit the position of Delgovicia. Twenty-five M. P. from Malton would reach Bridlington Bay, which, of the several sites suggested for it, seems to be as likely as any for the station Pratorium.

(11) York to the north-east and north.—A Roman road probably left York in a line with Stonegate, following the course of the present Malton road, along which there are some lengths of parish boundary.

It must have joined a Roman road shown on Warburton's map from the north of Stamford Bridge, through Sutton-le-Forest, Easingwold, Thirsk, and Northallerton, and joining Erming Street on the north of Catterick. It is marked by Warburton on his map as visible through Thormanby and by Thirsk to Northallerton, and he mentions it in a letter to Gale as more entire from Easingwold to Thirsk. It was faintly distinguishable at the beginning of the last century between Thirsk and Northallerton, and there seem to have been some remains between the latter town and Catterick.¹ The only trace now appears to be the road called "The Street," passing through Old Thirsk in the direction of Easingwold.

Gough's Camden, iii. p. 329.

Another road left York by what is now Bootham Bar, outside which many Roman interments have been found. Boundaries run along the road for about a mile from York, and in places further on along the road and across country in the direction of Easingwold, where it probably joined the road last mentioned. Drake continued the road by Newburgh to the Hambleton Hills and Teesmouth. Another Roman road seems to have branched northwards from the Thirsk and Catterick road near Thornton-le-Street. At about two and a half miles north of the latter place a parish boundary begins to follow a lane, first for two miles, and then on in the same line for half-a-mile, then nearly the same line is taken up by a lane and a parish boundary to Bullamoor, and after a break of one and a quarter miles, boundaries continue in a straight line from Hallikeld for five miles to the Wiske river, lanes following the same line for most of the way. After a gap of a quarter of a mile the line is taken up by a lane, joined in five-eighths of a mile by parish boundaries which follow it for two and a half miles almost to the river Tees. For 13 miles the indications of a Roman road are thus evident, and on the north side of the Tees a line of highways continues on nearly due north for about eight miles, by Fighting Cocks, with boundaries along it for two miles, and on by Street House and Stanton-le-Street. This would give a road to the north on the east of the rivers Ouse and the Swale, in the direction of Chester-le-Street.

CHAPTER V

ERMING STREET—continued

(12) York to Catterick.—The main line of Erming Street from York northwards to Aldborough (Isurium), near Boroughbridge, seems to have branched from the Tadcaster road on the west of the Ouse, and to have taken much the same course as the modern road; but few traces remain of it for seven miles. A parish boundary then joins the road and runs along it for two miles, crossing the river Nidd, and then along a track in the same direction to the cross roads at Providence Green, where a wide hedgerow seems to represent the Roman road near its junction with the road north by St. Helen's Ford.

There appears to be no trace of a Roman road from York, on the east of the Ouse, crossing that

river at Aldwark, as suggested by Drake.

From Providence Green the course of Erming Street is due north, with two slight turns, for a mile and a half along a wide modern road, and it is then joined by the modern York and Boroughbridge road, and turns 35° towards the west. Thence to Catterick, 29 miles, the general course of the road is so straight that no part of it is more than a mile away from a straight line. Beyond Little Ouseburn the road is embanked to a height of two or

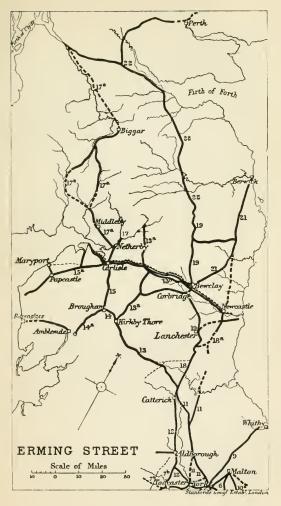
three feet on the lower side on sloping ground, and on both sides in hollows; further on the ridge is strongly marked, eight yards wide between fences 20 yards apart. Several parish boundaries run along the road. About two miles from Boroughbridge the present road diverges, and the line of the old road on to Aldborough (Isurium) may be traced across the fields to a lane leading towards the Roman station; on approaching which the Roman road turned towards the west, and entered at the middle of the east side. From the remains of walls, and other traces, Isurium appears to have measured about 430 yards from east to west, and extended from ground about 100 feet high on the south, for about 630 yards towards the river Ure. It was a rectangle somewhat wider on the south, and of irregular outline towards the north. The Roman road from the south-west, which has already (pp. 111, 112) been followed from Ilkley to beyond the river Nidd, cannot now be traced towards Aldborough; but in 1712 it was laid open in Roecliff common field, two miles from Aldborough, at two feet below the surface. It was 10 feet wide, and paved with stone.1

Northwards from Aldborough there are now no traces of Erming Street for more than two miles. It could be discovered at the end of the seventeenth century through the meadows, bearing the name of Brig-gates, half-a-mile to the east of the present bridge.² Drake mentions a tradition of a bridge, and that a beam

¹ Gale, quoted by Gough, *Camden*, iii. 300.
² Gale, quoted by Gough.

of solid black oak had been taken out of the river not many years before. In a mile and three-quarters from the river a parish boundary takes up the line, and in half-a-mile further Leeming Lane joins it, and for 13 miles is nowhere more than a quarter of a mile out of a straight line between Borough Hill, the highest part of Isurium, and Leeming. Parish boundaries follow the road nearly all the way to Healam Bridge, nine and a half miles. Stukeley 2 describes Leeming Lane as straight and perfect from the turn to Ripon, and as "all composed of stone and paved with large coggles which the neighbouring inhabitants take away to build withal, and pave their yards, etc." The road has been modernized, but the coggles are still to be seen in old buildings and walls adjacent. The course of the old road can be seen through Leeming to Leeming Wath, 130 yards west of the bridge, and continuing on the north of the river. Then there is a turn, and the road goes straight for five miles, parish boundaries following it for two miles. to within half-a-mile from Catterick. The modern road then turns away from Erming Street, and the ridge of the old road is traceable on to a lane which continues the line to Cowsland Bridge about a quarter of a mile west of Catterick, and a footway continues the same straight line to Thornbrough. There on the south bank of the river Swale, about a quarter of a mile west of Catterick Bridge, are the remains of a walled camp, about 240 yards by 175 yards

¹ Eboracum (1736), p. 25. ² Iter Boreale, p. 72.



square, the Roman Station Cataracto. The north bank of the river is about 50 feet lower than the camp, and the river may have been, for defence, held up by a weir which gave the name to the station. The road passes on the east of the station.

From Cataracto there is a turn in the general course of the road towards the north. After crossing the river Swale a line of hedgerows marks the course to the railway, north of which a short piece of the ridge is to be seen along a hedge. About a quarter of a mile north of the railway the modern road joins the course of the old road, which continues in the same straight line between Thornbrough and a point (488') one-eighth of a mile north of Scots Corner. The road, here called Watling Street and High Street, is followed for a mile and three-quarters by parish boundaries. For half-a-mile it is narrowed by encroachments, first on the west and then on the east, so that the straightness is lost.

(13) Catterick to Kirkby Thore.—Near Scots Corner the Roman road to Carlisle branches off to the north-westward. It will be convenient to follow this road before continuing northwards along the road from which it appears to spring.

According to Horsley, the road to Carlisle branched off at *Cataracto*, not far from which, he says, both branches were very conspicuous. The branching point, however, appears to have been four miles further north, near Scots Corner, where Warburton saw it, and from which point traces were lately visible branching off at an angle of 53° in a line

with the present Carlisle road. The latter, followed for three-quarters of a mile by a parish boundary, runs straight for six miles to the west side of Hutton Moor (538'), parish boundaries following it for two miles. In Horsley's time the road was very conspicuous on Gatherley Moor, and generally all the way to Greta Bridge, and the ridge still carries the modern road. Towards Scots Corner the bank is now eight yards wide, having probably been widened, and is as much as five feet high in places, and beyond Melsonby Bank, where the width between the fences is 20 to 22 yards, the ridge is seven yards wide and three or four feet high, with a metalled road now four yards wide in the middle. With slight windings, and followed by parish boundaries, the same direction is preserved to Greta Bridge, where the Roman road passes through a camp (183 yards by 133 yards) on the north of the modern road, between the Greta and Tutta Beck. At Rokeby Park there is a bend, and a straight road by Street Side for two and a half miles to Gallows Hill (800'), and then a turn to Bowes Cross (950') and on to Bowes with a slightly winding course. The station Lavatræ is on the south side of the Roman road, on the cliff over the river Greta. It measures about 140 yards square, and the ruins of Bowes Castle stand in the north corner. West of Bowes the road lies along the side of the moor on the north of the river Greta and of the railway, 1000 to 1500 feet above the sea. At Rey Cross, near the Yorkshire boundary, it passes through the remains of a camp measuring about 200 yards in each

direction, and continuing on, while the modern road bends to the south, in about two miles it reaches another camp about 100 yards square. Then the modern road rejoins the Roman road and continues along the south of Stainmoor to Brough. The Roman station Verteræ is represented by a rectangular camp (157 yards by 113 yards) on the south-east side of Swindale beck below the confluence of the Augill beck. The ruins of Brough Castle occupy the north end of the camp. In about two miles the road ascends a hill in a straight line pointing back to Verteræ, and with a slight turn goes on to Coupland Beck Bridge. The modern road to Appleby there turns off, and the line of the Roman road follows a footpath straight on to a wide lane, partly grassgrown, called High Street, and continues in the same direction to beyond Kirkby Thore, passing just north of Appleby railway-station. The course of the road was not long ago plain for the whole way on to Kirkby Thore, but for some distance railways now cross it and run along it. The modern road rejoins it about a mile from Kirkby Thore, after passing the remains of a camp near Crackenthorpe, about 320 yards square. At the station the railway again crosses the old road, the line of which is preserved by parish boundaries along it for three and a half miles from Appleby to Kirkby Thore.

Kirkby Thore was no doubt *Brovonace* of Iter II., 13 M.P. from *Vertere*. The station was on the north

¹ General Roy (*Military Antiquitics*) gives a plan of it under the name of Kreiginthorp Camp.

bank of Troutbeck, a tributary of the river Eden, and on the west of Kirkby Thore, and the site bears the name Burwens. Roman remains have been found to some extent, and quite lately coins in the Troutbeck near the Roman road, which is said to have crossed it by a bridge.¹

Maiden Way.-From Kirkby Thore a Roman road called Maiden Way branched off northwards, but there is nothing now to be seen of it for upwards of a mile. In 1845 it was visible on the brow of the hill above Hall Grange, and it is shown there on the Ordnance maps. The course onwards is over Newbiggin Moor, crossing Millburn Brook near the corn mill, and on between Kirkland and Crossfell, ascending to Melmerby Fell by Argill. On the fell it is described, in 1845,2 as being 21 feet wide, and two, three, and four feet high, with a ditch on each side, and intersected by conduits, many of which were entire. At the sides the stones were two to three feet long, and one or two feet wide, and in the middle were smaller stones. Where the ground was wet there were thicker stones beneath, making the road 14 inches thick. After crossing Aglionby beck, the road passes over Gilderdale Forest to Gilderdale beck, near its confluence with the South Tyne, and in half-a-mile reaches Whitley Castle, a lozenge-shaped camp about 200 yards by 130 yards. It then follows the left bank of the South Tyne, and is crossed twice by the railway to Alston. It is a parish boundary for

Archæologia Œliana, 1845.
 Bainbridge, Archæologia Œliana, vol. iv.

one and three-quarter miles north of Glendue burn. It passes over Featherstone Common, and by Blenkinsop Castle, to the south of the Roman station at Carvoran (Magna), on the south of the Wall, where it joins at right angles the Roman road running east and west. Hutchinson 1 describes the road in Northumberland in 1776 as being nearly six yards wide, bordered by large pebbles between which a pavement rose to the crown.

A Roman road branched near Whitley Castle to the Northumberland Watling Street near Corbridge. It crossed the South Tyne about a mile and a half north of Alston, and its course is now followed by a highway over Willyshaw Rigg, and a track onwards to the West Allen river, which it crossed on the south of Whitfield Hall. Highways follow the course on nearly all the way, crossing the East Allen a mile to the west of Catton, and passing a mile to the south of Hexham, and to the north of Dilston. On to the Tyne, it is shown on Maclauchlan's map of the Northumberland Watling Street. Warburton shows the whole road on his map of Northumberland (1716).

Maiden Way continued on north of the Wall from Ambloganna (198 yards by 145 yards) at Birdoswald, three miles to the west of Carvoran, and its course has been described at length by Rev. John Maughan.² It is perfectly straight from the north gate of Ambloganna to Little Beacon Tower, which is visible upwards of four miles distant in a west-north-westerly direction.

¹ History of Northumberland.
² Archaeological Journal, vol. xi, p. 120.

It passes over Warterhead Fell, where it is raised, with a ditch on one side, and over Ash Fell, where it is 15 feet wide with an edging of stones. It continues on in the same straight line for nearly a mile beyond Little Beacon Tower, and then bends slightly to the top of Brown Knowe, where it turns sharply towards the north-east to high ground on the north of the Kirkbeck. On the south of this a road turned off to the station at Bewcastle, an irregular hexagonal earthwork about 200 yards across, on the north bank of the Kirkbeck, where many Roman remains have been found. At Brownhill the Maiden Way turns north-north-west, aiming for Skelton Pike (1122'), five miles distant, which it avoids, passing round the west side of it, and crossing the river Kershope just west of Craigie Cleugh. It then mounts Tweeden Rigg, and turns more to the northeast to the top of a rigg on the north side of Tweeden Burn, where it again turns north-north-west and crosses the river Liddel on the east of Liddel Castle. Wheel Causeway, seven miles to the north-east, has been thought to be a continuation, but there is no evidence that it is Roman. Where it is now to be seen, it is a grass-covered rounded ridge about a yard wide.

Stanegate.—The Roman road, which is joined by the Maiden Way on the south of Carvoran, is not the military road which followed the Wall of Hadrian from end to end, and which here remains visible, but a road called Stanegate, which runs from the west of Carvoran to where the Wall crosses the North

Tyne near Chesters. It has been compared to the string of a bow, and has been supposed to be a short cut from one part of the Wall to another. Stanegate is two miles from the Wall in the middle of the bow, and passes over a difficult country, and the saving in distance by it, on the whole length of more than 16 miles, is not more than half-a-mile. The course of Stanegate is shown by the survey of the Roman Wall made for the Duke of Northumberland by Mr. Maclauchlan and is described by him in the accompanying memoir.1 It has been thought to join the military road on the south of the Wall about two miles west of Carvoran, but this part of the course is obscure. From the south side of the camp of Magna (160 yards by 125 yards) at Carvoran it runs straight east for a mile, and here Horsley says it was very visible upon the moor in his time. It passes by a rectangular camp on the east of Haltwhistle Burn, west of which Maclauchlan saw traces of it; and to the north of the camp of Vindolana (154 yards by 88 yards), at Chesterholme, to the west of which Maclauchlan records distinct traces. east of Vindolana the present highway follows the line as far as Newbrough, beyond which Horsley describes the Roman road as "very visible, pointing towards the river and Chesters," immediately to the east of which are the foundations of the Roman

¹ Survey of the Roman Wall, etc., made by direction of his Grace the Duke of Northumberland, K.G., by Henry Maclauchlan, 1857. This Survey and Memoir, and Bruce's Roman Wall, render any further description of the Wall and the works connected with it superfluous.

bridge over the North Tyne. Hodgson gives it much the same line in 1840,1 while Maclauchlan marks traces to the North Tyne a mile south of Chesters, and then turning northward along the west side of the river, but no traces of the road are now visible. There are evidences that it continued on the north of the Wall, past two Roman camps, to Bewclay, where the Devil's Causeway branches from the Northumberland Watling Street, and it is so shown on Horsley's map. It would seem that Stanegate was a connecting road between Maiden Way and the roads to the north of Bewclay, dating probably from the period between Agricola's advance to the Forth and Clyde (A.D. 80), and the building of the Wall by Hadrian (A.D. 121). This view derives support from the remains of the Roman bridge over the North Tyne. The bridge is plainly not parallel with the Wall; according to Maclauchlan it makes an angle of 20° with it towards the north-east, and it does not appear to be skew to the Wall in order that the river might be crossed at right angles. The foundation of the east abutment, which has been laid bare, shows the pier of a much narrower bridge embedded in it, and the earlier bridge to which that pier belonged must have had its abutment some 45 feet further east, under the Wall, which was continued on to the abutment of the later bridge, and terminated in a castle, the foundations of which adjoin the pier of the older bridge. It thus seems evident that the older bridge was there before the Wall was built,

¹ History of Northumberland, iv. p. 215.

and that it was widened from about 10 feet to 20 feet in Roman times; and it seems probable that the widening was done when the Wall was built, to accommodate the military road along the Wall. Immediately to the west of the river is *Cilurnum* at Chesters, 193 yards by 144 yards; the largest station on the Wall except *Ambloganna* at Birdoswald.

(14) Kirkby Thore to Brougham.—The present Carlisle road from Kirkby Thore, following the course of the Roman road, continues on in nearly the same line to Temple Sowerby, and then turns north round Whinfell, and after crossing the Eden at Edenbridge, makes directly for Brocavum, now represented by the remains of a rectangular camp, about 134 yards by 113 yards, on the south side of the river Eamont, with the ruins of Brougham Castle close by. Until the turnpike road was made the Roman road between Stainmore and Brougham was very conspicuous, six yards broad, formed of three courses of large square stones, or of gravel and flint as materials varied.¹

From *Brocavum* a Roman road went in a southerly direction towards Windermere. It is represented by a road which crosses the North-Western Railway at Yarnwarth, a mile and a half south of Penrith, and passes by Tirril and Winder Hall, over Swarth Fells (1832'), High Raise (2634'), and Kidsty Pike (2560'). It goes by the name of High Street, and is followed for four miles by parish boundaries. The pavement has been laid bare in several places at about a foot

¹ Gough, Camden, iii. p. 403.

beneath the turf.¹ It passes between Hayes Water and Blea Water (2663'), and descends by Hag Gill and Long Green Head to a camp at Low Borren, one mile south of Troutbeck Church, not far from the upper end of Windermere. The road is said to have gone on to Kendal, but it does not seem to be traceable.

Near Ambleside, about two miles and a half to the north-west, are the remains of a Roman camp situated on the low ground at the head of Windermere and to the east of the confluence of the rivers Rothay and Brathay. Camden describes it as the carcase of an ancient city with great ruins of walls and paved roads leading to it, and Gough 2 mentions large ruins of walls, of which little is now to be seen. The dimensions of the camp are 165 yards by 100 yards. Recent sewerage works along Borrans Road, from the camp towards Rothay Bridge revealed a "corduroy road" of oak trees laid on the surface of an old morass, covered with a layer of earth and stones five to seven inches thick, and four to five feet below the surface.3

There are traces of a Roman road westward from Ambleside. It is visible six miles to the west, where near Wrynose pass the road appears to have been cut out of the rock. It is marked on the Ordnance map along Wrynose Bottom, crossing the river Duddon three times, and then turning to the south-

Nicholson's Romans in Westmoreland.
 ² Canden, iii. p. 407.
 ³ Pro. Soc. Ant., 2 S. xviii. p. 267.

west along the right bank of the Duddon to Blackhall; but there seem to be no traces beyond in that direction. The track straight on westward from Cockley Beck Bridge is marked as a Roman road after an interval of about a mile. It passes a hundred yards to the south of Hard Knot Castle, a walled Roman camp about 130 yards square,1 and near the camp the road was described in 1877 2 as well paved for 150 yards, and two yards and a half wide. It winds down westward to the road which crosses the river Esk at Whahouse Bridge, and which probably follows the course of the Roman road on as far as the King of Prussia Inn, where the present road turns to the north-west. The course onwards is more uncertain. Dr. C. A. Parker, who has devoted considerable attention to the road, considers that it follows the old road along the south of Muncaster Park, where near Muncaster Head a piece of Roman paving remains, and so on to Ravenglass camp, overlooking the harbour formed by the mouth of the river Esk.

(15) Brougham to Carlisle.—The Roman road from Brocavum to Carlisle, after passing the river Eamont, appears to have turned north-west, and the present road appears to join it about one mile north of Penrith, and to follow its course to Carlisle. Gale says, in 1767, that this road on the east of the river Petterill was very well known to be the Roman road.

¹ Dymond, Cumb. and West. Antiq. Soc., vol. xii. p. 390.
² J. Dixon, Trans. Cumb. and West. Antiq. Soc., vol. iii. p. 358.

North of Plumpton Head a parish boundary follows it for five-eighths of a mile, and at Old Penrith, five and a half miles from Penrith, a rectangular camp, 170 yards by 116 yards, on the west of the road, appears to mark the site of the station *Voreda* of Iter II. After a turn towards the east to avoid the river Petterill at Wragmire Moss, the Roman road in about three miles entered Carlisle (*Luguvalium*) on the line of Botchergate. According to Ferguson there is a well-marked Roman road called Plumpton Low Street on the west of the river Petterill and the railway, parallel to that now described.

Carlisle to Papeastle, Egremont and Maryport .-A Roman road left Carlisle in a south-westerly direction. Traces of this appear in a parish boundary for a quarter of a mile along the Cockermouth road immediately outside the city, and again for two miles along the straight road between Newby Cross and Nealhouse. From the Maryport and Carlisle railway the present road runs straight to Red Dial, immediately to the north of which, and one and a quarter miles south of Wigton, is the Roman camp known as Old Carlisle. Stukeley described it 1 as a rectangular castrum 170 yards by 133 yards, from the north-east gate of which a road paved with coggles led to Carlisle, and another, paved in the same manner, ran north as far as he could see, that is, in the direction of Bowness. From Red Dial the Roman road followed the course of the present road almost in the same line straight for two and a quarter miles

¹ Iter Boreale, p. 54.

to near Percy Hill, and on by White Hall and Bothel, and from Threepland Gill Bridge, pointing for two and a half miles straight to the Roman station in a field called Burrens, at Papcastle on the river Derwent near Cockermouth. The north side and portions of the east and west sides of the camp can still be traced, the former measuring about 226 yards, and the latter about 130 yards, as far as they extend.

A Roman road, continuing southward from Papcastle, is described in 1815 1 as taking a straight course from the south of Cockermouth by Street Gate, Lamplugh Cross, Frizington, and Cleator to Egremont. Towards Cockermouth it was six yards wide, and paved with cobbles and stone from the adjacent ground. Near Eaglesfield it was found in 1794 as a paved way, seven yards wide, a little below the surface, and in 1877, though the road had been plundered of its boulders about 20 years before, the foundation had lately been uncovered 2 near Lamplugh. In Frizington Park the road was found seven yards wide about 18 inches below the surface, and it could be traced near Cleator.3

A survey of the Roman road from Papcastle to Maryport was made by Mr. F. L. B. Dykes.⁴ Leaving the camp at Papcastle, the course bends to the west along a lane and a fence, then takes a direct line

Lysons, vol. iv. p. exxxvii (note).
 W. Dickenson, Trans. Cumb. and West. Antiq. Soc., vol.

iii. p. 344.

³ T. Dixon, Trans. Cumb. and West. Antiq. Soc., vol. iii. p.

<sup>339.
&</sup>lt;sup>4</sup> Trans. Cumb. and West. Antiq. Soc., vol. i. p. 169.

across the fields to Dovenby, and then follows the road for two miles in the same line to the cross roads, beyond which it is traceable towards the river Ellen, through the grounds of Netherhall, and on to the camp on the cliff to the north of Maryport. This appears to have been about 170 yards square.

According to R. S. Ferguson, a Roman road leading direct from Old Carlisle to Maryport was till lately distinct by Waverbridge and over Oughterside Moor.

The Roman Wall from the Tyne at Wallsend to the Solway at Bowness, with a military road on the south side of it, passed on the north of Luguvalium. According to Bishop Bennet ¹a Roman road continued along the coast from Bowness to Maryport, being perfectly plain at Old Mawburgh (? Mawbray), and for two or three miles north of Allonby; and a Roman road has been supposed to continue on from Maryport along the coast to Moresby, two miles north of Whitchaven, and according to R. S. Ferguson, on to Ravenglass and Bootle, south of which it is known as High Street.

(16) Comparison of Itinerary distances and mileage.
—Iter V. of Antonine follows the road from Lincoln to Carlisle, and Iter II. passes over it in the reverse direction from Blatum Bulgium through Carlisle to York. Two other stations are named in the latter Iter, Brovonacæ and Voreda, which the distances locate at Kirkby Thore and Old Penrith respectively, whilst Brocavum, mentioned in the former Iter, is omitted. Arranging the part of Iter V. north of Lincoln with

¹ Lysons' Cumberland, p. cxxxv.

the distances in M. P., and the modern names with the distances in miles, they are as follows:—

	 М. Р.		STATUTE MILES.
Lindo Segeloci Dano Legeolio Eburaco Isubrigantum Cataractone . Levatris Verteris Brocavo . Luguvalio .	xviii xiv xx	Lincoln Littleborough Doncaster Castleford York Aldborough Catterick Bridge Bowes Brough Brough Carlisle	14 21½ 17½ 22½ 17½ 22½ 17½ 23½ 20 13 19 20

Reversing Iter II. from York and arranging it in the same manner:—

			М. Р.		STATUTE MILES.
Eburacum				York	
					v = 1
Isurium .			XVII	Aldborough	175
Cataractone			xxiv	Catterick Bridge .	$23\frac{1}{2}$
Lavatris .			xvi	Bowes	20
Verteris .			xiv	Brough	13
Brovonacis			xiii	Kirkby Thore	12
Voreda .			xiii	Old Penrith	13
Luguvallo			xiv	Carlisle	13
	м.	P. 111	Mile	S 112	

It may be observed that Ifer V. makes the distance from Eburaeum to Luguvalium 4 M. P. greater than Iter II.

(17) Carlisle to Netherby.—On the north of Carlisle, after crossing the river Eden and passing through the Wall at Stanwix, where the churchyard occupies

the site of the Roman station, the course of the Roman road appears to have been along a straight line about half-a-mile east of the modern road; it is now followed by lanes and pieces of parish boundaries, for two and a half miles due north. The modern road then joins the line and follows it for two miles. The Roman road continued on by Longtown and Netherby, where Horsley placed Castra Exploratorum of Iter II. According to General Roy, it went on to a station called Liddel Moat at the junction of the Liddel and the Esk, and seems then to have directed its course towards Nether Woodhead, and along the east of Tarras water towards Teviotdale, and probably on to Eildon; but there are no traces of such a road.

Longtown to the Wall of Antonine.—A road branched at Longtown almost at right angles with the last-mentioned road, which General Roy described in 1790 as being conspicuous, with vestiges to be seen for many miles together. It crossed the Esk near Longtown church, pointing towards Gretna, and led to the camp at Birrens near Middlebie, where Horsley placed Blatum Bulgium. The camp is on the north bank of the river Mean, and is protected by a burn on the east. It measures about 173 yards from the south face on the river's bank to the inner rampart on the north, outside which there are six ditches, and 117 yards from east to west. The road crosses the river at the south-west angle and passes to the south of Birrenswork Hill, about two miles to the

¹ Military Antiquities, p. 104.

west, and traces are marked on the Ordnance map for three miles towards the Milk river at Droveford. It passed to the east of Lockerbie, and crossed the river Dryfe about half-a-mile north of its confluence with the Annan. The road then branched, one branch continuing on in the same westerly direction across the river Annan, to the north of Lochmaben and by Amiesfield to Dalswinton. It turned up the east side of Nithsdale, where however no traces remain, to Durisdeer. Well path then marks the line of the Roman road over the pass to a road along the left bank of the Potrail water, and on to Elvanfoot, where, or at Crawford Castle, it reunited with the other branch. The latter turned off nearly at right angles, as if of later construction. It followed the east and then the west side of the Annan, and on the west of Moffat it is visible on the ridge between the Annan and the Evan, slightly raised above the surface, and traceable as the season advances by the lighter colour of the herbage. In trenches cut in 1892, the surface of the road was found to be slightly raised in the middle, of small stones four inches deep on a layer of larger stones II inches deep, laid in and upon a bed of clay. The width was 21 feet. The road is traceable on by a track to a Roman camp at Little Clyde on the north of the railway, a rectangle about 480 yards by 330 yards; and onwards to the main road about a mile south of Elvanfoot. the north of Crawford it is supposed to cross Southwood Rig, and follow the east side of the railway to

¹ Proc. Soc. Ant. Scot. 1894, p. 314.

join the main road to Biggar near Causeway House. General Roy found no traces on to Biggar, except in crossing Biggar Moss, and onwards he gives the probable course as by Liberton and Carstairs House, to Castle Dykes, a camp 200 yards by 187 yards, which the road passes through. Further on by Kilnkadzow to the north of Carluke he says that the road was known all along by the name of Watling Street, that between West Calder and Glasgow traces were then lately to be seen, particularly a little east of Tollcross, and that beyond Glasgow, towards Old Kirkpatrick, where it joined the Wall of Antonine, remains could then be discerned.

THE NORTHUMBERLAND WATLING STREET.

The Roman road northward from Catterick Bridge and through Durham and Northumberland was surveyed for the Duke of Northumberland by Mr. H. Maclauchlan.¹ The maps, engraved on a scale of two inches to a mile, give more detailed and accurate information on matters connected with the road than the Ordnance survey, on which in the main they appear to have been based, and they are supplemented by a memoir on the part of the road in Durham and Northumberland. The road is called Watling Street, the name by which it is known in those counties.

(18) Scots Corner to Lanchester .- At one-eighth of

¹ Map of Watling Street from the river Swale to the Scotch Border from a Survey made in the years 1850 and 1851, by direction of his Grace the Duke of Northumberland, by Henry Maclauchlan.

a mile north of Scots Corner, to which point the road has already been followed from Cataracto, there is a turn to the east for a quarter of a mile to a point (464'), from which the course of the present road is almost straight for 12 miles, pointing to Busselton Hill (700'), on the south of the river Gaunlees. The straight line is interrupted to pass round a small hill, Hang Bank (382'), on the east of Melsonby, the top of which is in the line and affords a view in both directions. Parish boundaries run along the road for five and a half miles to the river Tees, passing round Hang Bank. In Stukeley's time the great ridge of stone originally laid was not worn out.1 There is a slight twist in descending to the river Tees, on the north of which at Piercebridge are the remains of a camp (253 yards by 200 yards), on the west of the road. The course of Watling Street is then in a straight line for four miles to Legs Cross (660'), pointing to Busselton Hill. It is soon joined by the modern road, on both sides of which traces of it appear, and it continues on in nearly the same line for two and a half miles from Legs Cross to the river Gaunlees, east of Shildon Bridge. At Royal Oak the traces are evident for 150 yards on the west of the modern road, and thence continue on to the river. Parish boundaries follow the course of Watling Street continuously for upwards of three miles to the south side of the Gaunlees. Maclauchlan's map shows a Roman road joining Watling Street on the south side of the river, which is probably the road from Barnard Castle

¹ Iter Boreale, p. 72.

by Streatlam before-mentioned (p. 123). North of the river there is a turn towards the east and the modern road, on the site of the Roman road, goes straight through Bishop Auckland in a line from Busselton Hill to the station at Bincester. To follow that course now to Bincester would involve crossing a loop of the river Wear, and there has perhaps been an alteration of the river course since Roman times. On reaching the station, *Vinovia*, the road appears to have turned west and entered the south-east front and gone out by the north-east front of a camp (200 yards by 154 yards), on the brow of the east bank of the river Wear. In the 21 miles from Catterick to Bincester no part of the Roman road is half-a-mile away from a straight line joining those points.

From Bincester onwards the course of the road is somewhat obscure; it appears to have crossed the river Wear soon after leaving the station, pointing north-west, and Maclauchlan says that it was visible on the north of the river until it entered a lane, and again where the lane quitted the line of the road, and on between Hunwick and Hunwick railway-station down to the brook, beyond which the raised bank remained on one side or the other of the road to Willington. At Willington burn the present road turns to the east, but Watling Street goes straight on and is visible on both sides of the burn. Here a Roman road turned off north-east by Hollin Hall; it was traced to Brancepeth Park, and was supposed by Horsley 1 to have gone on to Chester-le-Street. Watling Street

¹ Brit. Rom., p. 399.

passes over Brandon Hill (875'), and Maclauchlan describes it as nearly perfect on the hill half-a-mile north of Brandon, and as traceable down to the river Deerness, on the south bank of which it turns 75° to the west. Beyond this there are but few traces of the road on to the camp at Lanchester (200 yards by 157 yards).

From Bincester to Lanchester there is an absence of that directness in the general course which is usual in Roman roads. On the south of the river Deerness it is pointing towards Chester-le-Street, but there does not seem to be any evidence that the road continued on in that direction, though in a few miles there are evidences of a Roman road running north and south through Chester-le-Street. The modern road is straight, and continues nearly straight in the same line northwards for four miles to Leybourne Hold, being no doubt on the line of the Roman road, which continues along a lane to Wrekenton, and thence straight on over Gateshead Fell for a mile and a half, and along the road to Gateshead and the river Tyne. The Roman bridge over the Tyne, Pons Ælii, occupied the site of the present low-level swing-bridge. The piers of it were incorporated in the mediæval bridge, and the foundations of one of the piers were removed when the present bridge was built.

At Wrekenton a Roman road called Wrekendyke crossed from south-west to north-east. It is visible on the south-west of Wrekenton, and it is said to have been formerly traceable on in that direction to the north of Kibblesworth and beyond in the direction of Lan-

chester.¹ To the north-east, the course is followed by a parish boundary for nearly a mile, and is then continued by Leam Lane, straight on for another three miles to Fell Gate, and on thence to the south side of Jarrow Slake, now Tyne Docks.

North of the Tyne the Roman road apparently followed the same course as the present road, straight over Town Moor, and on by South Gosforth, Stannington, and Morpeth, probably joining the Devil's Causeway, but nothing appears certain.

From Lanchester, Maclauchlan marks a road to the north-east, as the probable course of Wrekendyke.

(19) Lanchester to Chew Green.-Watling Street, leaving Lanchester on the east, turns towards the north-west to Low and High Woodside, where there are a few traces of it; and on to the west of the high ground on which Iveston stands. A road then takes up very nearly the same straight line, pointing from the high ground near Iveston, for two miles through Leadgate, and on nearly straight to the west of Ebchester (Vindomora), a camp 133 yards square, on the east side of the Derwent and on the north of a tributary burn. Watling Street curves down the burn to cross the Derwent and then turns more to the west, the line being taken up after threequarters of a mile by a lane, straight for a mile to Whittonstall, and on with a very slight turn to a square camp on Castle Hill on the south of Stocksfield burn. There is a turn down to the burn, and after curving

¹ Horsley's Britannia Romana, p. 451.

up the north side of it, Watling Street takes a new line and is soon left by the present road, the course being traceable until the latter rejoins it in a mile and a quarter. In three-quarters of a mile it seems to wind down into the Tyne valley. There are traces of it between the present road and the railway near Riding, and then the modern road seems to occupy the site of it for half-a-mile, beyond which the ridge is visible on the south of the road. After being joined by the Roman road from Whitley Castle, Watling Street crossed the Tyne a quarter of a mile to the west of the present bridge at Corbridge by a bridge, some ruins of which remain. The station Corstopitum was at Corcester, on rising ground (149'), on the north of the Tyne, and was defended on the west and north by the Corburn, a small tributary of the Tyne. It was oval in shape, about 440 yards by 352 yards in diameter, and the foundations of the wall exist on the south side. There are evident traces of the ridge of Watling Street for half-a-mile north of the Corburn, and then the same line is taken up by the present road pointing a little east of north to Stagshaw Bank, three-eighths of a mile south of the Roman Wall, where there is a camp and a slight turn to the west. At a quarter of a mile from the Wall there is another turn of 20° to the west, and from this point the road runs straight for one and a quarter miles to the side of a hill at Bewclay (700'), crossing the Wall obliquely, as if the laying out of the road had no reference to the Wall. There are traces of the ridge on the south

of the Wall, and across Stagshaw common a township boundary runs along the straight modern road for a mile, the first instance of a boundary along the Roman road since the river Gaunlees was crossed.

On the south side of the Wall the military way, which followed the Wall from end to end, was no doubt communicated with. In Horsley's time it was very plain, but it was destroyed not long after to make General Wade's road from Newcastle to Carlisle, and there is now no trace of it until that road leaves the Wall near Sewingshields, beyond which it is evident for many miles. It is about a foot above the surface of the ground, six yards wide, paved, and bordered with larger stones.

On the north of the Wall a parish boundary follows the road for three-quarters of a mile, and on reaching Bewclay, a mile and a half from the Wall, the road divides into two branches, one with a turn towards the north-west, and the other called the Devil's Causeway taking a north-easterly direction. The former runs straight for four miles in the direction of high ground (532') between Swinburn Castle and Colwell. The present road then leaves the course of the Roman road; and the ridge of the latter can be traced nearly down to the Swinburn, and up on the north side of the burn, where the modern road rejoins it and follows it in a straight line for one and a half miles to Long Crag, and on in almost the same line for two and a quarter miles to a ridge (950') near Hill Head. With a slight turn to the east another piece of straight road one and three-quarter miles long, followed by township boundaries, succeeds, passing Swinehills camp, 173 yards square, on the west. The modern road then turns off to the east to Redesdale, but Watling Street, marked by a track, and traces of the ridge, continues straight on for half-a-mile, and then across the moor, pointing to High Leam, for two miles to the river Rede, on the east of which and on the north of a tributary burn at Risingham is a rectangular camp (180 yards by 157 yards), marking the site of *Habitancum*, as an inscription proves.

After crossing the river Rede there are traces of the Roman road in a more northerly direction straight to Woodhouse, where the present road joins and follows it for five miles in straight lengths of about a mile, except near Troughend, where for half-a-mile it leaves Watling Street to the east. After passing Dargues Camp (308 yards by 263 yards), the modern road turns to the east at Blakehope to cross the river Rede, and the course of the Roman road, of which there are evident traces, continues on to cross the Rede higher up where there are said to be the remains of a Roman bridge. There are some traces of the ridge after the Rede is crossed, but the course is uncertain on to High Riechester, Bremenium, a square camp (133 yards by 133 yards), with the remains of masonry walls. Horsley 1 describes the road, in 1732, as being visible for almost the whole way from Risingham.

From Bremenium a Roman road may be traced eastwards, winding over the fells and along valleys

¹ Britannia Romana, vol. ii. p. 396.

north of Greenwood Law and Dod Hill to the river Coquet at Holystone, and on by Sharperton in the direction of Whittingham to join the Devil's Causeway near Thrunton.

Watling Street, proceeding northwards, slants down to cross the Sills burn, and then goes in a straight line, past a camp at Bellshields (572 yards by 374 yards) for three miles to Featherwood, where there is another camp (550 yards by 396 yards), and on over the fells (1200' to 1400'), where a parish boundary follows the track for a mile. At Chew Green, on the Cheviots near the source of the river Coquet, there is a complication of camps. A camp, 330 yards square, is overlapped by another camp, 330 yards by 200 yards, and encloses three smaller camps, one of which, about 110 yards square, is more strongly intrenched than the others. The name Ad fines, from the Itinerary of Richard, was given to the camps at Chew Green by the authors of the commentary on that fabrication, and it has unfortunately been perpetuated on the Ordnance maps.

Maclauchlan describes the road as visible for nearly the whole way from Riechester over the moors, where the side ditches are fully eight feet wide in most places, forming a total width of nearly 50 feet. Towards the Border the road is not so plain.

It is to be noticed that from the Wall northwards the road is more generally laid out in straight lengths than it is from the river Wear to the Tyne; though the country is wilder, it was perhaps in Roman times more open in the northern part. (20) Comparison of Itinerary distances and mileage.

—Iter I. of Antonine passes over the road from Bremenium to Cataracto. Reversing the Iter with the distances in M. P., and arranging it in parallel columns with the modern names and distances in miles, they appear as follows:—

		М. Р.			STATUTE MILES.
Cataractoni Vinovia . Vindomora Corstopito Bremenio		 xxii xix ix xx P. 70	Catterick Bridge Bincester Ebchester Corbridge Riechester	: : :	2I 18 9½ 24 les 72½

The distances agree with the sites usually given for the stations except the last, which would rather place *Bremenium* at the large camp at Dargues, but it has been placed at Riechester on the evidence of an inscription there in which *Bremenium* is mentioned.¹

(21) The Devil's Causeway.—The Roman road, branching off at Bewclay about one and a half miles north of the Wall, called the Devil's Causeway, was also surveyed by Mr. Maclauchlan for the Duke of Northumberland.² The first trace of it is at Cob Causeway, two and a quarter miles from Bewclay, beyond which it appears for a mile. The track

Horsley, vol. i. plate 192.

² Map of the Eastern Branch of Watling Street from Bewelay to Berwick-on-Tweed, together with a branch from High Rochester to Whittingham. From a survey made by direction of his Grace the Duke of Northumberland, in the years 1857–9, by Henry Maclauchlan, with a Memoir.

for three miles near Tongues is in a line with Chickmire Hill, and near Ferney Chesters a parish boundary follows it for half-a-mile, and the course is straight on for four and a half miles to near the Hart, a quarter of a mile west of Hartburn. It is plain for one and a half miles south of the Wansbeck, and can be traced on the high ground between the North British Railway and the Hart.1 It winds down and up the Hart valley, on the north of which there is a slight turn to the east, and the course along Harpath Lane points for three and a half miles to High Trewitley, and there are traces here and there all along. The road then turns nearly due north, and the track is visible for three-quarters of a mile, and then for a quarter of a mile, on to near Todburn (482'). The river Coquet is crossed at Todstead ford, and then there is a turn towards the west, and the course is directed to high ground west of Edlingham seven miles off. A lane takes up the line north of the Coquet to Long Framlington, and after an interval of one mile, a road follows it for one mile north of the Besom Inn. Then the straight line is quitted for nearly two miles, the old road turning to the northwest over Framlington Moor, where it is traceable.2 It appears to rejoin the straight line near the burn three-quarters of a mile south of Edlingham; and near Thrunton, one and a half miles north of Edlingham, where the Devil's Causeway can be traced, the Roman road from High Riechester joins it. Beyond, a

¹ Maclauchlan.

straight line can be traced to the river Breamish, crossing the river Aln close to the Alnwick and Coldstream railway. There is then a turn more to the north, and a straight line continues on for eight miles to the river Till, near Fowberry Tower, and on to Horton, following the line of the railway as far as Wooperton Station; roads, lanes, and tracks indicating the course nearly all the way to the Till. This straight line appears to point southwards to Glanton Pike. There are traces of the road on the north of the Till, and at Horton a lane takes up the line for five miles to Lowick, with parish boundaries along it for two miles. From Lowick the course can be traced pointing straight to Berwick Castle nine miles off. Maclauchlan considered that on nearing the Tweed the road turned to the north-east to a ford half-a-mile below Berwick Bridge. General Roy thought that it crossed the Tweed near West Ord, but he found no traces in Berwickshire, or beyond.1

Warburton shows this road with considerable accuracy in his map of Northumberland (1716). He describes it in a note as 22 feet in breadth, and paved with stone. It is between 50 and 60 miles long, and no part of it appears to be mentioned in the *Itinerary* of Antonine.

(22) Chew Green to the Wall of Antonine.— Beyond Chew Green the Roman road keeps on the crest of the Cheviot Hills for two miles, and then descends by the pass of Woden Law. It crosses the Kalewater at Towford, where there are remains

¹ Military Antiquities, p. 103.

of a camp, of which Roy gives a plan, about 583 yards by 366 yards, having in the south-east corner a camp of stronger profile, 330 yards by 166 yards. The road onwards is somewhat winding to keep on high ground; it is followed by a parish boundary for four miles to the south of Shibden Hill, and then it turns to the north-west, pointing to the Eildon Hills 14 miles distant. It crosses the river Teviot near the confluence of the Jed, to which point it is again, a parish boundary for three miles and a half. In about two miles the road appears again in the same line, bordered by trees for three miles, and followed by a parish boundary for a mile and a half, until the Ancrum road falls into it, and follows it for a mile and a half. On nearing the Eildon Hills it turns to the east of them, and remains were very distinct in 1803 where the road crossed the Bowden burn. A regular causeway was laid bare about the year 1820 in the Vale of Melrose; and in the same line, on the banks of the Tweed, the foundations of a bridge were described by Milne in 1743 as being very evident.1 After crossing the Tweed the course inclines to the west, and continues along the high ground between the Allan and Gala waters towards Soutra Hill. General Roy 2 considered that the course then inclined more to the west, but he found no traces until the river Gore is crossed near Borthwick Castle. He supposed that the South Esk was crossed at Dalhousie, and the North Esk near

¹ Wilson, Prehistoric Scotland, vol. ii. p. 50.
² Loc. cit.

Mavis bank, and that the road continued by Loanhead and under the east of the Pentland Hills, where there were vestiges a few years before 1790, and also traces on to Cramond on the bank of the Forth. From Cramond it is supposed to have passed by Queensferry and Abercorn to Carriden at the east end of the Wall of Antonine. Warburton, who rode over the road, found "the paving very entire and the stones large." 1

From this point on the Forth, about seven miles west of Queensferry, the Wall of Antonine passed by Falkirk, and then on the south of the Bonie burn and the Kelvin river to Old Kirkpatrick on the Clyde. There are still remains of the wall, and at the end of the eighteenth century the military road behind it could be traced almost throughout the whole length.

At Camelon, to the west of Falkirk, a Roman road runs northward from the wall for about three-quarters of a mile to a double camp overlooking the river Carron. The ramparts of the northern rectangle enclose an area 177 yards by 163 yards, and those of the camp adjoining on the south, an area 180 yards from north to south and 203 to 228 yards from west to east. A Roman road continued on north-westwards. The supposed course is by Larbert and Torwood, and traces are shown on the Ordnance map on the west of the Stirling road from near Bannockburn House to St. Ninian's. It passed to the west of Stirling, by a Roman camp of which some remains

¹ Letter to R. Gale, 1723.

exist, and by Craigforth Causeway, which a parish boundary follows, to the Forth, and on to Dunblane.1 The straight road on to Greenloaning may be on the line for four miles, and a mile and a half further north is Ardoch Camp. The camp is rectangular, 180 yards from north to south, and 153 yards from east to west, measuring to the crest of the inner rampart, outside which there are five trenches on the east and north sides (perhaps post-Roman), and remains of larger camps on the north. The Roman road can be traced on the east side of the camp, and excavations recently made show that it consists of gravel, 26 feet wide. From Ardoch the road takes a north-north-easterly course, and in two and a quarter miles passes Kaims, a Roman camp 27 yards by 23 yards inside the ramparts. The road is traceable in uncultivated lands by a slight ridge, and opposite Kaims it was found to consist of a pavement of rough stones covered with a layer of broken stone with a surface of gravel. About three and a half miles further on the road turns to the east, and in less than a quarter of a mile enters the camp at Strageath (160 yards by 140 yards), overlooking the river Earn. The road onwards branches off to the north between the turn and the camp, and after crossing the river takes an easterly course, followed by a road for nearly four miles, to Gask House, where it was found to be of rough stones closely laid together, and 20 feet in width. a slight turn the road continues on for three miles to the north of Dupplin Loch, where it was found to

¹ Maitland's History of Scotland, p. 167.

be formed of great stones, and 24 feet wide.¹ Maitland² continues the road on over Tibbermoor to Bertha, at the confluence of the river Almond with the Tay, and up the east side of the Tay by Cambusmichael, in the direction of Coupar, near to the probable site of the battle of the Grampians (A.D. 84), the most northerly point of Agricola's advance. The evidences of Roman roads to the north of Perth appear to be inconclusive, although Roman camps, relics of Severus' expedition (A.D. 210), are met with further north than Aberdeen.

The *Itinerary* of Antonine extends no further than to *Blatum Bulgium* at Middlebie, and *Bremenium* at Riechester; the names of Roman stations more north than these are all derived from the forged *Itinerary*, in which there are Roman roads extending to the Murray Firth.

¹ Dr. Christison, *Proc. Soc. Antiq. Scot.*, xxxii-xxxv.
² History of Scotland.

CHAPTER VI

EAST ANGLIA, IKNILD STREET, AND AKEMAN STREET

(1) EAST ANGLIA. General Course.

(2) London to Colchester.

(a) Chelmsford to the north.

(b) Stane Street.

- (3) Colchester to the south.
- (4) Colchester to the north.(5) Colchester to the north-east.
- (a) to Dunwich and Bungay.
 - (b) to Caister St. Edmunds.

(6) Peddars Way.

(7) IKNILD STREET. General Course.

(8) Lackford to Worstead Lodge.

(a) Haverhill to Cambridge and Godmanchester
 (b) Cambridge to Ely and Denver.

(c) The Roman Fen road.

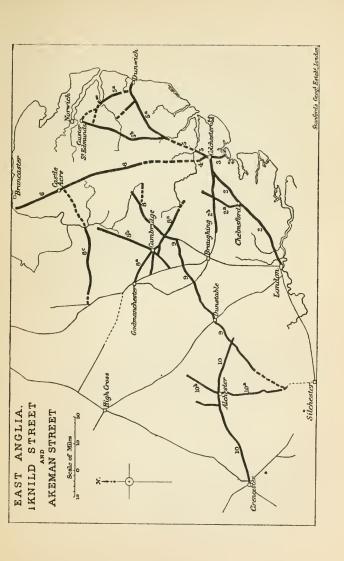
- (9) Worstead Lodge to Chesterford, Dunstable and the west.
 (10) AKEMAN STREET to Circucester.
 - (a) Road south from Alchester to Dorchester.

(b) Road north from Alchester.

(1) EAST ANGLIA. General Course.—In the greater part of this district the courses of the Roman roads are very imperfectly known. The Roman road, from London to Colchester by Chelmsford, and that from Erming Street through Dunmow to Colchester, can be followed without difficulty, but north of that important Roman city there is an area in which few remains of Roman roads are known to exist, and where parish

boundaries afford little help in tracing them, or in verifying the courses which have been suggested between supposed Roman stations. From Cambridge a road can be traced to within about 20 miles of Colchester, and then it is lost. Peddars Way is easily followed from the Norfolk coast near Hunstanton for 48 miles pointing to Colchester, and more doubtfully for another 14 miles in the same direction, and then there is little trace for the remaining 17 miles to Colchester. The course of the Roman road from Caister St. Edmunds, near Norwich, to Colchester is uncertain for the 12 or 13 miles south of the river Gipping; and very little is known of the roads to the east, which must have communicated with the Roman station on the coast near Dunwich, the site of which has been destroyed by the sea. The same may be said of the communications with the Roman stations on the Norfolk coast, Burgh Castle, and Castor; and in fact from Peddars Way eastward the Roman roads of Norfolk are almost unknown.

A like uncertainty prevails with respect to the stations in this part of the country named in the *Itinerary* of Antonine. In Iter V. the localities of all the six stations between *Colonia* (Colchester) and *Lindum* (Lincoln) are undetermined, and the distance according to the *Itinerary* between those places is 204 M.P., while the actual distance is less than 140 miles by way of Cambridge and Godmanchester. In Iter IX. the distance between *Camolodunum* (Colchester) and *Venta Icinorum*, generally placed at



Caister, three miles south of Norwich, is 75 M. P. compared with 55 miles by the direct road, and the localities of the three intermediate stations are unknown. There is thus a good deal of scope for conjecture in the placing of these nine stations; and this has been freely exercised, and Roman roads, of which there is little or no evidence, have been supposed to connect the localities chosen for them and for other stations of more doubtful authenticity.

The rough map known as the Tabula Peutingeriana gives seven names in this part of England, of which six can without much doubt be identified with names in the Itinerary; and the stations marked Baromaci, Caunonio, and Camuloduno may be placed with some certainty at Chelmsford, Kelvedon and Colchester. The name not in the Itinerary, Ad taum, appears from the Tabula to be near the Suffolk coast, and from it, on a line drawn to Ad Ansam on the coast more to the south, are marked Sinomagi and Convetoni, supposed to be the same as Sitomago and Combretonio of Iter IX. Without throwing much light on their proper positions, the Tabula Peutingeriana gives no support to the sites often assigned to these stations.

(2) London to Colchester.—The earlier Roman road to Colchester was probably a continuation of the road along the line of Oxford Street and Old Street, crossing Erming Street near Shoreditch Church, and on by Old Ford Road to the river Lea. From outside the east gate of the earlier Londinium, part of Fenchurch Street, Aldgate Street, Whitechapel High

Street, and part of Whitechapel Road, point direct to Old Ford, near which the street called Roman Road perhaps continues the line to the river Lea. At Aldgate the road from the east gate of the earlier city was crossed by the wall of the enlarged Londinium. After crossing the river Lea at Old Ford, the road continued through Stratford and Great Ilford, and by Chadwell Street to Chadwell Heath (70'), where there is a change of direction towards Romford and the high ground (325') above Warley. At Romford the present road curves round to the south, and is not straight until at Haroldwood Hall (105'), one and a half miles from Romford, a straight road on the line of the Roman road begins, and with a parish boundary along it for two miles, runs for four miles through Brook Street to the west side of Brentwood (300'). The modern road through Brentwood, and on to Mountnessing, is somewhat winding; but there a straight road begins pointing back to the high ground at Brentwood (300'), and continues for two and a half miles through Ingatestone. A winding road then begins, which a parish boundary follows for a mile down the hill to Margaretting, and again for half-amile by Hylands. The course of the Roman road through Chelmsford was probably along Moulsham Street and Springfield Road, crossing the river at Old Bridge.

There is some reason for thinking that the Roman station *Casaromagus* was near Widford on the southwest of Chelmsford.

Chelmsford to the North.—A Roman road turned

off to the north at Chelmsford, the course being along New Street and Bishop's Hall Road, and then along a footway which a parish boundary follows for a mile. The present road then continues in the same straight line through Broomfield to Little Waltham, where there is a turn towards the north-east and the road runs straight, except where streams are crossed, for four miles to high ground (240') near Chatley, parish boundaries following it for a mile and a half, and for a quarter of a mile. The straight road, almost in the same line, continues on for eight miles, crossing Stane Street at Braintree, to Gosfield, with parish boundaries along it here and there. There is no trace of the road further; it perhaps joined a road from Colchester by Haverhill to Cambridge. In 1790 1 two pieces of the ridge of the latter road were very visible on the west of Ridgewell, eight miles north-west of Gosfield, and remains extended further in that direction; and from Streetley, four miles west-north-west of Haverhill and nine miles from Ridgewell, it can be followed on to Cambridge. This road will be reverted to (p. 232).

Stane Street, which is crossed by the road from Chelmsford to Gosfield, branches eastwards from Erming Street near Braughing, and has already been noticed as far as Bishops Stortford, to the east of which it continues for eight miles, with county and parish boundaries along it, to Dunmow. After crossing the valley of the Chelmer, a straight road begins, which in two and a half miles is succeeded by another straight

¹ Archaologia, vol. xiv. p. 62.

road almost in the same line for a mile and a half, parish boundaries following both. The road then winds, but parish boundaries follow it continuously for seven and a half miles through Braintree, on the east of which the ridge formerly appeared for a quarter of a mile or more 1 to Bay Tree Farm. A piece of straight road then succeeds, two and a half miles long, and another length of straight road continues through Coggeshall to Marks Tey, where it joins the Roman road from London to Colchester.

On the north-east of Chelmsford the present Colchester road probably occupies the site of the Roman road through Hatfield Peverel and Witham, passing close to the east of Kelvedon, and on to Marks Tey, where Stane Street joins. The course continues along the present road to beyond Stanway Bridge, from which it has been traced on by Dr. Laver. 2 It turns away from the modern road towards the south end of Lexden Heath, following a thick hedgebank for some distance, and then goes across the fields, where under 15 inches of soil remains of the road were found about 14 yards wide, consisting of about one foot of stones mixed with chalk or lime, and rammed. The original soil beneath had been removed. With a turn northward the road, of which remains were found in several places, ran straight to the Balkern gate of Colchester, crossing the present London road on the west of the hospital.

There is a complication of roads and earthworks

¹ Gent.'s Mag., 1864, pt. i. p. 357. ² Trans. Essex Soc. Arch., N.S., vol. iii. p. 123.

near Lexden Heath which led Sir Richard Colt Hoare and the Rev. H. Jenkins to suppose that it was the site of *Camolodunum*, the British capital, while Colchester two miles to the east was *Colonia*, the Roman city.

The area enclosed by the Roman walls of Colchester, of which a good deal remain, is about 1000 yards from west to east, and 530 yards from north to south, the Balkern gate being near the middle of the west face.

(3) Colchester to the South.—The course of the road from Colchester to the south, as described by Dr. Laver, agrees with that shown on Mr. Jenkins' map.1 It leaves by St. Botolph's Gate, from which a parish boundary follows the street alongside St. John's Abbey wall, and continues on in the same direction. The ridge is visible in the fields towards Monk Wike, the stackyard of which is on the line of the road. Further on, the ridge is two or three feet high, in line with the raised road on the east of Berechurch Hall, and along it is a right of way to the Roman river. There are traces in the road near Abberton Church, which is on the line of the road, and then the course is lost; but Dr. Laver conjectures that it went on by Peet Tye to the Strood, a causeway supposed to be of Roman origin, leading to Mersea.

By others it is thought that a road went south from Head Gate, by Head Street and Butt Road, alongside which on the west side there was a Roman cemetery. Parish boundaries give support to this view, following

¹ Archaologia, vol. xxix.

Head Street and Butt Road, and continuing south across the fields for a quarter of a mile at the south of the Cavalry Barracks. The line is taken up by the road on the west of Berechurch Hall, and is continued by a parish boundary for one and a quarter miles from Roman river to Layer Brook.

The Tabula Peutingeriana seems to show that Ad Ansam, mentioned in Iter IX. of Antonine, was on the coast in this direction. Ansa appears to have the meaning preserved in the Italian Ansa, and the French Anse, namely a shallow bay such as may very likely have existed in Roman times near the mouth of the rivers Colne and Blackwater on the west and north of Mersea, now occupied by channels, fleets, and marshlands. It must be admitted that placing Ad Ansam here does not help to explain Iter IX.

(4) Colchester to the North.—The road from Colchester to the north, according to Dr. Laver, did not follow the course of North Street, because the remains of a villa were found in the middle of that street. A parish boundary however follows the street northwards from the river for three-eighths of a mile to beyond the railway-station, and then follows the Bures Road. A road in continuation of North Street runs due north through Mile End, beyond which it is said that the agger formed a conspicuous object for three miles before Horkesley Heath was enclosed; and the road, bearing the name of Horkesley Causeway, goes on straight to Nayland. Dr. Laver traces the road northwards from Rye Gate, Colchester, across

¹ Jenkins, Journal Arch. Assoc., vol. xix. p. 275.

the river at Middle Mill Ford and so to Mile End. In the direction of Nayland there was probably a road communicating with Peddars Way through Woolpit, but no traces of it appear for 13 miles, beyond which to the north of Hitcham there are indications of a road due north.

(5) Colchester to the North-east.—'The Roman road from Colchester to the north-east appears to have left by the East Gate, turning off after crossing the Colne and following the course of the present Ipswich road to Stratford St. Mary. The road, although not in a straight line, is followed by parish boundaries for more than half the distance, and for upwards of three miles continuously to the river Stour just above Stratford Bridge. The parish boundary runs straight on to the river where the present road turns to the east to the bridge, and on the north side of the river the course of the Roman road is to the west of the present road. From Stratford St. Mary a Roman road is supposed to have gone north to Hadleigh, and on to Woolpit, but there is no evidence of it on the map, except the name Stone Street north of Hadleigh, until the indications already referred to of a Roman road due north from Hitcham are reached.

To the north-east from Stratford St. Mary a parish boundary follows the present Ipswich road for a mile on the north of Capel St. Mary, and beyond that there is no trace by parish boundaries or otherwise for 10 miles; and then on the north of the river Gipping, there are indications of Roman roads in two directions, to the north-east and to the north.

That to the north-east seems to be represented by a parish boundary in Shrubland Park, and by a highway between Coddenham and Pettaugh, which is straight for three miles, and then, when the road is no longer straight, is followed for a mile by a parish boundary. The present road continues on for four and a half miles in a straight line, except where the river is crossed at Earl Soham, and there is halfa-mile of parish boundary along it near Cretingham Lodge. At Saxtead Green the present road turns off to Framlingham, but in two miles the same straight line as before is resumed by a lane with a parish boundary along it for five-eighths of a mile, and one and a quarter miles further on the present road takes up the same straight line for two miles. A portion presumably of this road is described by Suckling 1 as existing in an extremely perfect state just to the north-west of the abbey grounds at Sibton, about two miles further on. The road is supposed to have led to the Roman station on the coast near Dunwich, from which a road is supposed to have gone to the north-west and to have crossed the Waveney near Harleston. This may be represented by highways in a straight line from Peasenhall by Ubbeston and Cratfield to Weybread.

A Roman road is said to have been distinctly traced from the heaths which surround Dunwich to Bury St. Edmunds.² According to Gardner³ it went to Wenhas-

¹ History of Suffolk, 1848, p. xviii.
² Ibid. vol. ii. p. 230.
³ History of Dunwich, etc. 1754, p. 38.

ton and Blythford Bridge, where it parted, one branch going to Bungay, and the other to Bury St. Edmunds, called the King's Road or the King's Highway; and he mentions a grant in the ninth year of Henry VII. of land near Bramfield, abutting northwards on the King's Highway leading from Dunwich to Bury St. Edmunds. There appears to be now no trace of it, and the maps afford no clue. There is little trace of the road towards Bungay for some miles, but north of Halesworth a straight length of road called Stone Street begins, and is followed by a parish boundary for a mile. The straight road continues for three miles, a parish boundary again following it for a quarter of a mile, and then there is a slight turn. About two and a half miles farther on the present road turns off to the north-west to Bungay, but the course of the Roman road appears to be straight on along the line of a parish boundary which runs in a direct line for a mile and three-quarters from near Mettingham Castle across the Waveney to Ditchingham railway-station. It is supposed to have continued on by Hedenham, Brooke, and Poringland, to Caister, with a branch from Woodton to Tasburgh.1

At Ditchingham railway-station the parish boundary turns to the north-east over Broome Heath, and there is a bit of parish boundary beyond, perhaps indicating the road to Burgh St. Peter, the Roman fortress on the promontory formed by the bend of the river Waveney on the west of Lowestoft. Burgh Castle, the Roman fortress on the east of the marshes

¹ Norfolk and Norwich Arch. Soc., vol. vi. p. 153.

near the confluence of the Waveneyand the Yare, seven miles further north, was probably approached from the east end of Oulton Broad, and by Flixton, and along the road followed by a parish boundary to Hopton, and on by Jew's Way. The Roman walls of Burgh Castle still remain on three sides, about nine feet thick, enclosing an area about 230 yards by 108 yards, on the edge of a low cliff.

The Roman road northward from the river Gipping towards Caister St. Edmunds has been found on the west of the Ipswich road, and was traced to an old ford across the river. The course appears to be followed by the present road, which runs in nearly a straight line for 10 miles, with parish boundaries along it near Stonham, and again for two and a half miles from Waltham Hall to Brockford Street. At Stoke Ash it curves towards the north-east, parish boundaries following it near Thornham, through Yaxley, near Goswold Hall, for a mile and a quarter on the south of the Waveney river at Scole Lodge, for a mile near Tivetshall, and for two and a quarter miles between that and Long Stratton. The road, called Pye Street on old maps, is in straight lengths from Yaxley as far as Upper Tasburgh, where there are remains of a rectangular camp, and where on no good authority Ad taum has been placed, a station of the Tabula Peutingeriana, but which would seem from it to have been near the coast. The present road crosses to the west side of the river Tas at Saxlingham Thorpe, and then points straight for two miles to the Roman camp at Caister St. Edmunds, with a parish boundary along it for a quarter of a mile. The camp, which is one and a half miles further north on the east bank of the river Tas, and not much above it, is a rectangle about 450 yards by 370 yards, with ruins of the walls remaining. It is generally supposed to mark the site of *Venta Icinorum*, though it is but 55 miles from Colchester by the road which has been now followed, compared with the *Itinerary* distance of 75 M. P.

(6) Peddars Way.—The indications of a Roman road from the direction of Colchester towards Woolpit have been referred to as appearing on the north of Hitcham; and it has been mentioned (p. 220) that of a supposed road from Stratford St. Mary by Hadleigh to Woolpit there is little evidence until the same indications of a Roman road are reached. On the north of Hitcham, about 16 miles from Colchester, the present road turns towards Stowmarket, and Hitcham Street continues on, and then a lane pointing due north is followed for three-quarters of a mile by a parish boundary, which runs on across country for a mile to a highway, which it follows for a mile to Pay Street Green. At Clopton Green, a mile and a quarter further north, a lane takes up the same line for a mile, to within a mile of Woolpit, which has been supposed to be the site of a Roman station. About four miles north of Woolpit in the same direction is Stowlangtoft, where Roman remains have been found, and three miles further is Stanton, on the west of which the most southerly trace of Peddars Way is shown on the old Ordnance map. This

remarkable road can be traced hence for 45 miles to the north coast of Norfolk. It has been called British, but it has all the characteristics of Roman laying out, and is indeed the best preserved Roman road in East Anglia.

The old Ordnance map shows Peddars Way crossing the road from Honington to Barningham, one mile west of the latter place, and passing by Street Farm on the west of Coney Weston to the Little Ouse, from which a parish boundary continues in the same straight line for three miles to Brettenham Heath, crossing the river Thet four miles east of Thetford. Over Brettenham Heath Peddars Way appears as a green track through the ferns and gorse, five or six yards wide, and raised one or two feet above the adjoining ground. Wheel-ruts cut through the turf, but go no deeper, and the ferns on each side seem to mark out the width of the Roman gravel coating. On Roudham Heath, north of the Norwich railway, the ridge continues plain, worn narrower by the present cart-track, which is generally on one side or other of the ridge. A mile further, where the Swaffham railway approaches it, a line of old firs growing on the ridge renders it conspicuous, and further on the Way becomes a lane alongside the railway, which crosses it a little south of Wretham Station. It continues on in the same direction, with a parish boundary along it, to Galley Hill, Hockham Heath (156'), where there is a turn, and then, except for the five miles to be presently referred to, the remaining 33 miles of the course of the Way, wherever it can be traced, is almost absolutely

straight. A lane and a parish boundary mark its course for nearly three miles to the Thetford and Watton road, and there is a parish boundary onwards in the same line for a mile through Merton Park. The straight line is then lost, and a crooked lane to the west of it, with a parish boundary along it for two and a half miles, is called Peddars Way, of which no other trace appears for five miles. Hereabouts a road may have turned off communicating with Caister St. Edmunds, of which there are said to be traces near Saham, two miles from Peddars Way, and at Hethersett,1 five miles from Caister, which is 22 miles from Peddars Way. Near North Pickenham a green lane, and then a narrow metalled road between hedges, and towards the Swaffham and Dereham railway a green road 10 to 15 yards wide, take up the straight line of Peddars Way, with parish boundaries all along. There is no trace through arable land on the north of the railway, but through the meadows south of Palgrave Hall the track is plain, the ridge and its foundation having been removed for the sake of the gravel, leaving a shallow hollow. It is traceable on the north of Palgrave Hall, and then for two miles to Castle Acre no trace appears. The line appears to be straight for the entrance on the south face of the Roman camp, a rectangle 300 yards by 170 yards, on the west of the Norman earthworks. The road which leaves Castle Acre, apparently from the northeast corner of the Roman camp, in the course of Peddars Way, is in the same line, showing apparently

¹ Archæologia, vol. xxiii. p. 369.

that the site of the Roman camp, which was the beginning of the vast earthworks afterwards thrown up, was determined by the course of Peddars Way.

On the north of Castle Acre Peddars Way is now a metalled road 20 feet between the fences, but in a mile or two it becomes a green lane, and then a cartway alongside the fence of arable fields; and further on it is wide between the fences, but overgrown with gorse, leaving but a narrow track in the middle. Near Little Massingham the ridge is apparent for a short distance. From Massingham Heath the course continues straight for eight and a half miles, parish boundaries following it for the last six miles to beyond Fring. It is generally a green road overgrown with gorse in places, with the ridge remaining plain here and there, more particularly to the west of Houghton and on towards Fring. Lanes, footways, and parish boundaries continue the line on to Ringstead and, with a slight turn towards the east, to the shore of the Wash at Holmenext-Sea, two miles east of Hunstanton, and four miles west of Brancaster, where there are remains of a Roman camp, which appears to have been a square of about 200 yards, and where Branodunum of the Notitia has been placed. In 1600 the walls remained 12 feet above the ground.

Peddars Way has been said to pass through neither town nor village, and it is true that from Ringstead southwards as far as it can be traced, about 45 miles, Castle Acre is the only village upon it, and those near it are but small. In this respect it resembles the Foss Way.

Iter V. and Iter IX. of Antonine both pass through East Anglia, the first from London through Colchester and Lincoln to Carlisle, and the second from Venta Icinorum to London. Colonia in Iter V., and Camolodunum in Iter IX., both represent Colchester, the distance of which from London is 51 miles compared with 52 M.P. in each Iter. Casaromagus becomes Chelmsford by distance from London and from Colchester, and Canonium by distance becomes Kelvedon. Durolitum, 16 M.P. from Casaromagus and 15 M.P. from London, must according to distances be placed near Romford. Gale, to bring Durolitum to the river Lea, altered the numerals of the Iter to 26 M.P. and 5 M.P.

Beyond Colchester the course of Iter V. as far as Lincoln is obscure, there being no station on it fixed with any certainty, and the distances in the *Itinerary* between *Colonia* and *Lindum* amount to 204 M.P., while a direct route by Cambridge and Godmanchester would not exceed 140 miles. The *Itinerary* distances from London to Colchester agree with the mileage, and for that part of the Iter from Lincoln to Carlisle the total distance and the distances apart of the nine intermediate stations between *Lindum* and *Luguvalium* all agree with the actual mileage. The total distance prefixed to the Iter also agrees with the sum of the intermediate distances, and the obscurity between Colchester and Lincoln must be attributed to ignorance of the course of the Iter between those places.

The course of Iter IX. is also obscure beyond Colchester. By the direct road through Stratford St.

Mary to Caister St. Edmunds the distance is 55 miles, compared with 75 M. P. between *Camolodunum* and *Venta Icinorum*, and it is quite uncertain where the intermediate stations mentioned in the *Itinerary* were.

(7) IKNILD STREET. General Course. — It has already been said that roads bearing the name of Iknild Street or Way under various forms extend from the borders of Norfolk into Dorset, and as far as North Wilts there is a continuous line or lines of roads so designated. From its first appearance for some 10 miles, there is no trace of the Roman manner of setting out the course in straight lines, and then that manner of setting out is evident for 16 miles, and traces of the ridge appear in the modern road which now follows its course. From Worstead Lodge the road is straight for five and a half miles to Stump Cross, half-a-mile from the Roman camp at Chesterford, and points straight to Strethall, two miles south of Chesterford camp. At Stump Cross, Iknild Street turns off at an angle of 50° from the straight road, and passing through Ickleton goes on to Royston and Baldock in a winding course not at all suggestive of Roman laying out, while from Strethall, indications of a Roman road are plain in one straight line for seven miles in the direction of the station near Braughing on Erming Street (p. 134).

Iknild Street continues on beyond Baldock without any characteristics of a Roman road, by Wilbury Hill north of Hitchin (where perhaps Ashwell Street, which branched off at Worstead Lodge, rejoins), passing through Dunstable to Beacon Hill near Ivinghoe, where it again divides, the principal branch continuing on through Wendover and along the flank of the Chiltern Hills under the name of Ickleton Road, crossing the Thames near Streatley, and going on along the edge of the chalk escarpment overlooking the vale of White Horse, where it now bears the name of Ickleton Street, and the Ridgeway.

It is to be remarked that after it leaves the straight Newmarket road at Stump Cross, Iknild Street through Hertfordshire, Bedfordshire, Bucks, Oxfordshire, Berkshire, and Wiltshire bears but little likeness to a Roman road either in the laying out of the course or in construction. Dr. Guest considered it to be a British track; he observes 1 that there are no ancient towns on its course, Royston and Dunstable, where Erming Street and Watling Street are crossed, dating from the twelfth century, and that there are no Roman remains on it, but British in abundance. Whatever may be the age of Royston, distances however prove that Dunstable represents the station Durocobrivæ, on Watling Street. Dr. Plot observed,2 in 1705, that Iknild Street was "not cast up in a ridge bank or laid out by a deep trench." Bishop Bennet, who described a large part of its course early in the last century, observed the absence of straightness, and that it did not appear to have been ever paved or raised, and he endorsed the opinion that it was a British trackway. Where it has not been modernized it still

¹ Archwological Journal, vol. xiv. p. 99. ² Natural History of Oxfordshire, p. 323.

remains a grass road or track, winding along the flanks of the chalk hills for most of its course, quite unlike a Roman road except between Newmarket and Chesterford, where it seems to have been reconstructed after the Roman manner; and for this 16 miles Iknild Street constitutes part of a Roman road from Erming Street near Braughing to Newmarket.

Iknild Street, although it generally has little claim to be considered Roman, is connected with several Roman roads besides those which have been referred to. One which comes from the direction of Colchester crosses it at Worstead Lodge and leads on to Cambridge, and from Cambridge other Roman roads radiate to the north-east, the west, and the south-west.

(8) Lackford to Worstead Lodge.—The first certain traces of Iknild Way appear near Lackford, about 10 miles west of the most southern trace of Peddars Way, and 32 miles from Caister St. Edmunds, the supposed Venta Icinorum, but, according to Professor Babington, in 1882, it could be traced from near Thetford. A broad green lane bearing the name leads from Lackford to near Kentford, where it joins the road from Bury St. Edmunds to Newmarket, The latter road is followed by parish boundaries for more than half the distance from Kentford to Bury, and may represent a Roman road to the latter town, where Roman remains have been found. The county boundary runs along the road from Kentford to the north of Bury Hill, on the east of Newmarket, and after turning off to enclose an almost detached piece of Suffolk, continues on from Bury Hill in the same direction, passing through Newmarket, and along the London road nearly to Devil's Ditch. A deed, temp. Hen. III., mentions Iknild Way through Newmarket, and for six miles the course seems to be indicated by the county boundary. The present road continues on in the same line for three miles farther, but beyond that there is nothing to show that it follows the line of the old road until at Fleam Dyke a parish boundary joins it, and runs along a straight road for two miles to Worstead Lodge.

Haverhill to Cambridge and Godmanchester .- At Worstead Lodge Iknild Way is crossed by a Roman road, the Via Devana of Dr. Mason already mentioned, which, coming from the south, now first appears near Streetley, four miles west-north-west of Haverhill, though it was formerly traceable nine miles further in the direction of Colchester. From Streetley by Mark's Grave to Worstead Lodge it is a green lane with a ridge along the middle, and it continues on in a straight line for three miles to a point on the northwest of Gogmagog Hill (230'), three miles south-east of Cambridge, the ridge being prominent all the way. Near Worstead Lodge it is six yards wide, and quite five feet high; further on in lower ground it is not so marked, but on Gogmagog Hill it is six yards wide and four and five feet high, topped with pebble gravel. Where the green lane turns to the north to join the Fulbourne Road, the ridge can be traced straight on through arable land to the road at the top of the hill leading down to Red Cross. A parish

boundary follows the ridge to this road, which is called Wort's Causeway, and continues along it down the hill. There is a turn of about 30° at the top of the hill, and the road points to Grantchester, to which a Roman road continued on, the course of which is described by Bishop Bennet.1 From Red Cross it descended into the fen and disappeared, but as the ground rises the road appeared in the old line going just north of Trumpington, where in 1882 it was still to be traced as a raised bank.2 It followed an old lane down into Trumpington Fen nearly opposite Grantchester Church, and was found again on the west of the fen in the same course in an old lane which passes through Grantchester, where a rectangular camp (about 127 yards by 75 yards) adjoins the road. It followed a road on to Barton, where it fell into the Roman road leading from Cambridge to Erming Street.

At Red Cross the parish boundary which follows Wort's Causeway down the hill, turns 45° to the north along the road to Cambridge, and the present roads and streets in the town appear to be on the line of the Roman road to the Roman station on the north of the river Cam. It may be that the turn to the west at the top of the hill to Red Cross, and thence back again to the north-west, had no other object than to keep the road on the higher ground between Cherry Hinton and Trumpington Fen, but it is suggestive of a road across the Cam to Grant-

Lysons' Cambridgeshire, 1808, p. 45.
 Babington's Ancient Cambridgeshire, p. 26.

chester in the first place, before the station on the north of Cambridge was established.

In 1823, in making a sewer in Bridge Street, Cambridge, the pile-work of what was supposed to be a Roman causeway was found between the church of the Holy Sepulchre and Great Bridge. It consisted of wooden piles upon which rested squared beams, 14 feet below the present surface.

On the north of the Cam a good deal of the three sides of the Roman station may still be traced. Within it is Castle Hill, a mound of considerable height, probably of British origin, to which several Roman roads converge. That from Erming Street, passing through Barton, could be easily followed in Bishop Bennet's time in the fields at the back of the colleges until it fell into the road from Cambridge to Barton, which it again quitted, passing through Barton churchyard and rejoining the road again near Lord's Bridge, beyond which the ridge was to be seen in 1808, and on by Orwell to Erming Street.

The Roman road to Cambridge from Godmanchester points straight to Castle Hill for four and a half miles from near Lolworth Hedges, where there is a very slight change of direction to Fen Stanton, but for 10 miles there is hardly any deviation from a straight line. At Fen Stanton there is a turn more to the west, and then the road makes straight to Godmanchester on Erming Street. Parish boundaries follow the road for nearly all the way from Cambridge. Two milliaries from this road are now in the Fitzwilliam Museum, apparently dating from A.D. 305 to 353.

Cambridge to Ely and Denver.—Another road can be seen from Castle Hill radiating in the direction of Ely. It could be traced over the open fields in 1882 to a camp at King's Hedges, two miles from Cambridge (738 yards by 295 yards), the longer side bounded by the Roman road.1 A country lane, raised in some parts, called the Mereway, then takes up the line to Landbeach, beyond which, near the Ely road, the crest was plainly to be seen in the beginning of the last century, and it could lately be faintly traced. The Ely road follows it for two miles to Chittering, the same straight line having been preserved for seven and a half miles from Cambridge. There is then a turn, perhaps to an easy crossing of the river Ouse, and the road is supposed to have gone on through Stretham to Ely, and on through Littleport to Coldharbour Farm, where Bishop Bennet says it was visible in 1808, and then with a turn across the Little Ouse to Southery, and northwards to Denver.

The Fen Road.—From Denver westward went the Roman Fen road which was described by Dugdale ² as "that long causey made of gravel of about three feet in thickness, and 60 feet broad (now covered with the moor in some places three and in others five feet thick), which extendeth itself from Denver (near Salter's Lode) over the great Wash to Charke; thence to March, Plantwater, and Eldernell, and so to Peterborough, in length about 24 miles." In 1853 this road was

Babington's Ancient Cambridgeshire, p. 14.
 History of Imbanking and Draining, 1772, p. 174.

traceable across a ploughed field on the west of Denver, and it was cut through in 1850 about a mile from Salter's Lode Sluice, near Denver; it was of gravel set very hard and upwards of three feet thick, very much barrelled, and the middle about three feet below the present surface.1 The course can be traced across the fens to the north of March and Westrey, and then again across the fens for four miles to Eldernell. It was plainly visible 20 or 30 years ago as a causeway three feet above the fen between March and Eldernell, and on the north of the road towards Whittlesey it was one or two feet above the surface of the land, and very hard, but the gravel ridge has since been removed. The line appears to be continued by a straight road for two and a half miles on the west of Whittlesey, pointing to Peterborough. According to Bishop Bennet it had been traced through Milton Park to Castor. The length through the fens of this remarkable road is 11 miles between Denver and March, four miles between March and Eldernell, and one and a half miles between Whittlesey and Horsey. The purpose no doubt was to afford a direct communication between East Anglia and Erming Street and the west and north, and the shortest course from Downham Market (100'), jutting like a promontory into the fens, to Peterborough was skilfully chosen. It must be remembered that the fens were embanked by the Romans far to the north of this road, as the Roman bank on the north of Holbeach testifies. A careful

¹ Norfolk and Norwich Archaelogical Society, vol. iii. p. 425.

examination appears to have shown that the causeway was carried over a very considerable thickness of peat on boughs and branches of trees.¹

The course of the Fen road eastward is doubtful; some traces of it to the north-east of Denver were seen in 1853.² It may have joined Peddars Way south of Castle Acre, where from Bartholomew Hills a lane passing over Swaffham Heath with a parish boundary along it for two and a half miles leads to the Downham Market road, pointing in the direction of Denver 12 miles distant.

(9) Worstead Lodge to Chesterford, Dunstable, etc.—Returning to Iknild Street, at Worstead Lodge one of those branchings peculiar to Iknild Way begins. The London road, following one course, turns 27° towards the south, but a lane continues on in the same direction as before to Babraham, and the same general line is taken up in a few miles by a lane through Thriplow and Foulmire, and by Ashwell Street to Stotfold, two miles north-west of Baldock, keeping parallel to, and two or three miles distant from, the more usually recognized Iknild Way for 21 miles, and rejoining it at Wilbury Hill.

The London road runs straight on for five and a half miles towards Chesterford, pointing to high ground (400') near Strethall, three miles further on. It is a wide road 20 yards between the fences, with evidence of the ridge of the Roman road, which is very apparent south-west of Pampisford Station, where it

¹ Marshall, Cambridge Antiquarian Communications, iv. 205.

² Babington, p. 68.

is some three feet high with the slopes inside the fences, which are 25 yards apart. For one and a half miles to Stump Cross the county boundary follows the road and then turns off at about an angle of 45° along a green road to Ickleton Ford, while the road continues on for a quarter of a mile in the same line. The county boundary probably shows the line of Iknild Way, and the road straight on led to the great Roman camp at Chesterford, described and measured by Stukeley in 1719,¹ when the foundations of the walls were apparent all round, forming a rectangle 555 yards by 333 yards, with rounded corners. There are now no remains visible above ground.

From Chesterford a Roman road led in a southwesterly direction by Strethall to Erming Street. The course of it from Erming Street, near Braughing, has already been described (p. 134). It is almost in the same direction as the road through Chesterford to Newmarket, which has just been followed; whereas Iknild Street turns off to the west at Stump Cross at an angle of 45° to Ickleton. It would seem to run by Ickleton Farm, near which Bishop Bennet found it very manifest, but where no traces now appear, to Chrishall Grange, from which a green lane leads in four miles to the Royston road. A parish boundary, and then a county boundary, follow the lane for two miles, and the latter boundary runs along the Royston road for another two miles to that town, and through it, and on for five miles further. Marks of

¹ Itinerarium Curiosum, p. 78.

the course of Iknild Way were evident in 1808 on the downs east and west of Royston, and the present road which now follows it continues on between the railway and the downs on the south to Baldock, followed by parish boundaries after the county boundary leaves it. The course is then along a field track on the north of the railway for three miles to Wilbury Hill, from which a lane with a county boundary along it leads to Ickleford. It seems to continue by the road to Punch's Cross, and by a lane with a parish boundary along it to Telegraph Hill (600') and on to Brays Ditches on the north of Warden Hill, followed for a mile and a quarter by a county boundary. Then, according to Bishop Bennet, the way again divides, a branch to the north going through Houghton Regis to Maiden Bower, while the principal road continues on by Limbury and joins the present road from Luton, which, with a parish boundary along it, enters Dunstable by Church Street. At Dunstable, Iknild Street crosses Watling Street and turns south-west, and winds round the north of Beacon Hill (762') near Ivinghoe. It then divides: Lower Iknild Way wanders through Ivinghoe to Aston Clinton, Little Kimble, and Chinnor; and Upper Iknild Way winds north of Tring, through Wendover, by Princes Risborough, and along the flank of the Chiltern Hills. The course hereabouts, as described by Bishop Bennet, is doubtful; it seems to continue on under the name of Ickleton Road or Icleton Street to the south of Lewknor, Watlington, and Ewelme, to near Streatley, where it crosses the Thames, and then along the edge of the chalk

escarpment overlooking the vale of White Horse, where it becomes the Ridgeway. Iknild Street, as already stated, is mentioned in a charter of the tenth century as far west as between Blewbury and Weyland Smithy, and in the tenth and eleventh centuries Icenhilde Strete was the name of the road leading to Avebury.

(10) AKEMAN STREET to Cirencester.—A road bearing the name of Akeman Street crosses Iknild Way near Tring, and is supposed to have come from Verulam. From half-a-mile west of Tring it lies for five miles in a straight line through Aston Clinton to a mile east of Aylesbury, pointing between a high hill (680') between Tring Park and Wiggington, and high ground (340') near Waddesdon, and the same line is taken up for a mile by the present road on the west of Aylesbury. On to Waddesdon there is nothing to show the course, but further on short lengths of parish boundaries along the present road seem to indicate that it follows generally the course of Akeman Street. Across the low ground of the valley of the Ray the general course is straight for five miles to Blackthorn Hill (252'). Dr. Plot 1 says that there were tracks of a stony ridge visible and useful, and that the Ray was crossed at Steanford. The ridge is now merged in the modern road, and the Ray is crossed by Gallows Bridge, near which a parish boundary follows the road for a mile. From Blackthorn Hill the modern road turns north-west to Bicester, but the course of Akeman Street continues on in the same line along a

¹ Nat. Hist. of Oxfordshire, 1705, p. 319-321.

lane, and on to the brook at Langford, on the west of which a parish boundary and a lane leading to Chesterton mark the line for a mile. To the south is the Roman station at Alchester, through which a Roman road passes, making a turn when it crosses Akeman Street, and continuing northwards. This road will be reverted to. At Chesterton there is a turn to the south-west, and a straight road runs for four miles to the north-west corner of Kirtlington Park (355'), with parish boundaries along it for a mile and three-quarters. From this point a road called Portway runs due north, past Heyford, Somerton, and Souldern, to Aynho, on the east of which it was still pitched with stones in 1712 1; the course beyond is unknown.

From Kirtlington Park, Akeman Street makes a slight turn more to the south-west, and the course is straight for three miles across the valley of the Cherwell along the south side of Tackley Park, marked by lanes with parish boundaries. A lane then takes up the line to Stratford Bridge, and on to the Wootton gate of Woodstock Park, through which and for some distance on there are traces of the ridge. A section cut in Woodstock Park showed that the foundation of the road was of flags of the local stone called Stonesfield Slate, about an inch thick, and from 14 by 12 inches to half that wide. They were laid sloping in the direction of the road at an angle of 20° to 25° and upon this foundation was a layer of six inches of gravel under the sod. The width was 17

¹ Morton's Nat. Hist. of Northamptonshire, p. 502.

feet.1 The course is indicated by parish boundaries to the south of Stonesfield, and on to Ramsden (450'). where there is a turn more to the south-west, and a straight line to Bradwell Grove, eight miles distant, begins. For two miles a lane marks the course, and then for three miles across the Windrush valley there are apparently no traces, but beyond Asthall a parish boundary takes up the line for one and a quarter miles to Shill brook. At the north side of Bradwell Grove (420') there is a turn towards the west, and for 111 miles the general course appears to be straight for Cirencester, and the high ground (450') beyond. A lane and a parish boundary mark the course for two miles from Bradwell Grove, and after the valley of the Leach is crossed, a lane takes up the line to Williamstrip Park, in which it is shown by two bits of parish boundary. After the river Coln is crossed a road follows the course for three and a half miles, with a parish boundary along it for most of the way. The course onwards is undefined for two miles; it is crossed by Cherry Tree Lane, a prolongation of the Foss road from Hare Bushes Lodge with a parish boundary along it, which continues on for a mile to the local Ermin Way. The road from Ampney then seems to take the line, and it bears the name Akeman Street to the north-east gate of Cirencester, by which the Foss road also entered Corinium, the Durocornovium of the Itinerary.

According to Dr. Plot, about 1705, Akeman Street was a raised bank from Chesterton to Stonesfield, for

¹ F. Haverfield, Proc. Soc. Ant., xvii. p. 333.

a short length near Whitley Green, and from Bradwell Grove to the boundary of Oxfordshire.

There is a great contrast between the laying out of Akeman Street and the winding course of Iknild Way. It may be noticed that the name Iknild Street is sometimes given to Akeman Street on the east of Cirencester, and that the Foss to the south-west of Cirencester is sometimes called Akeman Street. They both led to Bath (Akemancester).

Alchester to Dorchester.—The Roman road southwards through Alchester ran straight for Shotover Hill (520'). The camp at Alchester, a quarter of a mile south of Akeman Street, is 330 yards square, and from the east gate the ridge of a road is visible as far as the railway, as if to give a direct access to the camp from the east. Across Otmoor southwards the ridge was very conspicuous for some miles in Camden's time, though often under water in winter floods.1 It was still paved in Dr. Plot's time, stone being found on and about the ridge and nowhere else on the moor. 2 On leaving the moor the direction changes. and the course seems to be through Beckley and by Headington Quarries to Bullingdon Green, from which a lane with a parish boundary along it for two and a half miles runs to Toot Baldon (300'). There is then a slight turn, and the course is straight to Dorchester, and a hill (340') on the south of the Thames, following a lane with a parish boundary along it to March Baldon, and then a track, a lane, and a road. From

¹ Camden's Britannia, vol. ii. p. 5. ² Nat. Hist. of Oxfordshire, 1705, p. 326.

Dorchester a Roman road probably ran to the Iknild Way along the line of the present road to Benson; and from this road, about half-a-mile from Dorchester, a parish boundary strikes across the Thames to the hill (340') already mentioned one mile south of the river, from which the straight line on the north of Dorchester is resumed by a lane with a parish boundary along it for a mile through Brightwell, pointing to the street through Cholsey 1 and the road beyond, and to the road through Moulsford. Wallingford lies a mile and a quarter to the east of this road. There is no trace beyond Moulsford, but the Roman road probably continued on by Streatley to Silchester.

Alchester to the North.—North of Alchester the modern road to Buckingham seems to occupy the line of a Roman road which passed to the west of Bicester, to the north of which parish boundaries follow the road for four miles to Fringford, pointing to Finmere Plantation (400'). There is then a slight change of direction, and a parish boundary, and then the county boundary follow the modern road for three-quarters of a mile to Finmere. The county boundary continues in the same line across country to Water Stratford, indicating the course of the Roman road, which is taken up by a lane in the same line on to Stowe Park, across which the old road can be traced in the same direction, but not beyond it. It no doubt joined Watling Street, but in the intervening five miles there are apparently no vestiges of the road.

¹ A "Stanwei" is given as a boundary of lands near Cholsey in a Saxon charter.

CHAPTER VII

THE FOSS WAY

(I) General course.

(2) Lincoln to Leicester.

- (3) Leicester to Cirencester.
- (4) Circumenter to Bath.(5) Bath to Hichester.
 - (a) Road to Uphill.
 - (b) Ilchester to Dorchester.
- (6) Ilchester to Axminster.
- (1) General Course.—The Foss Way or Foss road is remarkable for its direct course. From Lincoln, to the most southern traces of it beyond South Petherton in Somerset, no part is more than six miles away from a straight line about 182 miles long joining the extreme points, Leicester and Bath being on the line. There are not many marked changes of direction. Between Lincoln and Cotgrave Gorse it bends only two miles out of a straight line in 30 miles, and then there is a turn through 25° towards Leicester, from the north of which town the general course is the same for some 60 miles to the south of Stow-on-the-Wold, with a slight turn at the crossing of Watling Street. A turn through 25° on the south of Stow-on-the-Wold does not alter the general direction of the road as far as Cirencester so much as

the angle would imply. The Foss road joins another Roman road before entering Cirencester, and its course both in entering and quitting that town suggests that it was laid out with reference to *Corinium* already existing on the Roman road from Speen to Gloucester. From four miles south of Cirencester there is a straight course pointing to Bath for 17 miles, and then a turn keeps the road on high ground till it descends from Banner Down to join another Roman road before reaching Bath. Bath is left in the same general direction, which is not much departed from until Ilchester is reached, where there is a turn of about 20°.

There was probably a branch joining Erming Street about 10 miles north of Leicester, and at that town a Roman road from the south-east joined the Foss, but to the south of Watling Street it seems to have had but few connexions with other roads. Riknild Street must have joined it somewhere near Bourton-on-the-Water, and at Cirencester it joined Akeman Street and crossed the Gloucestershire Erming Street. It crossed the road from Speen to the mouth of the Avon at Bath, and another Roman road on the Mendips, and at Ilchester there is a branch to Dorchester. It no doubt communicated with the Roman road from Dorchester to Exeter, and it is possible that to the latter town there was a more direct road, branching near South Petherton.

There are comparatively few towns of importance on it. Leicester, Circucester, Bath and Ilchester are Roman, the last-named now not more than a village.



Lincoln and Between Leicester, Newark, which is not Roman, is the only town on it. From Leicester through Warwickshire it is now an unimportant road, for 41 miles mostly grassgrown, or little more than a lane or a field road. Further south the small town of Moreton-in-the-Marsh has arisen on the road, apparently since Roman times. Between Cirencester and Bath, 29 miles, there is not a village on it, and for long distances it is a farm road, or grass-grown, and south of Bath, though the road has been modernized for the most part, there are no towns, and hardly a village on it.

Many places on its course derive their name from the road. There are Foss Farms, Foss Bridge, Foss Mill, Foss Knowl, Foss Lane, and a Street-on-the-Fosse, and several Strattons-on-the-Fosse.

The only part traceable in the *Itinerary* of Antonine is that between Lincoln and High Cross, where the Iter turns on to Watling Street, and of the four stations named, *Ratæ* is the only one of which there is a modern representative.

(2) Lincoln to Leicester. - The Foss road left Lincoln with Erming Street and branched off from it near Bracebridge. Between Erming Street and Bracebridge some of the pavement, of flagstones set edgewise, remained in Stukeley's time.1 Soon after the river Witham is crossed the present main road, occupying the course of the Roman road, is straight for eight miles to Potter Hill (120'), between which and some point on the high ground on which Lincoln now stands the course was probably laid out, but trees now shut out the prospect. There is then a slight turn, and another straight line of six miles begins. The road appears to have been fenced in originally 20 to 30 yards wide, and to have been since narrowed in many places, by which the general straightness is disguised. The county boundary follows the road for a mile, and four miles north of Newark, at Brough, the station Crococalana of Iter VI. is placed. The road continues straight through the town of Newark, and then there is a slight turn, and another piece of straight road two and a half miles long reaches to near the bank of the river Trent near East Stoke, where the station Ad Pontem must have been. Remains of a Roman bridge are said to have been found in the river

¹ Itinerarium Curiosum, p. 103.

Trent here. The road then ascends the higher ground between the Trent and the Devon, and another straight line eight miles long ends near High Thorpe (200'), crossing the railway just west of Bingham Station, one mile due north of which, at Castle Hill, Barrow Field is the site of the station Margidunum. A slight turn at High Thorpe is followed by another straight length of three and a half miles ending at Cotgrave Gorse (250'), where there is a turn through 28° to the south, but of the 29 miles from Lincoln to Cotgrave Gorse no part of the road is more than two miles out of the direct straight line. Until it turns off to Cotgrave a modern road occupies the middle between the fences, but beyond that the Foss road is a wide rough track, not appearing very straight because of encroachments. It continues so for most of the way to the Nottingham and Melton road, beyond which for a mile a narrow metalled road runs along the middle between fences 20 yards or more apart, and then turns off; the wide green road continuing on for four miles and a quarter to Six Hills (447'). From Cotgrave Gorse the general course is straight for eight and a half miles to Six Hills. The straight line is deviated from for two miles in the lower ground near Willoughby-on-the-Wolds, but parish and county boundaries follow the road continuously from Cotgrave Gorse for 14 miles to Ratcliffe-on-the-Wreak. Near Lodge-on-the-Wolds, two miles south of Cotgrave Gorse, Stukeley describes the pavement of the road as "of great blue flagstones laid edgeways very carefully," and says that all the

way thence to Willoughby-on-the-Wolds the road was paved with red flints laid with the smoothest side upwards upon a bed of gravel, and the report then was that the Foss was thus paved all the way from Newark to Leicester. This paving still exists about a mile to the north of Six Hills. Near Willoughby-on-the-Wolds the station *Verometum* is placed.

At Six Hills a Roman road is supposed to have branched off to join Erming Street near Ponton.² A straight road is followed by a parish boundary for three miles to the high ground (511'), near Dalby tunnel. It continues on with a slight turn, and the line of highways passing to the north of Croxton Park may perhaps follow the course of the Roman road.

From Six Hills (445') the Foss road makes straight for six and a half miles to beyond Syston railway-station (194'), where the modern road from Melton Mowbray to Leicester joins it. To this point from Cotgrave the Foss is now an insignificant road, and the course is in places not very well marked except by the parish boundaries following it. From this point (194'), near Syston railway-station, a straight modern road four miles long extends to the middle of the present town of Leicester.

About three miles north of Leicester, a Roman milliary was found in 1771 by the side of this road. It is a short column three feet six inches high, and one foot nine inches in diameter, which apparently stood on a square base, close to which it was dug

¹ Itinerarium Curiosum, p. 136. ² Nichols' Leicestershire, p. exlviii.

up. It was appropriated as suitable for a roller, and after some time it was claimed by the road trustees as material for mending the road, but the inscription having attracted notice, it was set up in 1773 as "the centre of a neat obelisk surmounted with a lamp." 1 It is now in the Leicester Museum. The ends of the lines of the inscription are defaced, and several readings have been suggested, but of the important part there is no doubt. The inscription commemorates the Emperor Hadrian, in the fourth year of his reign, and third consulate, corresponding to A.D. 120, when Hadrian was in Britain. At that date therefore the Foss Way north of Leicester was in existence. It also gives the distance a Ratis III., confirmatory of the Roman name of Leicester. It is the oldest known milliary in Britain,2 and also the most perfect.

The Roman Ratie occupied a rectangular area on the east bank of the river Soar. In 1722 the walls could be traced, and Stukeley made a plan, which modern maps show to be fairly accurate, except that he omitted the west wall. From the north to the south gates it was about 860 yards, and from the east gate to the west about 580 yards, and the Roman town is

IMP. CAESAR
DIVO. TRAIAN, PARTH, F. DIV.
TRAIAN, HADRIAN, AUG.
POT. IV COS III. A RATIS

11

¹ Nichols' Leicestershire, 1795, vol. i. p. 5. ² The legible portion of the inscription is thus given by Nichols, and by Gough, Camden, ii. 315—

³ Itinerarium Curiosum, plate 92.

still marked out by streets outside the line of the walls. High Cross Street represents the street from the north to the south gates, and High Street, the principal street at right angles to it, by which the Foss passed through Ratæ from the east gate, crossing the river Soar a little north of Bow Bridge, and then turning south along the course of Great Holmer Street and Narborough road. The road now called Fosse road, more to the west, may possibly represent a Roman road connecting the Foss with a road leaving Ratæ by the north gate, crossing the Soar at North Bridge, and then turning west. A parish boundary follows the present road for two and a half miles westward from Fosse road, and other boundaries further on confirm the supposition of a Roman road in that direction.

A straight road, joining Watling Street near Manduesedum, and pointing to Leicester, has been mentioned (p. 75). Towards Leicester there are said to be some traces of a Roman road on the north of the Hinkley road in the direction of the road through Peckleton to Kirkby Mallory.

Gartree Road.—A Roman road left the south gate of Ratæ in an east-south-easterly direction. From near the Midland railway-station a boundary seems to indicate its course, crossing the London road at the north corner of Victoria Park, from which it is followed by a footpath for more than half-a-mile. The foot-path continues on to Stoughton Grange, where it joins Gartree Road, which continues on in the same straight line for four and a half miles to a high ridge (500') near Burton Overy, and on in

nearly the same line for three and a half miles further, a parish boundary following it for three and a half miles. Further on there are traces of the ridge, and from Medbourne, lanes and roads follow the same line to Cottingham, beyond which the present road takes up the line for two miles, and the ridge is traceable. In the same direction, after an interval of nine miles, is the line of the road which has already been mentioned as being indicated from Alconbury Hill on Erming Street, to Titchmarch. Gartree Road has got the modern name of *Via Devana* as the continuation of the road so called in Cambridgeshire, which has already been mentioned (p. 232).

(3) Leicester to Cirencester.—After leaving Leicester the Foss road is nearly straight for 11 miles, with a very slight turn on high ground (300') near Narborough. For three and a half miles the modern road occupies its course, and then leaves it for two miles, but there are traces of the old road in the interval. South of Narborough, parish boundaries follow it continuously for six miles to High Cross, on approaching which it is a grass-grown road through fields. The ditches on each side are traceable, about eight yards apart, and a paving appears to remain beneath the surface in places. Stukeley 1 mentions "a visible pavement of great round coggles by Sharnford," two miles north of High Cross.

At High Cross (450') (Venonæ), where there are only a few houses, the Foss crosses Watling Street, the four roads diverging in different directions. From

¹ Itinerarium Curiosum, p. 110.

Venonæ to Lindum Iter VI. and Iter VIII. of Antonine pass over the Foss, making the distance 63 and 64 M. P.; the distance from High Cross to Lincoln measures 62 miles. The intermediate distances agree with the sites which have been given above for the stations between Ratæ and Lindum.

The Foss leaves Watling Street for the south 50 yards to the west of the point at which it meets it from the north, in a straight line with Brinklow tumulus six miles distant. It is a narrow lane for a mile and a half, and the contrast between Watling Street and the Foss Way in both directions is remarkable. A parish boundary follows the lane, and then a road, for three and a half miles; and the same straight line is continued by a track to near Stretton, where the course of the road is not traceable for a mile. It appears to pass round the east of Brinklow mound, a parish boundary from Smite brook running to, and continuing along, the road to the east of Brinklow, indicating the course of it. At three-eighths of a mile to the south of Brinklow, almost exactly the same line as that from High Cross is resumed, the road for two miles pointing straight for the mound. The old fences, 20 or 25 yards apart, remain, with long strips enclosed on the sides of the present road. On the north side of the Avon the Foss is now a narrow grass field leading to the old Brit-ford, on the east of the present road and Britford bridge. The general course of the road lies between High Cross and high ground (350') on Dunsmore Heath, long since enclosed. It is bent to the east in the Avon valley to avoid the river except at the ford, and the old road has been narrowed, and is not very straight, and is little better than a lane.

There is a slight turn to the west on Dunsmore Heath, and for twenty miles the general course of Foss Lane is straight to Halford, apparently in the direction of high ground (800') near Bourton-on-the-Hill ten miles still further on. Nothing but the trees now prevent some prominent object or mark there being visible from Dunsmore Heath. A good deal of the original straightness has been lost, but it would seem that in the lower ground, when the distant marks were lost sight of, it never was quite straight. The width between the fences has been encroached upon on one side and the other, and it now varies from twenty or twenty-five yards down to as many feet. In parts the road is little more than a field road or a lane, but the ridge or embankment of the Roman road is still to be traced here and there, particularly when broad green sides remain, as near Compton Verney.

Near Chesterton the road passes by some remains of a camp; and near Eatington a Roman road from Stratford-on-Avon seems to have joined, but there are now no traces of it. On the north of Halford, Foss Lane ends, and the modern road from Warwick takes the line and follows it to Cirencester. The course is generally straight for four and a half miles, and then there is a slight bend, and between Knee Brook and Lemington there are slight windings on high ground,

followed for two miles by a county boundary, which seems to indicate that the line of the Foss road is occupied by the modern road. It is nowhere quite straight for any considerable length on to Moreton-in-the-Marsh, and where it crosses valleys there are twists, sometimes due in part to improving the gradient for the modern road. It is 20 to 25 yards between the fences, where it has not been encroached upon.

The main street of Moreton-in-the-Marsh occupies the course of the Foss road, which makes a slight turn to the east to a point one mile south of Stow-onthe-Wold, where there is a considerable turn to the south-west in the direction of Cirencester. There are several lengths of straight road of from one to four miles, nearly in the same straight line, with windings where coombes in the oolitic tableland (440' to 660') are crossed. The road generally winds up the coombes and back again to the same line. boundaries, which run along the road nearly all the way, follow these windings into and out of the coombes, except at one a mile to the north of Northleach, where the boundary keeps a direct course, and marks the line of the Foss, which has been quitted by the modern road. Beyond Foss Cross the straight course is deviated from to pass round the upper ends of several coombes, and after about a mile and a half of straight road, a round turn leads to a straight road nearly north and south. The modern road is hereabouts considerably banked up; near Bramston Farm, about three miles from Cirencester, as much as six feet, and there are deep side ditches outside

the embankment. To what extent the embankment represents the Roman ridge, and how far the side ditches are owing to the excavation of materials for the modern road is uncertain. Such hollows along the sides of roads, made for the purpose of getting road materials, are common in this stony tableland. The parish boundaries follow Cherry Tree Lane, which runs on due south in prolongation of the Foss, for half-a-mile past the turn to Cirencester at Hare Bushes Lodge, as far as the course of Akeman Street. Whether the Foss road joined the latter road there, or had an independent course from Hare Bushes Lodge is uncertain, but the two roads entered Cirencester together by the north-east gate.

The walls of the Roman Corinium of Ptolemy, or Durocornovium of the Itinerary of Antonine, form a rough rectangle, through the longest diameter of which the course of the Roman road from Speen to Gloucester runs in a straight line for nearly a mile. The principal cross street at right angles with it, the Via principalis of a Roman camp, has been found to have been in the line of Lewis Lane and Queen Street from the north-east gate, by which Akeman Street and the Foss road entered, and to have led straight to the amphitheatre outside the south-west gate. The width from wall to wall in this direction is about half-a-mile.

(4) Cirencester to Bath.—The Foss road leaves the Roman town on the line of Castle Street, a quarter of a mile to the north-west of the principal cross street,

¹ W. Cripps Proc. Soc. Antiq., vol. xvii. p. 201.

and makes straight for high ground (442') on the tableland on the north of Jackments Bottom, with a very slight turn north of Thames Head. The way in which the Foss road enters and leaves Corinium suggests that the Roman town had grown up upon the course of the Speen and Gloucester road before the Foss road was laid out. South of Cirencester the Foss road, or Acman Street as it is also called, is now a wide modern road, along one side of which the county boundary runs, for a considerable distance in a deep hollow, for two and a half miles to Jackments Bottom. The boundary may possibly show the original line of the Roman road, which was broken up, and with the addition of the stone dug out, went to make the modern road along the side. The road probably followed the line of the county boundary into Jackments Bottom and out again, but there are now no traces of it there.

From the south of Jackments Bottom (400') the course of the road is so straight for $16\frac{1}{2}$ miles that no part is more than half-a-mile from a straight line. It is made up of straight lines from point to point, which are only deviated from in crossing valleys, after which the line is resumed. The general course must have been laid out from several intermediate points on the tableland. The high ground (500') in the park one mile west of Cirencester is visible for some distance along this part of the Foss, and may have been one point of direction.

The county boundary continues to follow the Foss road for two miles further, and then parish boundaries

follow it for another two miles, and after an interval of half-a-mile, again for one mile, when a county boundary again joins the road for a mile and threequarters, and parish boundaries then follow the road for eight miles.

From Jackments Bottom onwards the Foss road is now a green road for 10 miles, used only for farm traffic, but it is a highway available as a bridle road, and it can be travelled over in a two-wheeled vehicle. It is 20 yards wide between the fence walls for long lengths. Near Culkerton Down Wood there is an embanked ridge five or six yards wide, and raised three, four, or five feet, the sides sloping about one in five, or one in six. It is described at the end of the eighteenth century as "showing its bold ridge sided with ditches." Sometimes the width has been encroached upon, leaving the level top of the ridge and one slope, and perhaps a small part of the other between the walls. There is no trace of a paving or a stoned surface where the ridge is deeply cut into by cartruts. Further on the road is wide in places with high hedges, and timber trees shading it, and in other places it has been narrowed, and is overgrown with bushes, and there is little or no trace of a ridge. In the valley of the Anton at White Walls, about two and a half miles west of Malmesbury, are the Roman remains to which the name Mutuantones (from the Ravenna list) was given by Sir R. C. Hoare. A little further on at Littlefield the Foss road is stopped up for a quarter of a mile, one of the very few places

¹ Collinson's History of Somerset, vol. i. p. 100.

where that has taken place. At Lords Wood Farm the green road ends for a time, a parish highway taking the course, and about one and a quarter miles further on this has lately been cut through in making the railway to the Severn Tunnel, without anything indicative of a Roman road being found, or indeed any evident traces of a made road on the stony subsoil. Hereabouts there is very little evidence that the old road was raised above the surface. A narrow modern road continues to run between hedges 20 yards apart, where there is no encroachment, as far as the turn to Grittleton, near Dunley Farm, and then a green road is entered upon, 18 or 20 vards wide between the hedges, but in places overgrown with ferns, briars, and nut-bushes, so that a dog-cart can hardly pass. This continues for one and a quarter miles to Foss Gate, where a modern highway from Grittleton joins, and three-quarters of a mile further on, after crossing the Gatcombe Valley, the parish and county boundaries which have followed the Foss for nearly 11 miles cease to do so for a mile and a quarter. Sir R. C. Hoare relates that hereabouts, at the beginning of the last century, labourers were destroying the Foss, and had "cut through a bold and lofty ridge by which a favourable specimen of its original construction was rendered visible," but unfortunately he did not describe it.1 Near North Wraxall (490'), three and a half miles further on, the south end of the 161 miles of nearly straight road is reached, and there is a slight turn

¹ Ancient Wills, Roman Æra, p. 102.

towards the east, and a straight road for a mile to the Duncombe valley, which is crossed by a narrow winding road. A county boundary follows the road from the south of the stream for two and a quarter miles, and on regaining the tableland near Ashwick Park (546') there is another bend towards the east by which the road is kept on the high ground, and it runs straight for three miles to the south end of Banner Down (600'), overlooking Bathford, followed by a parish boundary in continuation of the county boundary. Sir R. C. Hoare, in 1820, observed a ridge of fine appearance, and a high raised dorsum, which was then being broken up,1 and the road in its modernized form is banked up about three feet. Near the fourth milestone from Bath the parish boundary and the modern road part, the former continuing straight on and rejoining the road in about a quarter of a mile. In another quarter of a mile the main road turns to the west, and the boundary follows Morris Lane down to the London road, which it joins not far from where the Great Western Railway crosses the road to Bathford. Sir R. C. Hoare makes the present road leave the Foss near the fourth milestone, the course of the latter lying, he supposed, through the quarries and down Foss Lane. Collinson also makes it descend by Foss Lane, which he described in 17912 as deep, narrow, and overhung with hedges, and joining the London road at a bridge over a little stream. This lane, a quarter of a mile nearer Bath,

¹ Ancient Wilts, Roman Æra, p. 103. ² Collinson's History of Somerset, p. 99.

still bears the name, but the evidence of the boundary is against it.

The London road from Bathford to Bath is on the line of the Roman road from Silchester and Speen, and the Foss road joins it at right angles. From Bath Easton the course is straight for two miles to Walcot, and according to Scarth it continued by Guinea Lane to the top of Russell Street before turning southwards to enter the Roman city, but it may have bent southward, and approached the North Gate more on the line of Walcot Street.

The mediæval walls of Bath were on the foundations of the Roman walls of Aquæ Solis (or Sulis), and they can still be followed in the modern streets. They enclosed a pentagon approaching an irregular rectangle about 400 yards east and west by 388 yards north and south. The north gate was at the north end of High Street, not far from Pulteney Bridge, the west gate at the end of Westgate Street, and the south gate at the south end of Stall Street, near St. James' Church, on the slope of the ground rising above the low-lying land on the north of the river Avon.

(5) Bath to Ilchester.—By the latter gate the Foss road left Aquæ Solis, along what is now Southgate Street, and crossed the river Avon by a ford, of which there were vestiges at the beginning of the eighteenth century.\(^1\) It then ascended by Holloway and Devonshire Place by a winding course, the modern road joining and following it after the first half-mile. On Odd

¹ Collinson, vol. i. p. 100.

Down a straight road begins, which at Vernham Wood is joined by a parish boundary. On the high ground one mile north-east of Coombe Hay the modern road diverges to the west, and the line of the Foss is along a narrow lane, with remains of the ridge, which the parish boundary continues to follow down into Dunkerton Bottom, a descent of about 400 feet, and up again on the south of the valley. The modern road again quits the line of the Foss for half-a-mile, and then follows it past Huddox Hill to high ground (580'), a quarter of a mile north of Red Post, parish boundaries continuing along the road. In three-quarters of a mile the modern road turns off to Radstock, and the Foss runs straight on to Smallcombe, down into which parish boundaries are continuous for five miles from Odd Down.

In Smallcombe a cottage, which is actually on the Foss road, is freehold, and is said to be the only freehold in the hamlet. From Smallcombe the course of the Foss is straight for three miles in a line between high ground (550'), near Camerton Park, and (538') near Stratton-on-the-Foss.

The road, which the parish boundary follows, is rather winding up out of Smallcombe, between which and the Somer valley is a spur of high ground, over which, as the gradients up and down are too steep for modern wheeled traffic, the old road remains in almost its original state. It is a ridge about three feet six inches high and six feet wide across the top, between two old hedges, outside of which are ditches. In 1884, Mr. McMurtrie had a trench cut across, and described

the section.1 The original soil was met with at a level corresponding with that of the adjacent fields, and upon it is a layer of rubble stone five inches thick in the middle, and thinning off towards the sides, next is a bed of concrete about one foot three inches thick, then a layer of finer material composed of limestone pounded fine and mixed with lime and well rammed, ten and a half inches thick in the middle, and rounded off at the sides. On this was laid a course of paving stones, four to five inches thick, from the lias beds of the neighbourhood, of all sizes and shapes fitted together and grouted with lime mortar. This, the ancient surface of the road, was laid bare for a length of several yards, and two distinct ruts were exposed, three feet apart from centre to centre, one about two inches wide, and two or three inches deep, and the other wider and shallower. The ancient road surface has been covered with stones and earth, exclusive of which the thickness is two feet eleven inches. Sir R. C. Hoare 2 notices a very similar section of the Foss near Radstock, which was observed by Mr. Skinner, the foundation consisting of a layer of large flat stones. then one and a half feet of earth and rubble, afterwards a course of small stones, with pavement or pitching stones on the surface.

There are remains of the ridge on the steep south side of the Somer valley, and then the modern road through Radstock takes up the line. Near Strattonon-the-Foss there is a slight turn, and the road points

¹ Somerset Archwol. and N. H. Soc., vol. xxx. p. 76.
² Ancient Wilts, Roman Æra, vol. ii. p. 77.

to high ground (920') on Beacon Hill, near the east end of the Mendips, to which the Foss also points for five and a half miles from the south. After two miles in this direction the road winds down to cross the valley at Nettle Bridge, the parish boundary following it. A smaller valley is crossed near Ashwick Grove, where the main road turns off and a straight lane followed by a parish boundary leads in a mile to the above-mentioned point (920') on Beacon Hill.

Road to Uphill.—At this point the Foss road is crossed by a Roman road from the south-east to the north-west. The ridge is traceable for a mile to the eastward, and further on the line is thought to be indicated by Rough Ditch dividing the parishes of East Cranmore and Downhead. To the west of the Foss traces of the ridge are shown on the old Ordnance map for two and a half miles to the cross roads beyond Maesbury Castle, and then a highway in the same straight line, which is followed for two miles by parish boundaries occupies the course for two and a quarter miles to Green Ore. Further on the ridge is shown on the old Ordnance map for a mile on the south of Castle Comfort Inn, and traces continue over Ubley Warren, and on nearly to Charterhouse, where there are Roman remains, and evidence of lead-mining at a very early period of the Roman occupation.1 Sir R. C. Hoare saw the ridge of the road for a mile along the south of Black Down, beyond which the course seems to be followed by a lane from

¹ A pig of lead from the mines at Charterhouse Hinton now in the Bristol Museum bears the stamp of the Emperor Vespasian.

the north of Shipham, and to have continued along the south side of Banwell Hill, and along the north side of Bleadon Hill, where it is marked by a green track passing to the south of Hutton wood, and on to the south of Oldmixon and Uphill. Sir R. C. Hoare found traces of a square circumvallation and pottery at Borough Walls (? Walborough) on the south of Uphill near the mouth of the river Axe, and there he placed a Roman station to which he gave the name Ad Axium. There is no other authority for the name, but it has been perpetuated on the new Ordnance maps, which, however, place the camp a quarter of a mile to the east of the railway, above Oldmixon.

It is very probable that there was a port at the mouth of the Axe from which lead from the Mendip mines was shipped, and the position of *Ischalis* as given by Ptolemy's degrees in relation to *Aquæ Calidæ* (Bath) is there, and not at Ilchester. It is much more likely that a port at the mouth of the Axe should have been known to Ptolemy than an inland and unimportant place at Ilchester. The name *Ischalis* too appears to be connected with the Axe.

The Foss from the point (920') on Beacon Hill takes a straight course to Pyehill (462'), between Ditcheat and East Pennard, five and a half miles distant, parish boundaries following it nearly all the way. After descending the hill, a lane takes up the line, which passes through Charlton on the east of Shepton Mallet, to Cannard's Grave, where the

Ancient Wilts, Roman .Era, p. 44.

Ilchester road joins it. At Pyehill there is a considerable turn to the south-west, and a somewhat winding road leads down (462' to 200') to Wraxhill in a mile and a quarter, and then a straight road succeeds, four miles long, pointing between high ground (460') near Little Pennard and Cross Keys (110'), and with parish boundaries along it for most of the way. There is a slight turn at Cross Keys, and one and a half miles further on the modern road diverges from the Foss to descend the hill, and rejoins it in half-a-mile, the Foss continuing in the same straight line for three miles and a quarter from Cross Keys, and with a very slight turn, on for two and a quarter miles to Ilchester, parish boundaries following the road for two miles.

The Foss road crossed the river Ivel by a ford, which Stukeley describes as being made with great flagstones, to the Roman station, the walls and ditch of which Stukeley traced nearly all round. He gives a plan of it, and describes it as an oblong square 500 paces by 300 paces, the longer side of which lies along the south bank of the Ivel. The supposed sites of the gates make it 533 yards by 326 yards. Ilchester has been supposed to be the *Ischalis* of Ptolemy, whose latitudes and longitudes would however put that station nearly as far north as Bath, and 27 miles to the west of it, that is, near the mouth of the Axe.

A Roman road branched from Ilchester to Dorchester. For nearly three miles the straight modern

¹ Itinerarium Curiosum, p. 154.

road indicates the course to Vagg (400'), where the direction changes to high ground (800'), near Frome St. Quentin, 11 miles off, on which line there are traces here and there of the old road.

(6) Ilchester to Axminster.—The Foss road continues straight through Ilchester, constituting the principal street of it, on the line of the cross street of the Roman town. At the site of the south gate there is a turn towards the west, and the road for four and a half miles is in a straight line with a point on high ground (700') near Cricket St. Thomas, 13 miles distant. Stukeley, in 1723, saw the original paving of the road in many parts, "composed of the flat quarry stones of the country, of a good breadth, laid edgewise, and so close that it looks like the side of a wall fallen down." The road appears to have retained its original state until the beginning of the last century, when the modern road took the course of it to near Petherton Bridge. Parish boundaries follow the present road nearly all the way. There is a slight change of direction on high ground about a mile south of Martock, and half-a-mile further on the modern road turns away from the Foss, to Petherton Bridge, the course of the latter apparently continuing straight on to high ground (220'), beyond Over Stratton. Bridge House is on the line, which is taken up by lanes, with a slight turn beyond Over Stratton, as far as Dinnington.

The course of the Foss, which can be followed to this point from Lincoln without difficulty, then

¹ Itinerarium Curiosum, p. 155.

becomes uncertain. The early descriptions take it to Exeter, but there seems to be no evidence of it for many miles in that direction. A road has been traced from near South Petherton on somewhat inconclusive evidence, westward by Hurcot, Broadway, and Street Ash, and in the spring of 1900 a paved road was exposed by a flood at Donyatt Mill, near Ilminster, one and a half miles to the south of this line lying in the direction of a road through Crock Street, which a parish boundary follows for one and a half miles.

Near Dinnington, the narrow lane worn deep in the sand, which represents the Foss, branches right and left, and there is no trace onwards over the hill and through the valley beyond for three miles. Then from a point (600') near Cricket St. Thomas the present road, followed by a parish boundary, and with some traces of the ridge, runs straight for a mile, and when, near Street, it bends to avoid a hill, there are traces straight on, and in rather more than half-a-mile the straight line is resumed by the modern road, which a parish boundary again follows for half-a-mile at Monkham Down. The present road, probably following the line of the Foss, bends to the west to avoid the valley of the Axe, and at Tytherleigh turns more to the south again, and takes a straight course. It crosses the Axe at Weycroft, formerly called Stratford, and from Millbrook, where the Axminster road turns off, Stony Lane continues the line to the Dorchester road a quarter of a mile east of Axminster. The Foss there met the Roman road from Dorchester to Exeter by Honiton, and it may have crossed it and continued on to the mouth of the Axe near Seaton, where Camden and others placed *Muridunum*, but there are no evidences of it, and according to distances from Dorchester and Exeter *Muridunum* must have been seven miles further west.

CHAPTER VIII

RIKNILD STREET

(1) Stretton Grandison to Selly Oak.

(2) Bourton-on-the-Water to Boroughbridge.

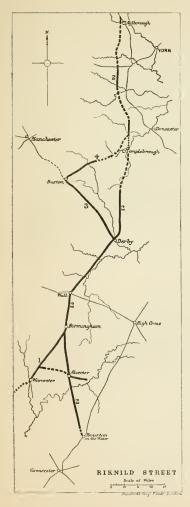
(3) Derby to Buxton. (4) Batham Gate.

(1) Stretton Grandison to Selly Oak,-Riknild Street is described by Higden as passing through South Wales, and by Worcester, Droitwich, and Birmingham. To the south-west of Worcester there is now no trace of it for 15 miles to Stretton Grandison, whence onwards a Roman road through South Wales will be described further on. From Worcester towards Droitwich a street and road seem to follow the course for two miles and a quarter, and then the same straight line is continued by a parish boundary across Hindlip Park, along the line of a shallow trench from which the Roman road materials have probably been removed. The main road then follows the same line to the south of Droitwich, pointing to a gap (700')1 in the Lickey range. There is then a slight turn towards a point (900') more to the east, near the Obelisk, and the present road follows a straight course in that direction for seven miles, deviated from at one place. From Droitwich a road called Salt

¹ Nash, Hist. of Worcestershire, 1781-89, vol. ii. p. cvii.

Way runs straight for three miles in the direction of Alcester, followed for a mile by a parish boundary. Its course onwards is uncertain. On the north of Bromsgrove the modern road leaves the line, but towards the end of the eighteenth century there was a high raised road on the Lickey Hills pointing directly to Bromsgrove. From the north of the Lickey Hills the present road lies in a straight line to Selly Oak, except for half-a-mile near Northfield.

(2) Bourton-on-the-Water to Boroughbridge.—The road now bearing the name of Riknild Street appears to have joined the Foss Way near Bourton-on-the-Water, about two miles north of which, and two miles west of Stow-on-the-Wold, a lane in a straight line northwards past Condicote to Hinchwick appears to indicate the course, pointing to high ground (about 840') on Bourton Down. It is not clear how the ascent of 250 feet from Hinchwick to the down was made, but on the down a lane from Springhill, with a county boundary along it, takes up nearly the same line for a mile and a half to near the Evesham road (950'), from which a parish boundary over Saintbury Hill seems to mark the course down the north side. On the west side of Weston Park, a line seems to be taken up lying between high ground (940'), two miles to the south, and Alcester, 12 miles to the north. A road in this line, passing on the west of Weston-sub-Edge, leads on to a highway with a parish boundary along it called Riknild or Icknield Street, which is crossed by the railway at Honeybourne Station, near which county boundaries follow it for a mile and



three - quarters. continues northward under the name of Buckle Street to Staple Hill, one mile south of Bidford, where there is a slight turn, and a straight line begins, pointing to the west of Alcester, four and a half miles distant. There is nothing to indicate the line for about a mile north of Bidford, when a lane called Icknield Street joins it and continues nearly to Alcester.

From Alcester a Roman road ran eastward, along the course followed for six miles by the straight modern road, to Stratfordon - Avon, and a parish boundary along the road for two miles south-east from Stratford-on-Avon seems to indicate that the latter occupies the line of a Roman road on towards the Foss near Eatington.

North of Alcester the line of Riknild Street is followed by the present Birmingham road, called Haydon Way, through Studley and to one mile beyond, where the latter road turns off to the north-eastward and there is no trace of the former for a mile and a half. At Ipsley a lane called Icknield Street exactly in a line with Haydon Way is reached. This line appears to point from Alcester to high ground (about 48o'), one mile east of Rowney Green, and a mile and a half north of Beoley. There is here a slight turn, and lanes follow the line of the old road by Forhill to near Headley Heath. Hutton 1 gives the course onwards by Stirchley Street, crossing the Bromsgrove road at Selly Oak, leaving Harborne a mile to the west, by the observatory in Lady Wood Lane, crossing the Dudley Road at Sandpits, and along Worstone Lane, passing five furlongs north of the Navigation Bridge in Great Charles Street, Birmingham. He saw the section of the road where the inhabitants attempted to pull it up for the sake of the materials, 20 yards wide, and one yard deep, filled up with stone cemented with coarse mortar, and he says that the course was discoverable by its barren track through uncultivated meadows. Birmingham and its suburbs now cover the old road for about four miles.

Stukeley says 2 that he found Rigning Street very

¹ History of Birmingham, p. 142. ² Iter Boreale, p. 21.

broad by Moseley, over a heath on the east side of the river Rea, but that appears to be away from the line.

On the north of Birmingham the line is resumed on the north of the river Tame, near Perry Bridge, by a county boundary for about a quarter of a mile to Gorsey Bank; and then a road continues it, passing a quarter of a mile to the east of Oscott, and it can be traced along a track shown on the old Ordnance map to near the Royal Oak Inn on the west side of Sutton Coldfield Park. In the park the ridge appears very plainly, of a rounded profile, eight or nine yards wide over all, and three to four feet high in the middle. It has been described 1 as presenting one of the best examples of a Roman road, 60 feet wide with a ditch on each side. It has little claim to be so considered, and the ditches where they occur appear to be connected with modern drainage. They may, however, indicate a cross section like that on Bignor Hill on the Sussex Stane Street (p. 57). At the south of the park, holes rather than ditches at the sides seem to show where the material for the mound was got. Further on in lower ground the ridge is not so prominent, but it is again more marked towards Streetley Hill. It is plainly traceable all through the park for a mile and a half, overgrown with gorse and heather, except where two golf putting-greens have been made in the course of it. It was until of late years the county boundary through the park. The coating of gravel can be seen here and there, and

¹ Journ. Archaol. Assoc., 1873.

it was cut through by a new road near the Streetley gate. The railway crosses it about 100 yards east of Streetley station. To the north of the park, about half-a-mile of the drive through Birmingham Wood to Little Aston Hall, a short length of road north of Little Aston, and another length to the west of Shenstone, mark the course of the road in a straight line from Streetley Hill to high ground (450') on the north-east of Wall. From near Birmingham to Wall (Etocetum) for nine miles the road is not perceptibly out of a straight line, which may very well have been set out from intermediate points at Streetley Hill, and the high ground (500') south of the Royal Oak Inn.

Riknild Street would appear to have crossed Watling Street on the east of Etocetum, and there is then a considerable change of direction to the northeast, and a straight course for nine miles to near Barton-under-Needwood. A lane follows the course of the old road for most of the way from Wall, crossed by the North-Western Railway just east of Lichfield station, and joining the Lichfield and Burton Road at Streethay. The latter road occupies the line of Riknild Street nearly as far as Branston. In Stukeley's time "part of Rigning Way north from Wall was very fair with a high straight bank." 1 The same straight line appears to have continued through Burton-on-Trent, and on to high ground (340') near the Knoll, Littleover, two miles from Derby. The modern road from Burton to Derby occupies the course of Riknild Street from the middle of the former town to near the

¹ Iter Boreale, p. 21.

river Dove, where the straight line is deviated from for a mile in crossing the river, and then resumed. Onwards, parish boundaries follow the present road in places for about half the way to Derby. In the beginning of the eighteenth century the road on Burton Moor was paved; in Stukeley's time it was the common road, and in 1769 a considerable length appeared on Egginton Heath, but it has since been obliterated by the making of the turnpike road. Stukeley notes that "upon the hill south of Littleover, Rigning is under the eye as far as *Etocetum*, and the hills beyond it." It is perfectly straight for 20 miles.

At Littleover the modern road turns to the east, and the course of Riknild Street appears to have been on the west side of Derby, crossing the Derwent to the Roman station at Little Chester, on the north of the town, between the river and the Great Northern Railway. Stukeley traced the track of the wall all round enclosing an area, according to his plan, 120 paces from east to west, and 100 paces from north to south. The road passed the north side of the camp, and crossed the river Derwent by a bridge, the foundation of which could be felt with a staff.⁴ Bishop Bennet said, in 1817, that the piers of the bridge could be felt in a dry summer. The road after leaving the station probably passed to the east of Breadsall, north-east of which the present road seems to occupy the line for a mile and

Plot's Staffordshire, p. 400.
 S. Pegge, Roman Roads in the Country of the Coritani, p. 5.
 Iter Boreale, p. 25.
 Itinerarium Curiosum, p. 54, Pl. 86.

a half past Breadsall Priory. At the east corner of the latter (434') there is a turn to the north, and a parish boundary follows the road for a quarter of a mile, and then traces of the ridge appear in the fields on the east of the present road for half-a-mile. In 1769 it was visible quite across the moor,1 and Bishop Bennet noticed a large fragment of the ridge in 1817.2 The line can be traced on in the direction of Horsley Lodge, near which it was very high and covered with furze early in the last century,2 and west of Horsley Woodhouse to Ticknall Lane and Street Lane in the same line for four and a half miles, the last threequarters of a mile being followed by a parish boundary. Just beyond, near Upper Hartshay (450'), there seems to have been a turn; there is now no trace onwards for three miles, but in 1769 the ridge was visible in places all the way to Oakerthorpe, pointing to Coneygre House.1 The road at the south of Oakerthorpe seems to be on the line for a quarter of a mile, and the road on the north also, and there are traces of the ridge about a mile north of Wingfield Station, between the road and the railway, where in 1817 the ridge was visible for a mile.3

The present road through Higham and Stretton to Claycross seem to follow the course. Bishop Bennet, in 1817, describes it as being quite plain for 300 yards through enclosures and over Tupton Moor three miles south of Chesterfield.⁴

S. Pegge, Roman Roads in the Country of the Coritani, p. 6.
 Lysons, Derbyshire, p. ccviii.
 Bishop Bennet. Lysons, vol. v. p. ccix.
 Lysons, vol. v. p. ccxi.

A few miles north of Chesterfield the course of Riknild Street is shown on John Warburton's map of Yorkshire by Eckington to Beighton. There is a note on the map, "Here Rikenild Street enters from Darby," and that is confirmed by the discovery in 1847 of a paved road crossing the railway obliquely on the north of Beighton railway-station. 1 Warburton marks the road on by broken lines, as not visible, to a Roman camp at Templebrough, on the south side of the river Don, about a mile to the south-west of Rotherham. The camp (about 200 yards by 120 yards), can still be distinguished, and important remains have of late years been discovered there. On the north of the Don more than one line of ridges could formerly be traced, and are marked on the Ordnance maps as Roman, and it is far from certain which of them, if either, represents Riknild Street. One line marked "Roman ridge" runs by Meadow Hall, Kimberworth, Greasborough, and just below the dam of the lowest pond in Wentworth Park. On the north of the pond the ridge remains tolerably perfect, with a ditch and counterscarp on the south-east side, and has all the appearance of a defensive work. It can be traced on to Upper Haugh, and a lane seems to connect it with a ridge which is visible on the north of Birch Wood. The Ordnance map continues it for a mile further. Another line of "Roman ridge" is marked close to this one about half-a-mile on the north of Meadow Hall; it passes half-a-mile to the west of Kimber-

¹ Hunter's Hallamshire, p. 23.

worth, and crosses Dog Kennel pond in Wentworth Park. On the south of the pond the ridge is visible without ditch or counterscarp, and it is shown onwards for a mile and a half by Hollen Hall to Hoober Hill, where it turns nearly eastward by Abdy and through Wath Wood, to the north of Swinton. Parish boundaries run along the line for the greater part of the way, and the ridge lately remained in many places.

If either of these ridges represents a Roman road, it would seem to lie more in the course of Batham Gate from Buxton onwards to join Riknild Street, than in that of Riknild Street itself. The connexion of the ridges with the camp at Templebrough on the other side of the Don is not clear, nor is there any trace known of a Roman road to Templebrough from the direction of Beighton. It is possible that Riknild Street followed a more direct course northwards from Beighton. A road following Warburton's line through Eckington and Beighton continues on to Aughton, and then turns more to the west to Guildthwaite, from which place tracks continue the same line to Alpha Place, and then, with a slight turn, roads, tracks, and a parish boundary carry the line on to the river Don at Aldwarke in the direction of Swinton; but from Aldwarke to Swinton, three and a half miles, there is no trace on the ground, nor other indication.

From the north of Swinton, a parish boundary runs nearly due north to the river Dearne, and the course of Riknild Street is marked on Warburton's map as visible onwards in that line for several miles to beyond Thurnscoe, and on by broken lines, which

seem to follow parish boundaries for some miles, to Nostell and Normanton, and to the river Aire at Woodlesford (Swillington bridge), four miles above Castleford. On the north of the Aire, the road is marked on Warburton's map as being visible for eight miles: Street Lane follows it, and in about a mile is joined by a parish boundary. On the east of Temple Newsham the ridge, which the boundary follows, is still visible on the west of the lane, and is again to be seen on the east of Austhorpe, and in places nearly as far on as to Scholes. For four and a half miles the course of the road is still plain, parallel to, and less than three and a half miles from Erming Street. Warburton's map shows it as being visible on as far as the Roman road from York to Adel and the Chevin, and by broken lines on by Rigton, and west of Stockeld Park and Goldesborough to Arkendale, from which place onwards it is marked as visible. The course is by Minskip, where there is a welldefined rectangular camp about 100 yards by 75 yards, apparently a military post on Riknild Street rather than an outpost of Isurium, as it has been supposed to be. Riknild Street is shown on Warburton's map passing about half-a-mile west of Boroughbridge, and joining Leeming Lane at Kirby Hill

There appears to be now little trace of Riknild Street for some distance north of Chesterfield, and it may perhaps be considered unlikely that there was a second Roman road in that direction within a few miles of Erming Street and Rudgate. But for four

and a half miles north of the river Aire the two roads remain evident, and further north both Riknild Street and Rudgate are mapped by Warburton, who rode over the latter; his journal showing, as in other cases, that his map is the result of personal observation.

The explanation of the two parallel roads so near together appears to be that the original road to the north was by Riknild Street, and that with the rise of York the road by Doncaster and Castleford was made, and also the road branching from it by St. Helen's ford and Rudgate to *Isurium*.

(3) Derby to Buxton.—A Roman road went from Derby by Buxton to Manchester, of which there are now few traces for 14 miles from Derby. Bishop Bennet described 1 it, in 1817, as branching at Darley Slade, and passing between Kedleston Park and Duffield, and close by Hopton, where a part of it had lately been opened, and over Brassington Moor, where it was visible. Near Slipperlow Farm a parish boundary runs straight for one and three-quarters of a mile by Minninglow, and then follows a road for half-a-mile to Pike Hall, halfway between Hartington and Winster. After a gap of half-a-mile a parish boundary in the same line marks the course of the road over Smervil Moor, Middleton Common, and by Benty Grange, to Henmoor (1140'). In Bishop Bennet's time the road was visible from Pike Hall to Henmoor on the east of the modern road. Half-a-mile further the parish boundary joins the road

¹ Lysons, vol. v. p. cexiii.

and follows it to Street House. The modern road then turns to the west to ease the hill, and the course of the old road, as indicated by the parish boundary, continued on, the modern road rejoining it in about two miles near Brierlow. The road and parish boundary go on straight to near Buxton, and then wind to Buxton together. Remains of Roman baths and other buildings were formerly found here.

On the north-west of Buxton the main road, and then a lane, appear to be in the line of the old road for a mile and a half; a parish boundary then joins the lane and follows it in the same line to Wythen Lache, beyond which the course is uncertain. It no doubt continued on through Stockport to Manchester.

(4) Batham Gate.—From Buxton a Roman road called Batham Gate or Bath Way led in a northeasterly direction. About one and a quarter miles from Buxton, on the Chapel-en-le-frith Road, a narrow lane branches off to Peak Forest railway-station, with a parish boundary along it. The boundary continues on to Smalldale, where a road, and a footway beyond take up the line. In 1769 it could be traced through enclosures, and was very visible over Tidswell Moor for many yards together, seven or eight yards wide. Bishop Bennet describes it, in 1817, as visible for a mile on the Buxton side of the stone fence between Tideswell and Bradwell Moors, and quite plain near the fence, 18 or 20 feet wide. It passes north of Bradwell, and in 1769 it

¹ Pegge, loc. cit., p. 12. ² Lysons, vol. v. p. ccviii.

was plain for a mile onwards, to Brough, where remains of a Roman camp about 103 yards by 90 yards lately existed. Beyond Brough for two miles the line is lost, but from the river Derwent it ascends in a straight and very steep course, and above Bamford remains in much perfection. It crosses the moors between Stanedge and Redmires, where the large paving-stones remain in many places. It there bears the name of "Long Causey," and continues on through Lydgate, over Crookesmoor, and along Camp Lane, and is then lost in the suburbs of Sheffield. It probably joined Riknild Street near Swinton.

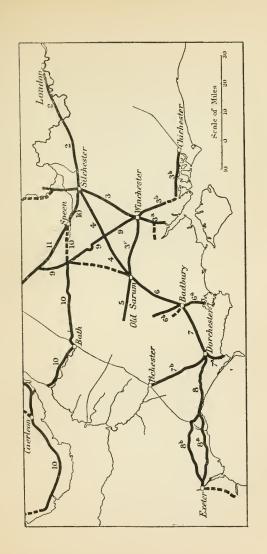
¹ Guest, History of Rotherham, 1879, p. 593.

CHAPTER IX

ROMAN ROADS FROM LONDON TO SILCHESTER AND THE WEST

- (1) General Course.
- (2) London to Silchester.
- (3) Silchester to Winchester.
 - (a) Winchester to Bitterne.
 - (b) Winchester to Porchester and Chichester.(c) Winchester to Old Sarum.
- (4) Silchester to Old Sarum.
- (5) Old Sarum to the West.
- (6) Old Sarum to Badbury.
 - (a) Badbury to Poole Harbour.
 - (b) Badbury to Ashmore, and to Hodhill.
- (7) Badbury to Dorchester.
 - (a) Dorchester to the South.
- (b) Dorchester to Ilchester.
 (S) Dorchester to Exeter.
 - (a) Coast-road to Exeter.
 - (b) Road by Axminster and Honiton.
- (9) Winchester to Cunetio and Wanborough.
- (10) Silchester to Speen, Bath, and South Wales.
- (11) Speen to Gloucester.
 - (a) Gloucester to Worcester.
 - (b) Gloucester towards Bristol.
- (12) Gloucester to Redbrook, and to Caerwent.
- (13) Iter XIII. of Antonine.
- (14) Gloucester to Llandovery.
 - (a) Abergavenny to Brecon.
 - (b) Aberyscir to the North.(c) Sarn Helen to Neath.
- (15) Llandovery to Llanio, etc.
- (16) Llandovery to Carmarthen.
 - (a) Carmarthen to Llanio.
- (17) Carmarthen to the West.
 (a) Ffordd Fleming.
 - 2

- (1) General Course.—The Roman road from London, which branching at Silchester communicated with the west of England and South Wales, is not referred to in the Laws of Edward, though it was as important as any of the Four Ways. The road takes a direct course from London to cross the Thames at Staines, beyond which it bends slightly towards the south, and then turns due west, straight to Silchester, the Roman Calleva Atrebatum. From Silchester a road of which little trace remains led to the north. To the south a road went to Winchester, from which roads ran to Porchester and Chichester, to Bitterne near Southampton, and to Old Sarum. To the south-west the Portway led direct to Old Sarum, from which one road went to Dorchester and Exeter, and another westward, perhaps on to the Mendips. From Silchester to the west was a road to Speen, where it divided, one branch going to Bath and across the Severn to Caerleon and South Wales, and the other to Cirencester, Gloucester, Brecon, and to beyond Carmarthen. Crossing these roads was a road from Winchester by Marlborough to near Wanborough, which formed a part of Higden's Erming Street from St. David's to Southampton.
- (2) London to Silchester.—The course of the road from Roman London towards Silchester has been noticed as far as the original Watling Street at the south end of Edgware Road (p. 65). From the Edgware Road the course continues on to Notting Hill along the line of the Bayswater Road, which



a parish boundary follows nearly all the way to the Westbourne stream. There is then a slight change of direction, and thence to Staines, 141 miles, the course of the road is so direct that it is nowhere more than a quarter of a mile out of a straight line. It would seem that from Notting Hill, on the edge of a terrace 95 feet above the sea and overlooking the Thames valley, some landmark or beacon, on ground (175') near Upper Bakeham to the southwest of Egham, was the point to which the course of the road was directed. From Upper Bakeham the towers of South Kensington and Westminster can be plainly seen, and the high ground at Upper Bakeham must have been equally visible from Notting Hill before houses obscured the outlook. From Notting Hill the Roman road followed this line, which is the general course of the present high road until the latter turns southwards towards Chiswick. Stukeley rode on by a narrow straight way to Turnham Green, where to a discerning eye the trace of the road was manifest.1 Parish boundaries, which have followed the present road all along, continue straight on in the same line by Stamford Brook Road to Stamford Brook, through Bedford Park, across Acton (Turnham) Green, and south of Acton Green railway-station, to near Gunnersbury station, and then along the high road again; and indicate the course of the Roman road to near Kew Bridge railway-station. The straight line appears to have been departed from to keep clear of the Thames, and through Brentford, and on nearly to

¹ Itinerarium Curiosum, p. 205.

Hounslow, the course of the road is uncertain. It is probably followed by the present road, curving northwards near Spring Grove to avoid a stream. From the east end of Hounslow lengths of straight road, almost in the same line, followed almost continuously by parish boundaries, indicate that the present road follows the course of the Roman road to Baber's Bridge. The Roman road itself was uncovered by General Roy at the end of the eighteenth century on Hounslow Heath, at the side of the modern road. For two miles on to East Bedfont a parish boundary runs straight a little on the south of the modern high-road, and then the latter, with a slight turn, goes straight to Staines with parish boundaries along it for the last mile and a quarter. The straight line crosses the Thames to Hythe a little to the south of the present bridge, and near the site of the old bridge, to the west of which Stukeley 1 saw the old road very evidently go through the fields, the ridge being then visible; but no sign of it now appears. He traced it along a lane and a footpath towards Thorpe Lea.

In 1835 the officers studying at Sandhurst made a survey of the Roman road onwards to Silchester, and a memoir was furnished to the *United Service Journal*.² At Bakeham House, now called Upper Bakeham House, the substratum of the road, and also the foundation of a building, and other Roman remains, had then lately been discovered, proving apparently that the

¹ Itinerarium Curiosum, p. 205.

straight course of the road had continued from Notting Hill to that point. In the valley, nearly half-amile to the south of this line, a stone pillar erected near Great Fosters in 1850 records that it marks the site of a Roman road to Silchester, a portion of which remains in the adjoining meadow. If so the road did not continue straight on, but bent to the south after crossing the Thames; the pillar may however mark the site of a branch road. Beyond Bakeham the memoir referred to states that the direction was through the yard of the inn at Virginia Water, where according to a tradition a foundation of gravel, supposed to be the Roman road, had formerly been discovered, and also that the line cuts Virginia Water, and that the ridge could be distinguished for 300 yards, where one of the drives in Windsor Forest ran along The yard of the inn seems to be out of a line across any part of Virginia Water, and no trace of the ridge is now distinguishable on to Belvedere, and the course of the road is uncertain.

It is likely that the hill on which the Belvedere Tower stands (260') was the point made for from Bakeham Hill, though it was perhaps avoided by the road. Beyond, the course of the road lies in a straight line between it and Duke's Hill, Bagshot (300'), the direction changing slightly, but the road from Notting Hill to Duke's Hill is so nearly straight for 23½ miles that no part is as much as three-quarters of a mile away from a straight line between those places. At Sunningdale the road is found in digging in the allotments near the church, and it was until lately visible

on by King's Beeches, and by Chater's Pond, and to the back of Windlesham Hall, where the county boundary marks the line of it for a mile and a half. Enclosing, planting, and laying out the grounds of new houses have now however almost effaced all trace of it. About a mile from Duke's Hill it is described in 1835 as being raised to a considerable height where it crossed a marsh.

At Duke's Hill (300') there is a change of 27° in direction, and the road goes nearly due west for 16 miles to Silchester. Under the local name of the Devil's Highway, it passes over Easthampstead Plain in a straight line to a point (311') called Crowthorne on the old Ordnance map, and Circle Hill and Lodge Hill on the new map, and then in nearly the same line to Ridge Farm, Finchampstead (331'), and with a slight turn southwards on by St. James' and West Court. On Easthampstead Plain it passes a mile south of a large intrenchment called Cæsar's Camp, between which and the road, at Wickham Bushes, Roman coins and pottery are found. The Devil's Highway is said by Bishop Bennet 1 to have been raised with a trench on each side, and to have been go feet wide, which probably included the trenches. It was levelled at the beginning of the last century when the ridings were cut. In 1835 portions were still existing to the north of Finchampstead Church. It crossed the Blackwater at Thatcher's Ford, and the river Loddon at Stanford, near the north of Stratfieldsaye Park, and beyond that, Park

¹ Lysons, vol. i. p. 201.

Lane, also called the Devil's Highway, with the county boundary along it for two miles, runs in a straight line to the east gate of Silchester (*Calleva*).

From Duke's Hill, Bagshot, to Silchester, 16 miles, no part of the road is a quarter of a mile out of a straight line joining those places.

From near Duke's Hill a Roman road has been supposed to have gone southward to Frimley, Farnborough and Farnham, and the change in the direction of the Silchester road has been thought to confirm the supposition, but without much reason. Stukeley tells us ¹ that he traced a Roman road from Winchester to Farnham and Farnborough, and which he supposed went on to Staines. He says that between Farnham and Alton the bank was visible, and in several places between Alton and Alresford. There appears to be no evidence of this road.

Silchester, on ground 300 to 320 feet above the sea, is in shape an irregular polygon 820 yards from the east to the west gates, and 803 yards from the north to the south gates. Outside the Roman walls are earthworks of uncertain age. Five Roman roads converge to *Calleva*, approaching it in different directions, and it cannot be doubted that it owed much of its importance to its being the place where the road from London branched in many directions.

The excavations carried on in recent years show that the street in continuation of the road from

¹ Itinerarium Curiosum, p. 203.

Staines runs straight from the east gate to the Forum, and a parallel street about 93 yards to the north of it leads to the west gate. A street at right angles to these led from the north to the south gate. The east and west gates consisted of two covered passages, 13 feet wide, separated by a middle pier, while the north and south gates had only one passage of 13 feet.

There was no doubt a road from Calleva northwards, but there is nothing to show its course with any certainty, nor could Bishop Bennet trace it in the beginning of the last century. Faint traces appear to have been observed in 1837 in a line between the north gate of Silchester and Ufton Church, and 25 or 30 years before that the road is said to have been traced by excavations in that line for 800 yards. The modern road by Englefield to the ancient ford across the Thames between Pangbourne and Whitchurch is a continuation of the same line. The indications of a Roman road in this direction on the west of the Thames through Streatley to Dorchester have already been noticed (p. 244).

(3) Silchester to Winchester.—This road left Calleva by the south gate, and its course is marked by the road by Three Ashes and Hall-in-the-Hole to Latchmere Green. Sir R. Colt Hoare says 2 that the ridge was "seen very fine" behind a barn on the side of the road from Three Ashes to Scotchman's Green, but he appears to refer to an earthwork a quarter of a mile

¹ Gent.'s Mag., 1838, part i. p. 192. ² Ancient Wilts, Roman Æra.

away from the line of the Roman road, and the pitching of the latter has since been opened on Latchmere Green.1 For three miles from Latchmere Green the course is obscure, but on mounting the chalk at Sherbourne St. John the line is taken up by the present road, and by a track over Rook's Down, on the highest point of which (440') a short bit of the ridge remains supporting two fir-trees. From this point Silchester is visible, and a lane, followed by a parish boundary, continues the line for a mile and a half to Worting Cross. The parish boundary continues on in the same straight line for four miles from Rook's Down, and no doubt marks the course of the Roman road, of which there is now no trace on the ground. Near Southwood Farm the parish boundary bends, and is soon joined by the Basingstoke and Winchester road, along which it runs to the Wheatsheaf Inn. It would seem that the Roman road was laid out in a straight line between Rook's Down (440') and high ground (552') between Southwood Farm and Kempshott House, and that the high ground was avoided on approaching it by the turn near Southwood Farm. The course of the Roman road appears to continue on in the same straight line from the Wheatsheaf to about a mile south of Popham, the present road lying a little to the west of it; there is then a slight turn, and the modern road, followed by a parish boundary for three miles, occupies the line of the old road along the west side of Stratton Park, and on in a straight line to King's Worthy. The road then turned away from the

¹ Maclauchlan, Archaol. Journ., vol. viii.

river and passed through Headbourne Worthy in a course not very plain, and then followed the line of the present road in a straight line as far as Abbot's Barton, through the grounds of which the same straight line is continued, and where some remains of the ridge can still be traced. The course onwards to the site of the north gate of *Venta Belgarum* (Winchester) is now covered with buildings.

The Roman city, on the west of the river Itchen, was a rectangle with rounded corners, measuring about 860 yards from the east gate near the river-bank to the west gate at the other end of High Street, and about 780 yards from the north gate to the south gate; the principal cross street of the Roman city being marked by Southgate Street and Jewry Street at right angles with High Street.

A Roman road left the south gate of the city, the course of which the present road follows through St. Cross to Compton; between the latter place and Otterbourne the old Ordnance map shows the ridge of the road for half-a-mile close alongside the present road on the east of it. It can be traced in Otterbourne Hill Wood, but not beyond, unless Stoneham Street indicates the line. It led to the Roman station on the east bank of the Itchen at Bitterne, where near the east end of Northam Bridge a vallum 460 yards long cuts off a promontory, generally supposed to be Clausentum.

Iter VII. of Antonine from Regnum to Londinium passes by Clausentum, Venta Belgarum, Calleva, and Pontes. Between London and Clausentum the

Itinerary distances agree fairly well with measurements on the map, bringing Pontes a mile or more to the west of Staines, a more likely situation than on the low ground by the Thames, but between Clausentum at Bitterne, and Regnum (Chichester), the distance is 28 miles, compared with 20 M. P. in the Itinerary. There appears to be now no trace of a Roman road from Bitterne in the direction of Chichester.

A Roman road, said to have come from Bitterne, but more probably from the Winchester road on the west of the river Itchen, has been described as passing along Burgess Street and the north of Southampton Common, where the road is a parish boundary for a mile, over Shirley Heath to Nursling, where it crossed the river Test at a ford near the mill, and on to Tachbury Mount, near which a fragment remained in 1834. The Roman road, of which traces remain on Beaulieu Heath, presumably branched from this road to Lepe, whence it is supposed the Solent was crossed to the Isle of Wight. Rew Street, running southward from Gurnard Bay, has been thought to show the point of landing in the island, but there is no evidence for that or any other Roman road in the Isle of Wight.

Winchester to Porchester.—A Roman road left Venta Belgarum by the east gate, and after crossing the Itchen and turning south, curved round between St. Catherine's Hill and Deacon Hill, and then bent nearly at right angles towards the south. A parish boundary along the road for three miles and a quarter round the curve and on to Morestead, shows that the present

¹ Journ. Archaol. Assoc., 1891, p. 182.

Bishops Waltham road follows the same line. A straight line is then entered upon which ranges with high ground (471') on Deacon Hill, and can be traced for about six miles. There are remains of the ridge in the wood a little south of the turn, and in the belt of trees on the west of the present road. South of Morestead a parish boundary runs alongside the road for half-a-mile, and in Jackman's Copse there are remains of the ridge. The old Ordnance map shows it for a mile and a quarter near Owslebury, and it is still to be traced through Anstice's Copse, and on through Rowhay Wood for more than half-a-mile. The same line is taken up by a lane a mile and a quarter further on, and the ridge is to be traced for half-a-mile on to Wintershill Farm, a mile and a quarter west of Bishops Waltham. Beyond that, on the tertiary beds, there is no trace except perhaps the name Cold Harbour, a mile north-west of Wickham. Stukeley says that upon Portsdown Hill he found some of the Roman way, which he supposed to go through Fareham and Havant to Chichester, with a branch to Porchester. Porchester Castle is one of the most perfect Roman walled fortresses remaining. It stands on a low point of land jutting into Portsmouth Harbour, the cast wall, with a water-gate, being washed by the tide. It is a square of about two hundred and ten yards, with corner towers and mural bastions. It appears to be of a late Roman period. A parish boundary runs along the top of Portsdown for three miles, which may indicate the line of the road to Chichester.

Winchester to Old Sarum.—The Romsey road is nearly on the course of the Roman road from Winchester to Old Sarum for three-quarters of a mile from the west gate. It then leaves the line, which is followed straight on by a highway to high ground (484') at the south-west corner of Teg Down, where there is a turn, and a straight course begins, which is followed for six miles to the west side of the Test valley. The ridge of the road is shown on the old Ordnance map for nearly the whole distance. It is still observable beneath the present road between Teg Down and Crab Wood; it can be followed through West Wood, and it is plain on the west of the wood. Beyond Garlick Farm the straight line is taken up by a hedgerow about half-a-mile south of Kings Sombourne, and on the edge of the Test valley (200') the hedgerow and a lane bend slightly towards the north, and descend to Horsebridge Farm. In the beginning of the nineteenth century the pebbles of which the upper crust of the road was formed were still apparent on the east side of the Test valley, and the piles of a Roman bridge are said to have been found in cutting the canal near Horsebridge lock.1 A bank somewhat resembling the ridge of a Roman road in the meadow on the north side of the road from Kings Sombourne, was the boundary fence of John of Gaunt's Deer Park.

On the west of the river a piece of the ridge is shown on the old Ordnance map, and again towards

¹ Sir R. C. Hoare, Ancient Wills, Roman Fra.

Littlewood, on the north of which it is still visible.1 The present road then joins the course of the Roman road, which lies in a straight line between Farley Monument (587'), erected on a barrow four miles east of the Test valley, and Middle Winterslow (500' +), seven miles west of the valley. The old Ordnance map shows the ridge for the greater part of the way; and traces remain beyond Buckholt Farm and towards Winterslow, where the present road leaves the line. A parish boundary follows the road for a quarter of a mile near Noad's Coppice. From Middle Winterslow the ridge of the old road is shown on the old Ordnance map winding down the steep hill and then running straight for three miles across the lower ground, over Winterbourne Gunner Down, and through Stock Bottom on Winterbourne Down, half-a-mile south of Figsbury Rings. The traces of the ridge are now effaced in the low ground, and a good deal of the down has been ploughed up, but on Winterbourne Down it is still to be seen for a mile and a half. There is then a bend, and the road makes straight for the south side of the inner mound of Old Sarum. It crosses the Bourne at Winterbourne Ford, and the lane which now marks the course may be seen from the railway, running straight up to Winterbourne Down. A lane continues on westward straight to Old Sarum, followed for one mile by a parish boundary.

A pig of lead, found at Bossington on the west of the river in 1783, which is in the British Museum, bears a stamp showing the date of it to be A.D. 60. (Gent.'s Mag., 1783, part ii. p. 935.) It apparently is evidence of traffic along the road from the Mendip mines at that early period.

The 19 M.P. between *Venta Belgarum* and *Sorbiodunum* in Antonine's *Itinerary* measure 21½ miles. The intermediate station, *Brige*, was placed by Sir R. Colt Hoare at half-a-mile east of Buckholt Farm, about 12 miles from Winchester.

(4) Silchester to Old Sarum. This road, called the Portway, was supposed by Sir R. Colt Hoare to branch off from the Winchester road outside the south gate of Silchester, in the wood below the wall, where he says it was visible. A comparison of his map with that of Maclauchlan (1850) shows that the Roman roads of the former are ancient intrenchments in the latter. The new Ordnance map, on what authority does not appear, shows the road by a dotted line from the West Gate, through Pamber Forest, and by Tadley Place Farm to Foscot. Sir R. Colt Hoare failed to trace it, and Maclauchlan, in 1851,1 found not the least vestige of the road eastward of Foscot. There the tertiary beds are quitted, and on the chalk escarpment, six miles from Silchester, the ridge of the road is shown on the old Ordnance map for one and a half miles pointing towards the south side of Silchester, and in the opposite direction to high ground (700') at Freemantle Park Farm, but it is now hardly traceable. At Freemantle Park Farm (700') there is a very slight change in direction, and the road appears to have been directed to the high ground (450') on the south side of Quarley Hill, nearly 19 miles off. The ridge was formerly traceable by Walkridge Farm and over Ridge Heath for four and a half miles, but it has

¹ Journ. Archeol. Inst., vol. viii.

been effaced by planting a belt of trees along it. The line is fortunately preserved by parish boundaries for three and a half miles to Bradley Wood, beyond which traces of the road are lost for two miles and a half. About half-a-mile on the west of St. Mary Bourne, the paving of the road was removed in 1879 for a length of a quarter of a mile on account of its interference with farming operations. It was found at from four to eight inches below the surface, and was about eight yards wide. The outline of the road is traceable in the wood to the eastward, and the course of the Portway onwards is taken up by the present road to Andover by Finkley. At Finkley, eighteen miles from Calleva, Sir R. Colt Hoare placed Vindomis, a station named in Iter XV., but the distances from Calleva and from Venta Belgarum would place the station to the east of St. Mary Bourne.

The Roman road from Winchester to *Cunetio* and Cirencester crosses the Portway about one mile to the west of Finkley, but there are few traces of the latter for two and a half miles across arable land until the Andover and Weyhill road is reached. There, in a straight line with the course of the Portway, which can be seen by Finkley and towards St. Mary Bourne, is a road to the south-west followed by a parish boundary, and the same line is continued by the road onwards through Monkston and Amport to the south side of Quarley Hill, from which, looking eastward, the

¹ Jour. Brit. Archaol. Ass., vol. xxxv. p. 92.

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course of the road can be traced in a straight line to Freemantle Park, more than 18 miles distant. There is then a turn, and the line of the road lies straight between the south side of Quarley Hill and the south side of the central mound of Old Sarum, ten miles off. From the top of Quarley Hill Old Sarum is visible, as it would doubtless be from the line of the Roman road on the south slope of it if a plantation of trees did not intervene. The present road occupies the course for about half-a-mile, and then there is a track over the downs, generally a slightly raised grass-covered ridge, but in places worn down to the flint surface of the old road. In about a mile the railway approaches it on the south and runs close alongside it for three and a half miles to near Idmiston. On down land the appearance continues the same, but where the land has been ploughed up the road is no longer traceable. On the down on the east of Idmiston the ridge of the road remained inside the railway fence until the railway was lately widened. At the descent into the Idmiston valley the track of the Roman road leaves the railway and diverges somewhat from the straight course in crossing the valley. It is shown on the old Ordnance map resuming the same straight line and passing round a barrow, but all traces of road and barrow are now effaced by ploughing. Through Porton and Gumbleton the course of the road is uncertain, but on the other side of the Bourne valley it is shown by a line of highways and tracks pointing straight to the south side of the central mound of Old Sarum, and continuing to within half-a-mile of it.

A straight line from Silchester to Old Sarum passes a mile to the south of the Roman road at Quarley Hill, where the road lies farthest away from a straight line in the 36 miles between those places.

It is to be noticed that this road, the Roman road from Winchester, and that on to the west, all three point to the inner of the two immense concentric ramparts of Old Sarum. The outer ring, which is supposed to have been strengthened by Alfred, has a mean diameter of about 520 yards.

(5) Old Sarum to the West.—The course of this road for the first three and a half miles across the valleys of the Avon and the Wily is uncertain. A ford and causeway across the Wily about a quarter of a mile below South Newton Mill may possibly mark the crossing of that river. Sir R. Colt Hoare described this road, and gave a map of it,1 which is based on the old Ordnance survey, with additions and slight alterations. Then, as now, the first traces of the Roman road appear as a ridge issuing from the northeast side of Grovely Wood, pointing to the ramparts of Old Sarum, and according to Sir R. Colt Hoare it continued an uninterrupted course through thick copse wood for several miles until it made its exit near Dinton Beeches, and he speaks of its well-known course. The old Ordnance map and Sir R. C. Hoare's map both show the ridge through Grovely Wood in a straight line between the south side of the inner ram-

¹ Ancient Wilts, Roman Æra.

part of Old Sarum, and high ground (648') near Dinton Beeches, and then on in nearly the same straight line through Stockton Wood and Great Ridge Wood to a quarter of a mile north of Lower Pertwood Farm, sixteen and a half miles from Old Sarum. The new Ordnance map marks the course through Grovely Wood, where it is now very difficult to follow it, by a dotted line not straight, but changing its direction at Grovely Lodge, and bending in the wood to get to Dinton Beeches; and beyond, what is a very crooked ditch and bank on the south of Stockton Wood and Great Ridge Wood, is marked Roman road. Sir R. Colt Hoare carefully mapped and described both the ditch and the road, and he found the latter beyond Dinton Beeches distinguishable across arable fields by a line of large flints, and passing into Stockton Wood, where he shows it on his map of the Stockton earthworks.1 It is not now traceable, but there is little doubt that the true line of the Roman road is that laid down on the old Ordnance map. Near Lower Pertwood Farm the ridge is shown on the old Ordnance map, and it is described by Sir R. Colt Hoare as passing round a tumulus in its course. Beyond that traces of the road are lost; Sir R. Colt Hoare conjectured that the course was along a road north of Kingston Deverill, and then confesses himself at fault for a very considerable distance; and the course he gives by Maiden Bradley and East Cranmore to the Mendip Hills appears to have little evidence on the ground, or from parish boundaries. The old Ordnance map shows a piece of ridge nearly in

the line of the ridge at Lower Pertwood, on Long Knoll, one mile south of Maiden Bradley. A parish boundary follows the ridge, which points to a barrow on the west end of the knoll. It is six miles from the ridge near Lower Pertwood, and there are no traces of the road beyond. The continuation of Sir R. Colt Hoare's road over the Mendips has already been noticed in connexion with the Foss road (p. 265).

(6) Old Sarum to Badbury.—This road quitted Old Sarum on a line straight from the south side to the crossing of Bokerly Dyke (410'), 10 miles distant. A lane called Portlane leads to a ford south of Stratford-sub-Castle, where the Roman road crossed the Avon near Coldharbour Farm, and a track, and Folly Lane, mark the course on in the same line to Bemerton, where Stukeley tells us 1 a stony ford over the Nadder was still very perfect. A road up to Wilton racecourse, along which a parish boundary runs, follows the line, and beyond, a green track through ploughed land, a track across the down, and a lane, mark the course to near Toney Stratford, where the river Ebble was crossed. A track, now a good deal effaced, leads on to high ground (500'), one mile south-south-west of Bishopstone, where a remarkable diversion from the straight line begins. The latter was no doubt laid out from points on the high ground (500') intermediate between Old Sarum and Bokerly Dyke, but if it had been followed it would have crossed in the space of a mile and a half three steep-sided coombes 150 to 250 feet deep, separated by two

spurs of similar height, before regaining the 500 feet level. The road in such a position would also have been exposed to hostile attack from the high ground commanding it on the south. The straight line was therefore departed from, and the road was kept on the high ground to the south of the coombes. The ridge of the road is shown on the old Ordnance map for nearly the whole length of the diversion. Sir R. Colt Hoare described it some few years later as in very perfect form on the down, and traces still remain. A narrow lane, and a track beside a hedge where the land has been ploughed up, now mark the course. Stukeley, who describes this "diverticulum," says that the ridge was very perfect to the west of it, butting full upon the end of a vast valley very deep and of steep descent. The course of the road where it resumes the same straight line as before is now marked by a track along a hedgerow north-west of Knighton Woods, where traces of a paving are marked on the new six-inch Ordnance map, and by Vernditch Woods to the down, where the embankment is very conspicuous, and the ditches at the side remain, including which the total width is about 20 yards. A parish boundary follows the ridge here for a mile and a half. Where the embankment is away from the modern road it remains almost perfect, about five and a half yards wide at top, and as much as six or seven feet high, and where a drove-way has been cut through, it shows a coating of tertiary gravel, two feet six inches to three feet thick. This must have been brought some four or five miles from the south. A little further on the ridge has been entirely cleared away, the materials having been taken to make the embankment of the modern road where it crosses a hollow. There are no traces of side ditches on the surface, but sections cut by General Pitt Rivers 1 revealed them, and showed the ridge to consist of a layer of nodules of flint on the old surface, upon which were six inches of rammed chalk, ten inches of tertiary gravel, six inches of rammed chalk rubble, six inches of gravel with rounded (tertiary) pebbles, with five inches of surface mould over, making a total height of three feet from the original surface to the top. The gravel top must have been entirely removed where this section was made. Towards Woodyates, where the old and the modern roads approach, the gravel top has been dug out from the middle of the embankment to a depth of more than two feet. Bokerly Dyke, a rampart and ditch which for some miles constitutes the county boundary, here crosses the Roman road, and the excavations made by General Pitt Rivers throw light on both. He cut a section through Bokerly in the line of the Roman road, which proved that the dyke was raised upon and across the road. A flint pitching mentioned in connexion with the latter would seem to have been the lowest stratum, not the surface of the road. Coins found in the rampart proved it to be not earlier than A.D. 394-423, and General Pitt Rivers considered it might possibly have been thrown up by the Romanized Britons, and he supposed that the Romano-British settlement exca-

¹ Excavations in Bokerly Dyke, pl. clxiii.

vated by him here was *Vindogladia*, a station in Antonine's *Itinerary*, 12 M.P. from *Sorbiodunum*, but also eight M.P. from *Durnonovaria*. Sir R. Colt Hoare placed *Vindogladia* at another settlement found by him on Gussage Down, some five miles further on; and he altered the *Itinerary* distances accordingly.

Immediately on the west of Bokerly the Roman road makes a turn through about 25° towards Badbury Rings, a conspicuous British camp 11 miles off. The first point made for was, however, on Harley Down (360'), five miles distant. For half-a-mile from the turn the line of the old road is in enclosed land on the north of the present road, and nothing remains visible but an undulation of the surface. Woodyates, formerly Woodyates Inn, is on the course of the Roman road, and then for a mile the present road occupies the site of it, the ridge having been destroyed, but a parish boundary running along the road. The present road then turns towards the west, and the Roman road, here called Achling or Ackling Ditch, or Dyke, goes straight on, and is very perfect for four miles across the downs, a parish boundary following it for three miles. It is five yards wide across the top, and four, five, or six feet or more high. The gravel top has been dug away in places to a depth of two or three feet for the sake of the material. Traces of the side ditches remain, and in several places they cut the annular bank and ditch surrounding a barrow. This is perhaps the most striking example of the embankment of a Roman road remaining in the country. It runs for miles in a

straight line in bold and sharp relief over the open down, and the magnitude of the work and its situation

are alike imposing.

At the highest point on Harley Down (360'), there is a slight turn more to the south in the direction of the east side of Badbury Rings. When the down is left the ridge appears as a hedgerow at the side of a lane, worn away on the other side by the plough, and with a parish boundary along it. After crossing the Gussage brook the lane ends in an old chalk-pit, but the parish boundary continues on for a quarter of a mile to a lane, beyond which a footpath and a fence along the east side of the enclosed Holly Down carry on the line. In a mile the grounds of Crichel Park are entered, and the ridge is traceable through the rookery. The school on the small common to the south of the park appears to be on, or close to, the line of the road, which is no longer traceable across the fields beyond. Witchampton Common, where Sir R. Colt Hoare saw the ridge entire in parts, has been enclosed, and a road has been made along the course of it, which is then followed by a lane for two miles to near Badbury Rings, except at one place where it cuts across the corner of an arable field which the lane goes round. From near Broadford, where a small stream is crossed, a parish boundary follows the lane for half-a-mile.

Badbury to Poole Harbour.—On the north of Badbury Rings the Roman road divides, one branch continuing on with a slight turn to the south, and the other branching off at an angle of 40° to the

south-west. The ridge of the road is plain a quarter of a mile north of King's Down Farm, and can be followed through a wood, on emerging from which it is again plain, first with the upper surface hollowed by digging out the coating of pebble gravel, and further on as a turfed ridge three yards wide and about two feet high. The direction is here a few degrees west of south, pointing between Badbury Rings and High Wood.

The great earthwork called Badbury Rings consists of three concentric ramparts and ditches which crown a detached hill of chalk (327'). It is rather larger than Old Sarum, the mean diameter of the outer defence being about 533 yards.

It is to be observed that for six miles north of Badbury the direction of the Roman road from Old Sarum is straight towards the east side of that earthwork, and with a slight turn, passes to the east of it, as if in the first place the road was laid out to communicate with the south rather than the west, and the road branching off towards the west was afterwards laid out.

Between Badbury Rings and High Wood the road bends to the south-east, and arable ground is entered upon, across which the course could be traced in 1847. The road does not now appear to be traceable between Badbury and the river Stour, but on the south side of the river the ridge can be followed across Eye Mead along the track marked on the

¹ Dr. Wake Smart, Proc. Dorset Nat. Hist. and Antiq. Field Club, vol. xv. p. 22.

Ordnance map; and the gravel surface of the road can be found a few inches beneath the turf. After the Stour valley had been crossed the road seems to have turned toward the west of south, and on the high ground on the south of the river, a section of the road was formerly to be seen in Corfe Mullen gravel-pit. The position in the pit, which covers several acres, is now unknown, and there is nothing to indicate the course of the road from the river. On the south of the gravel-pit a parish boundary marks the line, along which the ridge can be traced on to a lane about a mile west of Merley House, and then it is plain, a cart-track running sometimes alongside, and sometimes on the top of it, and on the heath it is almost perfect, four yards wide across the top, and three feet high. On the descent into a valley the ridge disappears, but on the ascent of the opposite hill it is again seen, and is very plain on the heath at Corfe Hills, of the same dimensions as before. After again disappearing where the line crosses a hollow, the ridge re-appears on the brow of the next hill, and a section exposed in a gravel-pit in 1900 showed one foot six inches of gravel on the old heath soil, with a bottom width of six yards. The ridge is higher on the top of the hill, and is again visible on the high ground to the south of the road to Broadstone. From that, down the hill, and across the railway to Upton House on Poole Harbour, the course of the road is marked by a track alongside a straight fence. Parish boundaries follow the straight road continuously for three miles from Corfe Mullen gravel-pit to Upton. The same straight line is continued on the south of Upton, and a piece of the ridge remains between Hamworthy Junction and Holes Bay. Traces also exist on the higher ground of Hamworthy Heath. The remains of the ridge there show a turn to the south-east, and in cultivated ground a little further on the road was taken up not many years ago. was also dug through about 20 yards west of Hamworthy Churchyard. 1 According to Warne 2 it crossed the Poole road, and after passing to the east of the old Manor House (now the Rectory), it terminated on the shore of the Poole estuary.

A Roman road leaving Badbury at or near the point where the road from Old Sarum divides has been traced northward to Donhead, by Hemsworth Down, to the east of Tarrant Monkton and Tarrant Hinton, through the grounds of Eastbury Park, and over Main Down, where the ridge is visible, to the high ground (850') on the north of Ashmore overlooking the vale of Wardour, into which it descends by Donhead Hollow.3 It preserves a straight course for 11 miles, which if continued would, in another 10 miles, join the Roman road from Old Sarum to the west at the last point to which it is traceable, near Pertwood.

There are indications of another road from Badbury to Hod Hill, where there is a Roman camp

¹ Wake Smart, Proc. Dorset Nat. Hist. and Antiq. Field Club, vol. xi. p. 21 (1889).

² Ancient Dorset, p. 183.
³ Proc. Dorset Nat. Hist. and Antiq. Field Club, vol. ix. p. 147.

within earlier intrenchments. A parish boundary in a straight line along a belt of trees for a mile and a quarter, points to Hod Hill eight miles off, and there are tracks onwards in the same line.

(7) Badbury to Dorchester.—The course of the Roman road in the direction of Dorchester, branching off on the north side of Badbury, where the ridge is plain, appears to be through Shapwick, nearly parallel to and on the north of the street, crossing the river Stour a little below the church, and on through Little Coll Wood to high ground (240') on the south of Coll Wood near Mapperton, where a hedgebank is in the line. Warnel describes the ridge a little further on as highly raised for 300 yards. A slight turn brings the line in the direction of the road through Winterbourne Kingston, and also pointing to the north side of the hill crowned by Maiden Castle (400') 15 miles distant, beyond Dorchester. A bit of the ridge remains in this line in Bagwood, half-a-mile west of Winterbourne Kingston, and there are several other traces between that and Tolpuddle, and fences and footways and bits of parish boundaries follow the line. From half-a-mile west of Tolpuddle a parish boundary marks the course for a quarter of a mile, and then there is no trace for several miles. The new Ordnance map shows remains of the ridge on Puddletown Heath, not in the same line, and where it is entirely hidden by the thick heath and furze. A piece of the ridge remains along the north side of the road through Kingston Park. The present road from

¹ Ancient Dorset, p. 174.

Grays Bridge to Dorchester appears to be on the line of the Roman road.

Dorchester, generally considered to be *Durno-novaria*, is bounded irregularly on the north side by the river Frome. Along the High Street the Roman city from the east to the west is 660 yards, and from the north to the south it measures from 360 yards at the east to 730 yards at the west. Though rectangular towards the south the general form approaches a quadrant of a circle.

The *Itinerary* of Antonine makes it 20 M. P. from *Sorbiodonum* to *Durnonovaria*, which is less than half the distance between Old Sarum and Dorchester. If the latter be *Durnonovaria*, 21 miles must be left out, with a station, probably Badbury, in the same way as a station and distance must have dropped out of Iter XIII. between Cirencester and Speen.

Dorchester to the South.—A Roman road from Dorchester to the south was very perfect between Maumbury and Winterbourne Monkton before the present turnpike road was made, "a high, broad ridge paved with stone." Near the latter place it passes within half-a-mile of Maiden Castle, a camp of oval form 1200 yards from east to west, and 550 yards from north to south, crowning a chalk hill (400') with vast triple ramparts, enclosing 43 acres of ground. There are evidences of Roman occupation, and some traces of the ridge of a road on the Dorchester side of the earthworks. The present Weymouth road is straight for three miles to Ridgeway Hill (440'); and

Hutchins' Dorsetshire (1796), p. viii. of 3rd edition, 1861.

at the beginning of the last century the elevated ridge, pitched with stone and nearly covered with turf, was still visible for half-a-mile beyond,1 and the course of the road was traceable on the south side of the hill to the west of the modern road. A parish boundary follows the course for three-quarters of a mile. On the south of Upway the Roman road appears to be on the east of the present Weymouth road, and the ridge, 10 yards wide, was lately visible in the lane leading to Thornhill Farm, and could be traced in a meadow opposite Broadway Church.² On the south of Broadway a parish boundary follows the straight road for half-a-mile to Redlands, and traces of the Roman road are said to have been found at the foot of the hill in Radipole parish. A parish boundary follows the present road for a quarter of a mile to the mouth of the Wey, near Radipole church.

Dorchester to Ilchester.—The road from Dorchester to Ilchester, which has been already mentioned (p. 267), appears to have left by the west gate, passing to the south of Poundbury, following the course of a straight road for one and a quarter miles to Bradford Peverel, and crossing the river Frome to Stratton in a straight line to the high ground (611') north of Frampton. It is described in 1796 as a "dorsum broad and high and paved with flints," 3 and it is still plain in the fields beyond Stratton, and at Grimston Common Field as an elevated ridge

¹ Hatcher, quoted by Warne, *Ancient Dorset*, p. 186. ² Warne, 1872, p. 186. ³ Hutchins' *Dorsetshire*.

paved with flints.¹ The present road takes the line beyond Grimston, and then there is a turn (611'), and Long Ash Lane, with a parish boundary along it, continues the course for four miles to high ground (800'), half-a-mile east of Frome St. Quintin. Between this point and a point (400') near Vagg, two miles north-west of Yeovil, and 11 miles distant, the course of the road seems to have been laid out. Roads and lanes here and there, sometimes with parish boundaries along them, lie in the line which passes one mile west of Yeovil. From Vagg to Ilchester the present road follows the line for three miles in a straight line.

(8) Dorchester to Exeter.—To the west of Dorchester the modern road occupies the site of the Roman road for three and a half miles as far as Knowle Hill. From about half-a-mile from the town it appears to be directed straight for two and a half miles to a tumulus on Bradford Down, A parish boundary follows it for a mile and a half along the straight road, and continues to follow the winding road for seven miles to Eggardun Hill (828'). When Stukeley saw the road between Dorchester and Bridport, then called the Ridgeway, the original ridge remained, made of flints laid in a fine bank and covered with turf.2 He noticed that it frequently made great curves to avoid valleys, and kept on the highest ground; there are, however, pieces of straight road as well as curves. The ridge is still

¹ Warne, ² Itinerarium Curiosum, p. 161.

plain nearly all along, and in many places it is

conspicuous.

To the north of the road, on Eggardun Hill, is an oval camp, triple trenched on the west, about half the size of Maiden Castle, which it somewhat resembles. It would seem that the Roman road took the course of an older road to this stronghold, and the Roman manner of setting out is not characteristic of the road onwards.

From near Eggardun the road turns towards the south-west and slants down the hill by Spyway Green, and is traceable through the arable land. When the old road was broken up it was seen to be "composed of a bed of large flints laid on the substratum of chalk, with a thick layer of smaller stones on the top, the whole almost as compact as a wall." 1 According to Davidson, the course of the road is joined by the present road to Bridport about a mile and a quarter west of Askerswell; but there is a good deal in favour of the course given by Warne on the authority of a local antiquary, through Up Loders and Yondover and along the road from Yondover to the main road one mile east of Bridport. From that point parish boundaries follow the present road to Bridport, and it appears to be on the line of the Roman road through Bridport, and on to half-a-mile beyond Chideock, where the Roman road mounted Chardown Hill, and passed over Stonebarrow Hill, the course being by Cold Harbour and along a lane followed by a parish

¹ Davidson, British and Roman Remains in the vicinity of Axminster, 1833.

boundary for two miles on to the river Char. At Charmouth the Roman road seems to have divided, one branch continuing along the coast, and the other going by Axminster and Honiton.

The coast road passed north of Lyme Regis to Heathfield Cross in the course of the present road; parish boundaries follow for three-quarters of a mile, a quarter of a mile, and half-a-mile, and on by Axbridge, Colyford, and Elverway, to Sidford, parish boundaries following the road for three miles on the east of Salcombe Regis, and for half-a-mile on the east of the river Sid. At Stowford the modern road leaves the line of the old road, which is represented by a lane with a parish boundary along it over the shoulder of a hill, and is rejoined by the present road in threequarters of a mile. The parish boundary follows the present road on to the river Otter, and then runs at the back of the houses on the north of the street at Poppleford, and again joins the present road, along which it runs to Windmill Hill, having apparently followed the course of the Roman road continuously for six and a half miles from Stowford. Then, after an interval of one mile, there is a quarter of a mile of parish boundary, and after another interval of threequarters of a mile, parish boundaries follow the present road continuously for two and a half miles to the junction with the Roman road through Axminster and Honiton.

This latter road goes over Charmouth Hill by Penn Cross and Hunter's Lodge to Axminster, county and parish boundaries following the present road for two and a half miles from Penn Cross. Just before reaching Axminster a road called Stony Lane, turning off to the north to Millbrook, appears to mark the junction or crossing of the Foss Way. On the west of Axminster, after the valley of the Axe and the Yarty has been crossed, a straight road a mile and three-quarters long begins, pointing to high ground (700') on the east of Axminster and continuing to Shute Hill (455'). Then the road winds, with a parish boundary following it for two miles, and descends Moorcox Hill, close to the railway four miles east of Honiton, where in 1828 the structure of the old road was seen, 18 inches thick with large stones at bottom and smaller at the top, closely cemented as with mortar. The present road occupies the line of the old road through Wilmington, parish boundaries following it for two miles, and then for one and a half miles to Honiton the course is not clear. Through Honiton the present road is straight for three miles, and it continues in nearly the same line to Patteson's Cross, and on to the river Otter at Fairmile, on the west of which a parish boundary follows the road for a mile and a half. From near Whimple the road, straight for two and a quarter miles, is followed by parish boundaries for nearly a mile and a half, and they continue along the road for another mile and a quarter through Rockbere; and again after an interval of a mile, parish boundaries follow the road from the river Clyst to the fork roads near East Wonford, where the Roman road along the coast joins.

¹ Davidson, loc. cit.

road continues on through Heavitree to Exeter (Iscal Dumnuniorum).

The *Itinerary* of Antonine makes it 51 M. P. from *Durnonovaria* to *Isca Dumnuniorum*, which agrees fairly well with the actual distance between Dorchester and Exeter by either route. The intermediate station, *Muridunum*, 36 M. P. from the former and 15 M. P. from the latter, is placed by Camden and others at Seaton, which is seven miles too far to the east. On the inland line the distances would place it near Honiton, a site which agrees better with the inland position of *Ridunum*, as it seems to be shown in the *Tabula Peutingeriana*.

There appear to be no roads set out in the characteristic Roman manner beyond Exeter. According to Bishop Bennet, an old road, converted by the Romans to their own use, went over Haldon to Teignbridge, and was quite plain at the beginning of the nineteenth century on the right of the turnpike road on the ascent to Haldon. It seems to have passed by Alphington, on the south of which a parish boundary follows the present road for a quarter of a mile, and on by Red Cross and Kennford. On Haldon a parish boundary follows the road for half-amile, and then leaves it and joins the road branching to Teignmouth, which it follows for half-a-mile, and then follows Haldon Lane for two miles to the east end of Ugbrooke Park, where it rejoins the Exeter road, and follows it to Sandy Gate, a mile and a quarter north of Teignbridge. This line of parish

boundaries, more than five miles long, seems to mark the course of the old road. Teignbridge is claimed to be of Roman origin, and it is certain that remains of a very ancient bridge were found in rebuilding the bridge in the latter part of the eighteenth century. Bishop Bennet continued the road by Totnes to St. Michael's Mount, led so far probably by the itinerary attributed to Richard of Cirencester. Another old road over Little Haldon, now called Portway, and the boundary of Dawlish parish, is mentioned in a deed of 1044 as "Streete" and "Port Streete," and has been thought to be the line of a road which crossed the Teign below Newton Abbot.2 Bishop Bennet mentions the crest of a Roman road visible for a mile near Uffculme on the road from Exeter to Taunton, and he says there was a road from Exeter in a northeasterly direction, but there seems to be no trace of these, and of a supposed Roman road from Exeter to Stratton, on the Cornish coast, there seems to be no evidence at all.

Iter XII. of Antonine has occasioned much discussion. Wesseling gives the heading Per Muridunum Viroconium, and it was made a Calleva per Muridunum Viroconium by Gale to suit the Iter as it stands. Parthey and Pinder give it a Muriduno Viroconium, and while printing the Iter continuously as it stands in all MSS., they suggest in a note that the first eight lines, enclosed within brackets, were by mistake transferred from Iter XV. On this sup-

Lysons, vol. vi. p. cccxiv.
 Davidson, Trans. Devon. Ass., xiii. p. 106.

position the first station after Muridunum would be Leucarum, and the length of the Iter by addition of the distances would be 166 compared with the 186 in the heading. The position of the three stations between Muridunum and Isca Leg. 11. Augusta (Caerleon) are unknown. Bishop Clifford 1 continued Iter XII. from Exeter by Hembury, putting Nidum near Taunton and Bomium near the mouth of the river Parrett, 27 miles by water from Caerleon. No trace of either road or stations are known; the country about the river Parrett must have been a swamp in Roman times, and a 20 mile passage across the Bristol Channel does not seem likely. The suggested removal of these stations to South Wales will be reverted to (p. 346).

(9) Winchester to Cunetio and Wanborough.—This is a road crossing the Portway, passing by the Roman station Cunetio near Marlborough, and joining the road from Speen to Cirencester about halfway between those places. The road left the north gate of Venta Belgarum, and the present Andover road, followed by a parish boundary for five miles, is on the line of the Roman road from the suburbs of Winchester to Barton Down Farm, six and a half miles from Winchester. The course is straight to Worthy Down (400'), where there is a slight turn, and a straight line begins which continues for 15 miles to the north side of Conholt Park, a highway following it for nearly the whole distance. A plantation on the north side of the present road interferes with the view

¹ Somerset Archaol. Proc., vol. xxii., pp. 2, 22.

along the line of the road, but from Worthy Down Conholt is plainly visible in clear weather, and it is quite possible that the long straight line was laid out between Deacon Hill (471') two miles south-east of Winchester, which the line cuts, and Conholt (790'). From Chute Heath close to the latter the high downs beyond Winchester can be plainly seen in clear weather.

The ridge of the road has been destroyed in making the modern road, but it is visible between Barton Down Farm and the Test valley, and again on the north side of the valley through Harewood Forest, where a parish boundary follows it for a mile and a half. The line of the road is crossed by the railway a mile and a half east of Andover station, and the straight lanes which follow it can be seen from the train. Near East Anton the line of the Portway is crossed, but there is no sign of the latter. On approaching Charlton Woodlands Farm the course is across fields for half-a-mile, and then it is again followed by a lane, along which the ridge is visible in places. At the south-east of Conholt Park the road bisects a circular earthwork, and through Conholt Park the embankment is very plain. It was described as long ago as 1760,1 and it was cut into by Mr. G. Knowles, the owner of Conholt Park, in December 1898. In one place, where the old road is a terrace on sloping ground, some six feet high on the lower side, and four or more yards wide, it was found that beneath a foot or 15 inches of soil

¹ Archæologia, vol. i. and vol. viii.

there are five and a half inches of white chalk compacted together, then three or four inches of clay, under which was found a layer, 18 inches thick, of large flints, apparently set by hand, the upper four or five inches of which appeared as if they had been burnt and were mixed with a black powder. We learn from the old account of 1760 that the upper stratum was a beautiful gravel, no parts of the country near producing any such material. That has since been removed, probably to make garden-paths. In other places the black powder appears immediately under the turf, the upper layers having probably been removed. Near the north side of the park the layer of large flints is 12 inches thick, the flints closely packed together and the upper surface apparently burnt. Under the flint layer a bed of stiff clay with small flints embedded was found, but was not dug into for more than a few inches.

The appearance of black ash or cinder over the layer of flints apparently burnt is remarkable, and attracted the notice of R. Willis in 1760, who likened them to the cinder and ashes of a blacksmith's forge, but found that they washed white. They must date from the making of the road, as they are covered by the upper layers, and the supposition may be hazarded that we have here traces of fire lighted on the flint foundation of the road to make a smoke as a beacon for the laying out of the 16 miles of straight road from the south.

In the north of the park the long straight line ends; if continued, it would lead into Hippenscombe, a steep-

sided valley more than 200 feet deep, commanded by high ground on all sides, and by Fosbury camp on the east. To keep on the high ground the Roman road, still well defined, bends westward through an angle of 60°, and skirts round the heads of the two branches of the coombe, by Chute Heath and Scots Poor, bending round to the north and northeast until a prolongation of the original line is reached, more than two miles from where it was quitted. This remarkable bend is roughly a halfcircle of one mile radius, and is followed for a mile by the county boundary between Wilts and Berks. The ridge of the road is still very plain over Chute Heath, raised three or four feet above the surface, and six or seven yards wide. The semicircle ends near Tidcombe, and another straight line is entered upon which lies between Haydown Hill (850'), near Fosbury camp on the north of Hippenscombe, and Barbury Castle (871'), 16 miles distant, and visible from Haydown. Highways having parish boundaries along them for a mile and a half, and traces of the ridge, mark the course of the road from near Tidcombe by Marten and Crofton to Savernake Forest, and the ridge is shown on the old Ordnance map nearly on to Savernake House, close to which Sir R. Colt Hoare found it visible. The course continues through the forest, on the north-east of the avenue, and nearly parallel with it. On reaching the high ground (620') on the southern edge of the Kennet valley the road takes a more northerly direction, and it can be seen on the north side of the valley rising

up from Werg, where the river was crossed, to Poulton Down. The Roman station *Cunetio* at Folly Farm (644'), overlooking the Kennet valley, and some 200 feet above it, lies to the west of the prolongation of the straight line from Haydown. The camp, so far as it can be traced, seems to have been about 300 yards by 250 yards. Roman coins, pottery, and other objects have been found within it from time to time, and a Roman well was opened to a considerable depth about 20 years ago. There are indications of roads slanting down from the camp towards Werg, and westwards towards Marlborough, communicating with the Roman road from Speen to Bath, which will be presently followed (p. 329).

A Roman road is shown on Sir R. C. Hoare's map of Cunetio (1819) coming from the direction of Old Sarum, and joining the road from Winchester on the south of Folly Farm. It cannot now be traced there, but across the enclosures at Braden Oak, half-a-mile distant, the ridge is just observable on the same line. From Old Sarum, a road with parish boundaries along it runs in this direction for four miles to Porton Firs, and the road continues on, pointing to Sidbury (735'), a doubly-intrenched earthwork rivalling Old Sarum in magnitude. From the north entrance what Sir R. Colt Hoare calls a bold, broad, and straight raised causeway, resembling a Roman road, runs for more than a mile to Everley, intersecting a barrow in its course.1 There is nothing definite beyond to indicate the course of a Roman road.

Ancient Wilts, p. 180,

From the north side of the Kennet valley the course of the road is almost straight for six and a half miles to the edge of the chalk escarpment between Badbury and Chisledon. It is marked by a line of highways up to Poulton Down, across which is a green track with the ridge almost entirely effaced. At the highest point, on Poulton Down (700'), one can see Folly Farm, and northward through the notch in the escarpment near Badbury into the vale beyond, and there can be little doubt that the road was laid out straight between this notch and the high ground near Cunetio from intermediate points. A lane follows the line to Ogbourne, from which onwards the Roman road was evident when Sir R. C. Hoare saw the turnpike road being made in 1818. There is a very slight turn at a high point (560') near Whitefield Farm, and beyond a parish boundary runs along the road for a mile. Near Badbury the road bends to the east and descends into the valley; and it then lies straight between a high point (556') on the edge of the chalk escarpment and the point of junction with the Roman road from Speen. At the time of Sir R. Colt Hoare's survey the workmen making the new road described the old road at Badbury Wick, then called High Street, as having been composed of flint, 10 or 12 feet wide, with large sarsen stones for a foundation in wet and marshy places.1 Across the fields the hard causeway was revealed in ploughing. A parish boundary runs along the present road for three-quarters of a mile towards the junction of the Roman roads, three

¹ Ancient Wilts, Roman Æra, p. 94.

miles due east of Swindon station. Here, where many remains of Roman pottery and coins have been found, Sir R. Colt Hoare fixed a station to which he gave the name of Nidum. In Iter XIII. of Antonine Spince figures as 15 M. P. from Durocornovium, whereas Speen is really 34 miles from Cirencester. Fifteen miles brings us to the junction of the roads, and adding 19 miles, the distance on to Speen, makes up the total at the head of the Iter. It is a reasonable supposition that a station has dropped out, but if so it is more likely that the missing station was 15 miles from Speen, where on Wanborough Plain there are also Roman remains. A Latin name given to a supposed station is misleading, and Nidum is the more unfortunate as it is the name of a station in the Itinerary of Antonine, the site of which is uncertain. Unfortunately too the name has been perpetuated on the new Ordnance map.

CHAPTER X

ROMAN ROADS FROM LONDON TO SILCHESTER AND THE WEST—continued

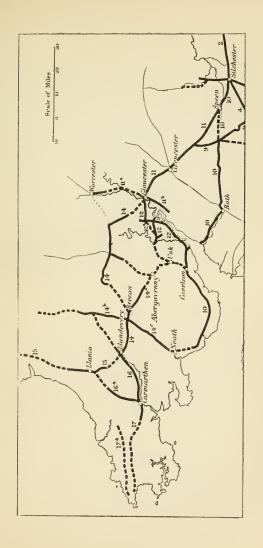
(10) Silchester to Speen, Bath, and South Wales .-A road from Silchester to Speen (Spinæ) appears in Iter XIII. and in Iter XIV. of Antonine. It issued from the west gate, and its course is indicated by a highway with a parish and county boundary for three and a half miles, beyond which there is little or no trace to Speen, where the roads branched. Beyond Speen, following Iter XIV. in the reverse direction, there is little or no trace of the road as far as Cunetio. It probably followed the line of the Bath road from Newbury towards Hungerford, and continued on by Rudge 1 to the north of Hill Barn, on the south side of the Kennet valley, about threequarters of a mile to the east of Mildenhall, where the ridge remains on the down. Sir R. Colt Hoare, in his map of Cunetio, shows the Roman road onwards to the lane at Cockatrip Cottage, along the south of a field in which many coins and fragments of pottery, etc. have been found. He also shows "an earthwork

¹ In a well at Rudge was found the curious brass vessel bearing the names of five Roman stations on and near the Wall of Hadrian. A Roman pavement was also discovered there in 1723.

of a square form by which the parish church was surrounded," which he supposed to be a Roman camp, and called Lower Cunetio. Traces are visible, but there is good reason to think that they are not Roman. There are undoubted evidences of a Roman settlement in the more sheltered valley, but the camp on the high ground at Folly Farm must mark the Roman station *Cunetia*.

There are no indications of the Roman road onwards through Marlborough. Stukeley supposed that there were remains of a camp near the river in what is now the garden of the Master of the College, but R. Gale found that he was mistaken. The first trace of the road is three miles further on, near West Overton, where a short length of the ridge is shown on the old Ordnance map on the north side of the Bath road, and it is still traceable. A little further on near East Kennet Sir R. Colt Hoare observed the causeway five feet high and 18 or 20 feet wide, and the ditches were distinct in 1884. The road passed round Silbury Hill on the south side, and although it has been ploughed up it is now sometimes traceable by the eye. In 1867, to test Mr. James Fergusson's contention that Silbury was upon the Roman road, some sections were cut across the road, and the trenches on each side of the road were found at a distance of 18 feet apart, and were traced round the hill to the straight portion of the road on the west of it. The road there ranges with the south side of the mound, and it can be traced in

¹ Ancient Wills, p. 34.



dry summers. From Silbury the course is straight for two miles and a half to a point (665') on a spur of Calston Hill. A slight curve brings the road in a mile and a half to the 700 feet contour line on the north side of Morgan's Hill, along which it is carried on a terrace about five yards wide, cut into, and embanked upon, the slope of the hill. Where it passes round the head of a coombe at Horse Coombe Bottom Wood, the banking up is considerable. On the west of Morgan's Hill the Roman road is joined by Wansdyke, an intrenchment which crosses the Wiltshire Downs for many miles, and is plainly traceable from the borders of Hampshire to this point. It follows a devious course, and varies a good deal in size; over Morgan's Hill it is unusually crooked, and consists there of a ditch with a rampart on the south side, and a slight counterscarp on the north. The crest of the rampart is nine or ten feet above the down, and 18 to 20 feet above the bottom of the ditch as they now exist, and rampart and ditch together measure eighty to ninety feet across. Coming over the hills it joins the Roman road at an acute angle, and Stukeley thought that there was "incontestable proof that it was in being before Roman times," and that the Roman road followed the course of Wansdyke.1 Local antiquaries have generally insisted on the pre-historic, or at least pre-Roman age of the great intrenchment, and that the Roman road took the line

¹ Itinerarium Curiosum, p. 142.

of it. If so, as Sir R. Colt Hoare pointed out,1 we must suppose that Wansdyke, which winds about through all the rest of its course, takes an absolutely straight line for three miles to Wans, and then again for 10 miles on to Ashley Wood, making together 13 miles of straight course along which a Roman road follows it. The excavations made by General Pitt Rivers in Wansdyke close by prove from coins that the work is Roman or post-Roman in date, and the earthworks themselves show the manner in which the pre-existing Roman road was made use of by the makers of Wansdyke. The road, which is on a terrace five or six yards wide along the steep north slope of the down, is joined on the south by Wansdyke, here a deep ditch with a high rampart on the south of it, together some 27 or 30 yards wide, at the head of a coombe about a quarter of a mile east of the Calne road; and there the whole character of the intrenchment changes. There is no longer a rampart on the south of the ditch, but the edge of the embanked terrace has been raised by material excavated from a ditch along the road, and thrown up as a counterscarp some four feet high on the north of the ditch, the steep slope of the down rendering any other defence unnecessary, and the whole is not more than 17 yards wide. It is probable that the rampart crossed the road and joined the counterscarp, but that is now obliterated by a cart-track. As

¹ Ancient Wilts, p. 27 (1819). A few years later he considered that the Roman road was probably formed on a Belgic boundary bank (*Roman Æra*, p. 106).

the slope of the hill-side gets less steep going westward, a rampart appears on the south side and increases in height, and near Smallgrain plantation, to the east of the Calne and Devizes road, there is a considerable bank on either side of a hollow way.

From the junction of Wansdyke the course of the Roman road is in a straight line between the top of Morgan's Hill (847') and the south end of Lansdowne (760'), 18 miles distant; and it may be seen from the former to continue in that direction for three miles to near Wans. Beyond the Calne and Devizes road the ground falls, and cultivated land is entered upon, and a hedgerow followed by a parish boundary marks the line, and there is little other trace of road or dyke for one and a quarter miles, when it appears more plainly for half-a-mile to the south of Stockley. Sir R. Colt Hoare mentions hereabouts traces of a ridge with a bank and ditch on the north side. Hedges followed by parish boundaries continue the line, and looking back from near Wans a straight line of hedges can be seen rising out of the lower ground towards Morgan's Hill. On nearing Wans the hedgerow and parish boundary bend towards the north, and soon the latter is the only trace now left of the Roman road; though Sir R. Colt Hoare's map (1819) shows the ridge to within one-eighth of a mile of the lane, which the parish boundary joins about 60 yards south of the cross roads, and follows across the Calne road. Then the ridge of the Roman road is plain in the belt of trees on the east of the grounds of Wans

House, with the remains of a ditch on the north-east side, along which the parish boundary runs. The ridge bends round to the house and there it is effaced for 200 yards; but the parish boundary marks the line of it on to the Chippenham road (475'). Then another straight line is entered upon pointing to high ground (600'), south of Ashley Wood, 10 miles distant, overlooking the Avon valley near Bathford. This line is nearly parallel with that from Morgan's Hill, and a quarter of a mile to the north of it, and is joined by a rough reversed \$ curve. Sir R. Colt Hoare placed Verlucio at Wans, where much Roman pottery and other objects have been found, and thought that the road entered the station at the south-east angle and left it at the north-west angle. There are no remains of a camp, and there is no reason to suppose that the course of the road was affected by the station, which there is some reason to think lay to the north of Wans House. It would rather seem that, as at Elstree on Watling Street, two high points were made use of in laying out the road, the second being perhaps Calston Down (800'), near Oldbury, a mile north-east of Morgan's Hill, to which the straight line from Ashley Wood points.

At the Chippenham road Spye Park is entered, and for about 300 yards, where the ground was formerly ploughed, a low undulation of the surface is all that remains of the ridge. It then appears plain for a quarter of a mile; five or six yards across the top and four or five feet high, having on the north side traces of a ditch with a ramp or counterscarp outside, show-

ing the modification of the road by the makers of Wansdyke. According to a section made here by Sir R. C. Hoare's surveyor in 1820, "the agger was 20 feet broad and six feet high, and the smaller one rising on the outer side of the ditch nine feet wide."1 steep-sided valley appears to have been crossed by winding up stream and back again to the same line, as in many other instances, and on the west side of the valley the banking up of the road on the low side is plain, and there seem to be remains of the road surface on both sides of the valley. The ridge continues for a quarter of a mile on to another valley, beyond which there are now no further traces within the park, though the ridge is shown on the old Ordnance map, and on Sir R. Colt Hoare's map (1819). There are some indications of the ridge outside the park, and in less than a mile a line of hedgerows, with remains of the ridge here and there, and followed by parish boundaries, takes up the same straight line for upwards of eight miles. From Bowden Hill (500') the entire course of the road to Ashley Wood is in sight. Sir R. Colt Hoare noticed that a cottage built upon the Roman road at Forest Gate was a free tenement,2 a similar case to that already mentioned on the Foss road near Radstock (p. 263). On the east of the canal near Lacock he describes the ridge as being 20 feet wide and four feet high with a regular trench on the north side. Where the Roman road is crossed by the railway, one and a half miles north of Melksham, the

¹ Ancient Wilts, Roman Æra, p. 83. ² Ibid., 1819, p. 82.

parish boundary leaves the line of the road and no trace appears for a quarter of a mile; and then the course of the road, followed by a parish boundary, curves round a low hill as if to avoid the highest part, and resumes the same straight line. Near Neston Park Sir R. Colt Hoare noticed the agger six feet high with a ditch on the north side, and in the park he described a section as being four paces wide and six and a half feet high, at top a layer of loose stones, then one of earth, lower down a stratum of stone grouted or pounded,1 the lowest foundation being concealed. It would seem from a note on the authority of Mr. Leman that "the bank and ditch of Wansdyke were there plainly visible, as made on the foundation of the previous Roman road." 2 At Wraxall Wood, about two miles further on, the remains of the road are described by Sir R. Colt Hoare as 30 feet wide and nearly 12 feet high,3 and he says that the flat stones which formed the foundation of the road, with a concrete layer over them, were still to be seen. There is now to be seen a somewhat dilapidated fence wall of rough local stone, of which there is plenty about, upon what appears to be the bank of Wansdyke on the north of the track of the Roman road. Through the arable land beyond an undulation of the surface is all that remains, which would hardly be noticed if it were not in the line of the road marked by a parish boundary. There seem to be some traces of the Roman road with Wansdyke

¹ Ancient Wilts, Roman Æra, 1819, p. 79. Ibid., 1812, p. 27. ³ Ibid., 1812, p. 77.

alongside it towards Ashley Wood, in which Sir R. C. Hoare found the ridge visible at the beginning of the nineteenth century.

On the high ground above Bathford, Wansdyke leaves the Roman road and turns south-west, and the course of the latter through Bathford is probably along the line of Chapel Row and round the bend of the Avon to Batheaston, where it is joined by the Foss road, and thence with a sharp turn, straight for two miles to Walcot, where the road into the Roman city of Aquæ Solis (or Sulis) probably turned off. The road followed by Iter XIV. went on through Weston and by North Stoke to Bitton.

The course of the road from Bath westward has been the subject of much difference of opinion. Iter XIV. of Antonine's *Itinerary* gives the distances of the stations, beginning from *Aquæ Solis*, thus:—

То	Trajectus	vi.	м. Р
-11	Abona	ix.	,,
,,	Venta Silurum	xiv.	,,
,,	Isca	ix.	,,

At six miles from Bath is Bitton, where there are traces of a Roman camp and evidences of a station, but only an insignificant stream, the Boyd, to be forded, and to give the name *Trajectus* to a station; and there has been a disposition to assume that *Trajectus* is connected with a ferry across the Severn. Harris, and others following him, placed *Trajectus* at Aust, 20 miles from Bath, deriving that name from

¹ Archaologia, vol. ii. 1763.

Augustus, and Gale put it at Oldbury, three miles still higher up the Severn. Bishop Clifford 1 declined to throw over the Itinerary, and supposed that the name Trajectus has reference to a passage across the Avon near Bitton, by a British road going north and south. Coxe,2 writing in 1801, continued the road from Bitton to St. George's Church by the south of Redland Down, and over Durdham Down, where he says it was still high and visible, to Sea Mills, near the confluence of the river Trim with the Avon, three and a half miles from the mouth of the latter; and there he places Abona. Thence he says that paved remains of the road still existed, joining the turnpike road, and so on to the Severn. On Durdham Down, the ridge still appears as a low undulation in the surface. It was opened on the west of the Stoke road, near Durdham Lodge, in 1900. Under three inches 3 of turf a paving of large stones was found, bedded on a layer of about six inches of earth, under which was about a foot of calcareous earth and limestone. Traces of the side ditches were found, about 16 yards apart, and one foot two inches to one foot nine inches below the crown of the paving of the road, which appears to have been about 20 feet wide. The distance from Sea Mills to Venta Silurum by Southbrook is rather more than thirteen miles, compared with the 14 M. P. of the Itinerary.

¹ Somerset Archaol. Soc., 1876.

² Monmouthshire, p. 13*.

³ Martin, Trans. Bristol and Glonces. Archwol. Soc., vol. xxiii, p. 309.

Bishop Clifford objected that vessels going down the Avon from Sea Mills with the tide would have the ebb against them in the Severn going up to Southbrook, and places Abona near King's Weston Park, with a landing-place on the Severn. There is no doubt that in Roman times the tide flowed up to the foot of the high ground on which he places Abona. It would do so now if it were not banked out, the land for a width of one and a half miles bordering on the Severn being several feet below high-water level. The Bishop suggests a causeway,1 and mentions Chittening Street, which is three miles from the mouth of the Avon, as probably representing it. Another way to the Severn is marked "Roman road" on the new Ordnance map. But such a causeway appears an insufficient provision for crossing a wide river with a 40 feet tide without a sheltered port at hand such as Ahona at Sea Mills would have afforded. From the mouth of the Avon there is a straight run of about five miles in a slanting direction across the Severn to Portskewet, below "The Shoots," and clear of rocks, and by choosing the ebb or flow a favourable tide in either direction could be secured for the passage. Waiting for a change of tide would not have been a serious matter, and a causeway may have been available at favourable times.

On the Welsh side of the Severn a landing-place may have existed near the Roman camp at Sudbrook, of which now only half remains on the cliff near the

¹ Bristol and Gloucester Archael, Assoc., vol. iii.

Severn Tunnel pumping station. Shelter was certainly afforded by St. Pierre Pill and Caldicot Pill on either side of the camp, and about two and a half miles apart. The former is the outfall of the Meyric stream, and Caldicot Pill is the estuary of a stream originally the Twrch, Latinized as Tarocus, and now called the Troggy. Both pills were used by shipping until the construction of the railway, and they were so used from very early times. A grant, preserved in the Liber Llandavensis, of the land lying to the west of St. Pierre Pill, then called Pwll Meyric, includes the free right to bring ships to land in the mouth of the pill, and another grant of land includes the free right of bringing ships to land in the mouth of the Troggy (in hostio Taroci), i.e. in Caldicot Pill. The grants probably date from the seventh century, and the conclusion is that at that time both were old-established harbours.1

For the passage to and from the Avon, Caldicot Pill would be the more convenient harbour, and a paved causeway has been traced from Caldicot to Caerwent. It enters Caldicot common field, where it is soon lost under the soil; it is marked for a short length as "track of Portway" on the Ordnance map, and is joined by the present hauling way for about half-a-mile, and is then lost as far as the Nedern brook.² Coxe in 1801 found vestiges of an ancient paved causeway between the brook and the eastern

¹ This information from the *Liber Llandavensis* has been courteously furnished by Mr. James G. Wood.
² Ormerod, *Strigulensia*, 1861, p. 20.

gate of Caerwent, which, within the memory of man, had been more perfect.¹

The Roman station *Venta Silurum* at Caerwent measures about 530 yards from east to west, and 450 yards from north to south. The road runs through the middle lengthways, and on straight for upwards of a mile, followed for three-quarters of a mile by a parish boundary, to Five Lanes, where there were vestiges of a causeway in 1801.² The present road then turns to the north, but in a mile and a half resumes the same line near Penhow. Two miles further on, at Catash, the course of the Roman road appears to follow a parish boundary on the north of the present road. It leaves the latter again near Woodville, and passing by Summerhill, crosses the Usk and enters Caerleon in the line of High Street.

The rectangle enclosed by the walls of the Roman Isca leg. II. Augusta, which can still be traced, measures about 530 yards by 450 yards. It is thus of exactly the same dimensions as Venta. This station, the Isca of the Itinerary, is the starting-point of Iter XIV., which has now been followed in the reverse direction from Silchester, and also of Iter XIII. by Burrium to Gloucester, Speen, and Silchester. Burrium is placed near Usk, the distances from Caerleon, and from Abergavenny, Gobannium in Iter XII., corresponding. There appears to be no trace of the road from Caerleon to Usk, nor of a Roman road onwards in the direction of Gloucester.

¹ Coxe, Tour in Monmouthshire, p. 17*.
² Coxe.

The indications of a Roman road on to Abergavenny are only a few short lengths of boundary along the present road, and no Roman remains are known at Abergavenny.

Camden ¹ cites a passage quoted by Leland from a poem by Necham (1215—1225), in which *Julia Strata* is mentioned in connexion with the Usk entering the Severn.² On this hint the author of the spurious *Itinerary* of Richard of Cirencester gave the name *Via Julia* to his Iter from Bath to St. Davids. Sir R. Colt Hoare made it *Via Julia Maritima*, and Scarth extended it eastwards to Marlborough, Speen, and Silchester. The only authority for this name is the reference above mentioned.

On the west of Caerleon, on the north side of the railway, traces of the Roman road are marked on the Ordnance map, which also marks the road from Bassaleg onwards as a Roman road. About one mile from Bassaleg traces of the ridge remain, and the road appears to have been laid out straight for one and a half miles. A little further on is a square camp by the side of the road, one mile beyond which the modern road turns south to St. Mellon's, Rumney, and Cardiff.

Cardiff Castle has generally been assumed to have been where the Roman road crossed the river Taff; but it is probable that the old road continued straight on where the modern road turns south

Pritannia, iii. 109.
 Intrat et auget aquas Sabrini fluminis Osca
 Pracceps; testis erit Julia Strata mihi.

to St. Mellon's, a line of roads from Julian's Farm a mile and a half further on, and parish boundaries for a mile on the north of the Taff at Gabalva opposite Landaff, and for a quarter of a mile in the same line north of Ely Bridge, indicating the line of the Roman road.

There is no doubt, however, that a Roman fortress guarded the mouth of the river Taff two miles lower down, at Cardiff Castle. The Roman walls have of late years been discovered beneath the mediæval ramparts along the eastern and northern and part of the western sides; the Castle buildings covering the rest of the latter, and the southern side. The rectangle of the Roman walls measures 198 yards from east to west, and about 210 yards from north to south, with a gateway in the northern face.¹

Beyond Ely Bridge the modern road to Cowbridge is followed by parish boundaries for half-a-mile near Caerau, where there are remains of a Roman camp about half-a-mile to the south of the road, and after a break, again for a mile and a quarter, where the boundary follows the old road up the hill to St. Lythan's Down, which the modern road goes round. On the west of the down the parish boundary again follows the road over the hill, and continues along the modern road for a quarter of a mile along Coedriglan Park. There are other indications which seem to show that the present road follows the line of the Roman road through Bonvilston, deviating from it at Llantrythid Park, between Old Post and Three Ashes, and again at

¹ Archæologia, Ivii. 335.

Stalling Down. Here the characteristic features of a Roman road reappear. From Stalling Down (400') one mile east of Cowbridge, to Stormy Down (310') 111 miles distant, there lie in a straight line half-a-mile of highway, half-a-mile of Cowbridge street, and then three and a half miles of the main road as far as Brocastle. The line is continued on by a lane in the direction of Ewenny Abbey for a mile, and then there is no trace for two and a half miles across the Ewenny and Ogmore valley. A lane with a parish boundary along it for a quarter of a mile then takes up the same line for three-quarters of a mile on the south of Laleston. After an interval of a mile the straight line is joined by the main road, which follows it for a mile, with a parish boundary along it from Park Isaf to Twmpath-y-ddar, where there is a Roman camp (331') and a clear view along the straight line back to Stalling Down. The main road and the parish boundary turn off northward to Pyle, but the line of the Roman road continues on with visible traces in nearly the same line by Heol-ysheel, and Heol-las, to Kenfig. From Kenfig the road seems to have turned north along Water Street, past what is marked as a Roman monument on the old Ordnance map, to Beggarsbush on the main road near Margam. It possibly continued on over the Margam mountain, and by the east of Mynydd-ygaer crowned by a camp, to join Sarn Helen. This would be more in accordance with Roman practice than a course along the shore of the Neath estuary, commanded on the land side by high and steep hills.

The difficulties of the way across the sands from Margam to Neath at the end of the twelfth century are described by Giraldus Cambrensis. The finding of two milliaries, near Port Talbot and near Aberavon, may be thought to show that the road passed those places, but the original positions of the stones are unknown. No traces of the road are known, nor are there any vestiges of a Roman station, nor of Roman remains of any sort at or near Neath.

Iter XII. of Antonine has been thought to pass over the road which has now been followed. Camden, who supposed that transcribers had "strangely confounded the two Iters from Calleva to Isca, and from Maridunum to Viriconium," placed Bomium near Cowbridge, Nidum at Neath, Leucarum at Loughor (Llwchwr), and Muridunum (Maridunum) at Carmarthen. In this he was followed by the writers of the spurious Itinerary of Richard of Cirencester, and by Bishop Bennet and others. If Parthey and Pinder are right in supposing that the first eight lines of Iter XII. were transferred by mistake from Iter XV., the next station to Muridunum would be Leucarum, XV. M.P. distant, compared with 19 miles from Carmarthen to Loughor; the XV. M.P. on to Nidum would compare with 13 miles on to Neath; and the XV. M.P. on to Bomium, with 22 miles to a point near Cowbridge, 27 miles (the Itinerary distance) from Caerleon. Neither the total nor the intermediate distances agree; no traces of Roman stations are known at Loughor, Neath, or near Cowbridge, although an altar, coins and pottery have been found at Loughor; and there are no evidences of a Roman road between Carmarthen and Neath. *Muridunum* in Devonshire appears in Iter XV., and *Ridunum* in the *Tabula Peutingeriana*, in both XV. M. P. from *Isca Dumnuniorum*; while *Maridunum* of Ptolemy is stated by him to be in the country of the Dimetæ, that is to say in South Wales. Whether the latter is the *Muridunum* mentioned in Iter XII. must remain uncertain.

(11) Speen to Gloucester.—There is no trace of this road until the gravel-covered tertiary beds are quitted near Wickham, four and a half miles from Speen. There a road is entered upon which is straight in general direction for nine miles to Baydon Hill (786'), and points in the other direction to Speen. For some miles from Wickham the present road is not straight, being sometimes on the line of the Roman road, but generally winding from one side of it to the other. There is little trace of the ridge until beyond Poughley, where a piece of it remains on the north of the present road, which there takes the line of the Roman road, and by its elevation between hedges wide apart shows traces of the ridge. The road is soon narrowed to 12 or 15 feet between the fences, and the Hare and Hounds Inn stands on the line of the Roman road. At Woodlands Farm the present road turns south at a right angle, and the course of the Roman road can be traced straight on across a meadow by an undulation of the surface, with browner herbage. In the arable field beyond the stones of the road were ploughed up

20 to 25 years ago. In three-quarters of a mile the present road rejoins the Roman road and follows it through Baydon. In the beginning of the nineteenth century the Roman road hereabouts is described by Bishop Bennet 1 as presenting an elevated crest raised many feet above the downs in various parts. Beyond Baydon a parish boundary follows the present road for a mile, and continues on in the same straight line for three-quarters of a mile further to Peaks Down, and then the Roman road is traceable across the down in the direction of Wanborough Plain Farm. Near this place remains have been found, which may mark the site of the Roman station already mentioned (p. 328) as having dropped out of Iter XIII. between Durocornovium and Spinæ. The road thence turns due north-west, and runs straight for Callas Hill on the escarpment of the chalk half-amile to the east of Wanborough, and then a straight road is entered upon which passes through Stratton St. Margaret's to Blunsdon Hill (494'), seven miles distant. On this length of road, a mile and a half from Stratton St. Margaret's, and three miles due east of Swindon station, is the junction of the Roman road from Winchester, and here Sir R. C. Hoare placed a Roman station to which he gave the name of Nidum, which has already been referred to (p. 328). Looking back from Blunsdon Hill the road can be seen to the south-east mounting up Callas Hill, the chalk downs beyond being visible; and towards the north-west Cricklade and Cirencester, the latter ten miles off, with

¹ Lysons, vol. i. p. 200.

the Cotswold hills beyond, are in sight. The road, where it has not been encroached upon, is 50 or 60 feet between the fences, but it has generally been narrowed on one side or the other, and in consequence the straightness is not so apparent. On Blunsdon Hill there is a slight turn, and a straight road runs to Calcott Bridge, near Cricklade. There is now an interval of nearly a mile at Cricklade, in which, however, portions of a causeway across the meadows were dug up at the end of the eighteenth century. Parish boundaries run along the road from Blunsdon to Seven Bridges, Water Eaton.

From the north-west of Cricklade a straight road runs for three and a half miles to Driffield Cross (320'); looking back from which Blunsdon Hill is plain, and the road up the chalk escarpment at Callas Hill can be seen in clear weather. Near Driffield Cross there is a round turn and then another straight road leads to Cirencester. This straight line points from Driffield Cross, to the south-east gate of Cirencester, and to high ground (700') near Duntisbourne House, four miles north-west of Cirencester. If it were not for the elm trees along the road Driffield Cross would be visible from the entrance of Cirencester. Parish boundaries follow the road for two miles and three-quarters through Driffield Cross to Siddington. The road is not much raised above the surface until Preston is reached, and then for about half-a-mile it is carried across the meadows to Cirencester, on a causeway on the south side of the river Churn.

¹ Sir R. C. Hoare, Ancient Wilts, Roman Æra, p. 97.

From Wanborough Plain Farm, where there is a decided change in the general direction, to Cirencester, no part of the road is as much as half-a-mile away from an absolutely straight line 19 miles long. The road here bears the name of the Ermin Way, as it is called by Higden, the Monk of Chester, and under that name it goes on through Cirencester to Gloucester. It constituted the main street of the Roman Corinium, or Durocornovium, which, between the south-east gate and the church, is now represented for 150 yards only by Tower Street, the rest being built over. North of the church, Dollar Street and Gloucester Street occupy the site of the same Roman street, which measures seven furlongs from gate to gate. About midway it was crossed at right angles by the principal street about half-a-mile long from gate to gate, now represented by Lewis Lane and Queen's Lane, and the other Roman streets and buildings so far as they are known appear to be laid out parallel to, and at right angles with Ermin Way. The enclosing walls, which are still traceable, do not suggest the rectangular plan of a Roman camp; and they enclose an area far larger than the largest Roman camps such as Glevum, Venta Silurum, or Isca. In these respects Cirencester resembles Verulam, Colchester, Chichester, and Silchester; British cities rebuilt by the Romans, and afterwards walled.

From Cirencester the course of the Roman road, following the present road, is straight for eight miles to Gloucester Beeches (900'), with a slight turn on high ground (500') at Daglingworth Down, and with

some twisting up the hill by Stratton, due in part at any rate to modern improvement of the gradient. The ridge of the Roman road makes its appearance soon after leaving Cirencester, and on the high ground it is now seven yards wide and four to five feet high, and near the third milestone as much as six feet high. There are ditches at the sides in places which may be in part Roman, or may be more recent quarries for road materials. Looking back from this high ground the chalk downs, which are crossed by the Roman road, 20 to 22 miles off, to the south-east, are visible. Beyond Gloucester Beeches the road passes round the head of the Side valley at Nettlecombe to Birdlip, and winds down the hill, followed by parish boundaries. Near Little Witcombe, five miles from Gloucester, a straight line is entered upon which, as one looks back from Wootton Cross roads one mile east of the cathedral, points to high ground (900') above Birdlip Hill. Stukeley says that from Circucester the Roman road appeared with a very high ridge and very straight for eight miles to Birdlip Hill, 1 and Camden says that on Birdlip Hill it showed a very bold ridge and appeared to have been payed with stone.2 Where the road is crossed by the railway the Roman paving was found entire 18 inches beneath the surface. The road turned to the south at Wootton Cross and entered Clevum (or Glevum) by the north gate, together with the road from the north. In Northgate Street, Gloucester, the

¹ Itinerarium Curiosum, p. 67. ² Britannia, i. 384.

Roman road was found about ten feet six inches below the surface, composed of stones of irregular shape bedded in mortar on concrete.

The walls of the Roman *Clevum*, as traced by Bellows,¹ included a rectangle 510 yards by 435 yards. The north corner was in the Cathedral cloisters, the east corner at the junction of Aldgate Street and King Street, the south corner inside the turn from Brunswick Road into Parliament Street, and the west corner at the angle of the County Prison facing Commercial Road.

The road from Gloucester to the north appears to have been on the line of the Tewkesbury road passing through Longford, where a closely-pitched pavement was found six feet below the surface of the road. To the north of Twigworth, a parish boundary follows the present road for about a mile, and beyond that there seem to be no indications of the course for more than nine miles, and then Stratford, at the boundary of Gloucestershire, seems to mark the line. From about four miles north of Stratford, highways, tracks, footways, and a parish boundary continue in a line between Stratford and Worcester for more than six miles. A footway crosses Croome Park from Kinnersley to a highway in the same line for half-amile, and then a footway leads to and follows a belt of old trees in the same line for half-a-mile, followed for a quarter of a mile by a parish boundary. A narrow strip of enclosed land on the west of Kempsey Common, with the footway alongside, continues the

Proceedings of the Cotteswold Field Club, vol. vi. p. 150.

line to a broad lane leading on to Napleton, where the straight course is lost for a quarter of a mile. A lane continues it for a mile, and then a footway takes up the line for a mile and a quarter, passing on the east of Timberdine Farm, to the Worcester road. After crossing the latter the course is across pasture fields, marked by a line of old trees, to a footbridge over Duck Pool, and then a highway takes up the line, pointing in the direction of High Street, Worcester.

There is no definite trace of a ridge along this line, but there are appearances which suggest that the Roman road materials have been removed, leaving a shallow hollow along the course of the road. The same thing is to be seen along the course of Riknild Street through Hindlip Park, on the north of Worcester (p.271); and several other instances where the ridge has been removed, and the materials have been dug out, leaving a shallow trench, have been already noticed.

Parish boundaries along the present road from Gloucester towards Bristol, at Hempsted, Quedgeley, Moreton Valence, and on the south of Stroud Water, for lengths of a quarter of a mile to a mile and a half, seem to indicate the line of the Roman road in that direction.

From the west gate of *Clevum* the Roman road proceeded in a north-westerly direction straight to the Severn. The causeway, raised some five feet above the meadows, now called Over Causeway, is undoubtedly in part Roman. An old man lately described it as having been paved in the middle with

cobble stones in his father's time, the width of the road being then the same as it is now, about 10 yards. The approach to Telford's bridge at Over turns off to the north, and the causeway beyond has been destroyed, but a bit of the old road with the narrow bridge over the old course of the river Leadon, in line with the causeway, is still to be seen on the west of the river between the approach to Over bridge and the railway. The Ordnance maps mark a road along the low eastern bank of the Severn northward to Maisemore Bridge as a Roman road, on what evidence is not apparent.

(12) Gloucester to Redbrook, and to Caerwent.—On the west of the Severn there is some indication that the Roman road onwards took a direct course from Over to Linton, from which the present road points for three and a half miles to high ground (630') to the south of Mitcheldean. Roman roads are supposed to have branched from near Over both to the southwest and the north-west. The course of the former, of which there seem to be no traces, is marked on the Ordnance map through the meadows and by Murcot to Minsterworth, falling into the present road from Gloucester to Westbury and Newnham. The latter road is thereabouts below the level of the Severn floods, and a little further on is connected by Oakle Street with the road westward from Gloucester. It is marked on the Ordnance map as a Roman road, and "traces of Roman paving" are marked in two places on it further on, but it has none of the features of Roman laying out. It is an old road, which was a turnpike road for many years, and was improved by Telford.

"Traces of Roman paving" are marked in many places on the Ordnance maps on the roads of this part of the country. They are to be seen on roads which were improved as turnpike roads in the latter part of the eighteenth and the early part of the nineteenth century, and which were in some cases afterwards improved as mail roads. The traces are marked where the roads have been diverted or lowered to improve the gradients, and also where the roads are sunk in the ground as if from the effects of long wear previous to the laying of the paving. Paving was no doubt to be seen where it is marked, and traces of it, or more frequently of a line of kerbing, are still visible here and there, but it by no means follows that it was always Roman. In the Forest of Dean, paved Roman roads still remain, and on old roads and tracks which have lately been modernized, the traces may in some cases have been of Roman paving.1 But when roads were improved in the early part of the last century, a paved foundation was not unfrequently laid, and if repairs

A belief has arisen that the use of wheeled vehicles was forbidden in the Forest, and that consequently all roads except those made in recent years must be Roman. In a summary of the "Laws and Customs of the Miners of the Forest of Dean," supposed to date from the time of Edward I., as given by Nicholl (Iron-making in the Olden Time), it is stated that "carts and waynes are prohibited"; but what really was prohibited was to "make carriage" of the mine otherwise than by the measure called Bellis, so that the King might have his rights. That is, the quantity of ore was not to be measured by cart or wain load in assessing the royalty, and proves that carts and wains were in use, and that a load was then, as now, a variable quantity.

were afterwards neglected, the road wore away, and the paving stones became exposed on the surface. This was the case in 1881 on the Shrewsbury and Holyhead road, constructed with a paved foundation in 1823, and may well have been the case in the neighbourhood now under notice, where the roads were much worse cared for.

From Newnham onwards to beyond Blakeney many "traces of Roman paving," now no longer visible, are marked along the road on the Ordnance maps, but there is nothing characteristic of a Roman road. About a mile south of Blakeney, the road takes a more direct course, and follows the same general direction to Lydney, where it is joined by the Dean road, the connexion of which with Gloucester must be now traced.

The present road from Over, which points for three miles and a half from Linton to high ground on the south of Mitcheldean, is followed by parish boundaries for a mile and a quarter, and with some improvements of gradient appears to follow the course of the Roman road to beyond Halfway Bridge. It there turns towards the north-west, but the direct line is continued on by a lane, a footway and parish boundaries for two and a half miles, and then the present road by Huntley rejoins, and follows the direct line onwards for a mile. This is the course followed by the post road from Gloucester to Mitcheldean in Overton's map of 1712, which appears to be the earliest map on which roads are shown. The course of the Roman road on towards Mitcheldean is un-

certain. The post road on the old maps continues on from Mitcheldean by Drybrook to Monmouth, and "traces of Roman paving" are marked on the Ordnance map at many points on the road onwards between Mitcheldean and Drybrook, and it is marked as a Roman road on to Ruardean; and beyond "traces of Roman paving" are marked along a narrow road at Lower Lydbrook, near the Wye.

At or near Mitcheldean a Roman road turned to the south, but the course is uncertain for a mile and a half. At three-quarters of a mile south of Mitcheldean, the Ordnance map marks "traces of Roman paving" for half-a-mile beyond the turn in the present road near Abinghall, but it seems likely that a lane along the higher ground from the Folly to near Gun's Mill may be the course of the Roman road. To the south of Gun's Mill, the paving, consisting of squared blocks, and apparently Roman, was entire not many years ago. The Ordnance maps mark "traces of Roman paving" in six places in the mile and a half onwards by Tibbs Cross to Littledean, and the kerb bordering is still to be seen here and there in the improved road.

At Littledean two roads from the east converge. They are for the most part narrow, sunk, crooked roads, with little to suggest a Roman origin, but both are marked all along on the Ordnance map with "traces of Roman paving." On the road which passes from the Severn side through Newnham to the south of Littledean, a paving of squared blocks is said to have been entire not many years ago, but

some of the "traces of Roman paving" are marked on the maps in places where the road must have been worn into a deep hollow before the paving was laid. Westward from Littledean, in continuation of this road, "traces of Roman paving" are marked on the Ordnance maps in eight places in the mile and a quarter to Cinderford Bridge, and in eight other places onwards to the Speech House, but with the recent improvement of the road, all have now gone. On the hill between the Speech House and the railway-station, a strip of bordering kerbstones and some of the paving, said to be Roman, remained not long ago. A paved Roman road in the same direction still remains in the Forest to the west of the railway, and to the north of the present road, and it can be traced for some distance pointing towards Worcester Lodge. It is of squared stones bordered with kerbing, and about eight feet wide. It may have joined a Roman road along the course of the old post road from Mitcheldean, which seems to be that of a road mentioned in a perambulation of the bailiwicks of the Forest in the tenth year of Edward I., as altam viam tendens apud Monmouth.1 The course onwards is by Coleford Meend and Lower Berry Hill to Cherry Orchard near Newland railway-station, where a road from Clearwell through Scatterford and Newland joins. Traces of Roman paving are marked along the latter on the Ordnance maps, and Mr. J. G. Wood describes it and the kerbing as being still visible after rain, and plainly Roman. This road is in continuation of a

¹ Trans, Bristol and Glouces, Antiq. Soc., vol. xiv. p. 362.

straight road to Bream Cross in the direction of Lydney Park, two and a half miles distant.

A parish boundary, and then a county boundary, follows the road from Cherry Orchard down to the Wye at Redbrook, where probably the river was crossed to reach *Blestium*. The old post road turns off to the Wye bridge at Monmouth half-a-mile from Redbrook, passing by Duffield Lane to the south-west of the Kymin.

The Ordnance map marks as a Roman road a track in the wood on the north side of the road from Staunton to Monmouth, which a county boundary follows for half-a-mile from Staunton. The track is crossed twice by the modern road, and can then be followed as a narrow, hollow way northwards to the river Wye at Hadnock, a mile and three-quarters above Monmouth. It has the appearance of an old packhorse road, which however may have been in use in Roman times, and even earlier. Roman coins have been found in the workings of the iron mines near Clearwell, and coins, fibulæ, and other Roman objects have been met with deep in the cinder-heaps of the old bloomeries, especially at Whitchurch, on the west of the Wye, two miles to the north of Hadnock; showing that the conveyance of the hæmatite ore for reduction to bloomeries, situated where wood fuel was plentiful, went on at least as early as the Roman occupation.

Continuing southward from Littledean, traces of paving are still to be seen in the sunk road near Grange; and along the present modernized road

in Sutton Bottom "traces of Roman paving" are marked in six places on the Ordnance map. At about half-a-mile from Soudley the present road diverges from the old track, and along the latter traces of paving can still be seen. It soon divides—one track going straight to Soudley Camp, and the other through Soudley Plantation to the Dean road at the ford. Soudley Camp occupies the end of a ridge between two brooks; it is triangular in shape, each side measuring about 60 yards. From Soudley Ford the paving of the Roman road is plain, and onwards traces and remains of a paved road distinctly Roman are almost continuous along the forest track called Dean Road. Towards Blackpool Bridge the pavement remains almost perfect for 150 yards. consists of blocks, about eight inches square, between kerbstones five or six inches wide, and 10 to 18 inches long. In some places the kerbstones are held in place by blocks of stone outside, breaking joint with them, and this seems to be the case where a less massive kerbstone has been used. Towards Soudley the width is as much as nine feet, but the more perfect length towards Blackpool is eight feet wide. It can be traced on both sides of the stream at Blackpool to the west of the bridge. The bridge is not 100 years old, but it may be noticed that there are plain traces of paving leading to it, as well as to the ford. The Roman paving is again plainly visible on the Dean road for 40 or 50 yards about 100 yards south of the Blakeney road, where it is nine feet wide. Neither this nor the Roman paved road to

the west of the railway, near Speech House station, is noticed on the Ordnance maps. The Dean road continues on as a green track through the forest for another mile and a half to Old Croft, and on to Allaston, and then, following a track and footway, it falls into the main road from Gloucester on the north of Newerne.

In the perambulation of the bailiwicks already referred to, Dean Road is called via Regia.

It has already been said (p. 356) that from about a mile south of Blakeney the present road from Gloucester takes a more direct course. The same general direction is followed from The Purlieu past the point of junction of the Dean road, and through Newerne and Lydney, and then a footway by Lydney House follows the same line to Aylburton, where the present road takes it up.

In Lydney Park many Roman remains, the foundation of a temple, and of a large villa, with baths, pavements, statues and objects in bronze and iron, show it to have been a place of some importance.

The Ordnance maps mark "traces of Roman paving" in the present road on the south of Aylburton, but the road seems to have been altered by modern improvements, and it may be doubted if the paving, now no longer visible, was Roman. It appears probable that the old road continued straight on by Sandford Bridge to Alvington. On the south of Alvington, after crossing the brook, the present road turns to the eastward, but a track and a footway

straight on up the hill continues the line to join the present road near Brookend, and seems to be the old course. The road follows the same line onwards for a mile, except at a twist where the stream at Wyeford is crossed, and then there is a slight turn on high ground, and a parish boundary follows the road for three-quarters of a mile to Stroat, where a slight deviation seems to have been made. The present road continues straight in general direction to Tidenham, and then bends towards the west, and about a mile beyond Tidenham the course of the Roman road leaves the present road, and is followed by a footway to the north of Tutshill. In 1861 the road showed its line through the turf, and was found as a rude pavement in sinking foundations for buildings.1 It could be traced down to the Wye at the site of the ancient bridge across the river at the south end of Piercefield Park, where remains of piles were clearly to be seen at low water. The track can still be traced on the Monmouthshire shore, ascending through Castle Wood to The Mount, Chepstow, from which a parish boundary and a road mark the line to Hardwick Hill. The parish boundary turns along the Newport road for more than a quarter of a mile, and then the Ordnance map marks "traces of Roman paving" on it. In about half-a-mile the road passes through Pwll Meyric, and on to New Inn Smithy, where it bends to the south, and the course of the Roman road continues on to a highway leading to Crick and Caerwent. In 1732 Horsley described it on

¹ Ormerod's Strigulensia, p. 3.

the east of Caerwent as a military way large and remarkable.1

(13) Iter XIII. of Antonine.—The present road from Gloucester which turns from the line of the old post road towards the north-west at about five miles from Gloucester, is marked as a Roman road on the Ordnance maps with "traces of Roman paving" along it. The road was improved by Telford as the mail road to Ireland by way of Milford Haven in the earlier part of the last century, and it has no appearance of Roman laying out. It is crossed by the road from Mitcheldean to Newent, marked as a Roman road on the Ordnance map, and with "traces of Roman paving" for some little distance. Another road northwards from Mitcheldean, by Mitcheldean Road railway-station to Brooms Ash, seems to have quite as much claim to be considered a Roman road. From it the Ordnance map marks a Roman road branching to Bury Hill near Bollitree, where Roman remains have been found. They consist mainly of coins and fibulæ; and it has been thought that there are traces of hardware manufacture.2 It has been supposed to be the site of Ariconium, a station in Iter XIII. of Antonine's Itinerary, XV. M. P. from Clevum; Blestium, the next station westward, XI. M. P. distant, being placed at or near Monmouth. Bollitree is 13 miles from Gloucester, and 13 miles from Monmouth by way of Goodrich Ferry, and there is little evidence of a Roman road either from

¹ Brit. Rom., ii. p. 469. ² Rev. H. G. Nicholl's Iron-making in the Olden Time.

Gloucester or on to Monmouth, where no Roman remains are known. The same may be said of Usk, where *Burrium*, the next station in the Iter, has been placed; but *Burrium* is found also in Iter XII., and the distances from *Gobannium* at Abergavenny in that Iter, and from *Isca* at Caerleon in Iter XIII., accord in fixing *Burrium* at or near Usk.

A route for Iter XIII. by Mitcheldean and Redbrook suggests itself as an alternative. *Ariconium* would then be near Littledean, and *Blestium* near the Wye.

(14) Gloucester to Llandovery .- The Roman road appears to have turned off to the north-west after the Severn was crossed, but there is little trace of it. In a perambulation of the Forest of Dean, A.D. 1228, the road from Leadon bridge at Over to beyond Newent is called "Magna Strata"; and in a perambulation A.D. 1300, it is called "regalis via"; 1 names which furnish a presumption that it was a Roman road, though it is doubtful how far the present road follows the same course. Beyond Dymoke there is more of the character of Roman setting out, the course of the present road lying in straight lines from point to point in very nearly the same direction for nine miles and a half to Stretton Grandison. The road must have fallen into the continuation of Riknild Street coming from Worcester, of which there are unfortunately no From Stretton Grandison the course is perhaps straight to the present Hereford road near Shucknall, then following the old road to Lugg

¹ J. G. Wood, Woolhope Field Club, 1901.

Bridge, and thence along a highway followed by the boundary of the city of Hereford for three and a half miles; and on very nearly in the same straight line to the station Magnæ at Kenchester, parish boundaries running along the present road for most of the way. At Magnæ, the road coming southward from Wroxeter, which has already been noticed (p. 80), crossed. Westward from Magnæ the course appears to be followed by the present road as far as Garnons, and a parish boundary across the Lawns in the same general direction probably represents the line on to the Hay road to the west of Garnons. From Maddle Brook a parish boundary follows the straight road for nearly two miles to Staunton-on-the-Wye. Some five miles further on a parish boundary again follows the road for half-a-mile between Winforton and Whitney, where the modern road crosses the Wye; but the Roman road seems to have continued on the north side of the river, and is probably represented by a lane turning south at Bronydd to the square camp near the bank of the Wye, which must have been crossed near Hay. Between Hay and Brecon there are but few indications of the course of the road. At about a mile from Hay a piece of straight road begins, which for two miles points straight to a conical hill near Three Cocks, and on it are two places called Ffordd fawr (great road). The course is perhaps followed by the modern road to beyond Bronllys. From near Pont-y-bat-fach, one and three-quarter miles west of Bronllys, a line of highways crossing the main road at Pen-isaf-waun,

and continuing on in the same line to within one mile of Brecon, on which the name of Ffordd fawr again occurs, may probably represent the Roman road.

This road was joined near Brecon by a Roman road from Abergavenny, of which however there is little trace. To the west of Crickhowell the course seems to be by Tretower to Pen-y-gaer, where there are the remains of a Roman camp, and along a lane to Ty-maur, about half-a-mile west of which at Bwlch a parish boundary joins the present main road and follows it for half-a-mile, and continues along a lane for a mile, to the southward of Allt-yr-Yscrin. A stone pillar, probably a milliary, dedicated to Victorinus (A.D. 265-7) formerly stood by the side of the road at Scethrog, and seems to show that the present road follows the course of the Roman road on the west of the Brecon and Merthyr railway.

West of Brecon the road called Hen-heol (Old Street) is no doubt the Roman road leading to the camp at Aberyscir on the north bank of the river Usk, on the east of the confluence of the Yscir. The camp called the Gaer, some of the masonry foundations of the walls of which remain, measures 207 yards by 140 yards. From it Roman roads went in four directions. Of Hen-heol to the east some traces remain, but the course of the others is not so plain.

The road northwards appears to have passed over

¹ It was removed and in use as a garden roller for some time, and again set up on the roadside,

Cefn Sarnau, where it seems probable that it was joined by a road branching on the north of Brecon, and passing over the hill to the east of Pen-y-crug and by Sarnau. It crossed the Honddu at Castell Madoc, from which a parish boundary follows the present road for a mile and a half, and it then mounted the high ground on which from Post-ypabell for two miles a parish boundary runs along the track. The course is then uncertain. It is supposed to cross the Wye near Castell Llechryd, a camp 200 yards square close to Builth Road railway-station, and to have gone over Llandrindod Common, where traces are said to have been visible at the beginning of the last century, and over Cefullys crossing the river Ithon, just south of Castell Collen, a large camp 133 yards square, with remains of walls of rough-hewn stone. In 1786 there were remains of a raised causeway made of large pebbles and gravel, and overgrown with grass.1 The road is supposed to have continued on to Caersws near Newtown, Montgomery, by Caerfagu, over Camllo Hill and up the Clywedog valley, and over Bwlch-y-Carnau, but the course is uncertain.

Sarn Helen to Neath.—The Roman road to the south from Aberyscir, called Sarn Helen, seems to have crossed the Usk about half-a-mile west of the camp, where a parish boundary runs at right angles from the river to the end of a ridge, and then along the top of the ridge and along a lane to Heol Fwt-y-drain. The parish boundary continues along a road

¹ Archaologia, iv. p. 4.

to the south of Mynydd Illtyd, though the Roman road is thought to be visible about a quarter of a mile further to the north. After passing over the Brecknockshire mountains, it appears to have entered the upper end of the Llia valley, and after following it for two miles to have turned south-west over the mountains, crossed the valley of the Neath river near its source, ascended the steep escarpment of the mountain, and followed Nant Hir down to Ton-y-Castell, one mile south-east of Capel Coelbren. In 1760 the causeway here was described to be uninterrupted for a mile, a raised road 40 feet wide with a ditch on each side,¹ and it is still plainly visible. The 40 feet no doubt includes the ditches.

At Ton-y-Castell there is a Roman camp about 166 yards square close to Sarn Helen, which here enters Glamorganshire; and then parish boundaries follow the road over the mountains between the vale of Neath and the Dulais valley for eight miles. The road remains plain on the mountains, and, as indicated by the parish boundary, it descended into the vale of Neath near Ynis-y-Geryn, about two and a half miles from Neath, where it may have crossed the river, or may have followed the course of the present main road and crossed further down, where it is said to have been visible in the marsh at the beginning of the last century.²

From the station at Aberyscir the Roman road seems to have continued westward along the north

Strange, Archaol., vol. i.
 Hoare's Giraldus Cambrensis, clvi.

of the river Usk, generally in the course now followed by highways, to one mile beyond Rhyd-y-Brew, where the modern main road joins it. Hereabouts the causeway was visible in 1774.1 At Trecastle the narrow Cwm Dwr, through which the modern road passes, was avoided, and the Roman road ascended the Trecastle mountain to the south of it. A rough track now represents what, until about 1785, was the coach road between Brecon and Llandovery. Near it in 1769 a stone supposed to be a milliary, inscribed to Posthumus, was found. On the edge of the west escarpment of the mountain (1267') the road passes close to the remains of a large camp called Pigwn, now a good deal obliterated. The Ordnance map shows a rectangle 466 yards by 400 yards, with another 366 yards by 300 yards placed diagonally within it, and not far off a small camp 46 yards square. The road then winds down by Black-cock (where oxen used to be kept to help the coaches up the steep hill) to Hafod. The course of the road is then straight for a mile to the head of a deep valley, which it passes round, and again runs straight for a mile, and then winds down the hill by Fron. The road appears to have crossed the river Brân near Llandovery Castle.

At Llandovery, where *Luentium* of Ptolemy has been placed, but with little reason, four Roman roads met. From Llanfair-ar-y-bryn, half-a-mile to the north of the town, where Roman remains have been found, there was formerly "a very notable Roman

¹ Strange, Archæol., vol. i.

way of gravel and small pebbles "1 in a north-easterly direction. The present road, straight for two miles, follows it, and about three miles further on Sir R. C. Hoare observed a causeway upon Cefn Llwydlo, which is now visible. The road is said to have crossed the river Yrfon at Glancamddwr, and to have joined the Roman road which has been described (p. 367) from Aberyscir to Castell Llechryd and Castell Collen.

(15) Llandovery to Llanio and Sarn Helen.-The road onwards from Llandovery seems to have crossed the river Towy in the direction of the railway-station. On the north of the river the course appears to be shown by a highway leading over Bwlch Trebannan to Cynfil Cayo, and the Roman gold-mines at Gogofau, and on to a Roman road bearing the name of Sarn Helen running north. This Sarn Helen is parallel to, and 24 miles west of the continuation northward of the Sarn Helen from Neath to Aberyscir. It is followed by highways in a straight line for two and a half miles south of Bwlch Blaen-y-corn, and crosses over the mountains, where it is very plain, to Llanfair Clydogau, and then it went on by a course which is obscure to Llanio, where at Caer Castell, Roman pottery, coins, and inscribed stones are found, and which has been supposed to be the Luentium of Ptolemy, but with perhaps less claim than Llandovery. A Roman road bearing the name of Sarn Helen can be plainly traced in a direct line due north from Llanio for nine miles, and it is visible further on at

¹ Gough's Camden, iii. 142.

Cwmllechwydd, and again at Llwynrhyngell, a mile and a half to the north of the river Ystwith. It is supposed to have crossed the river Dovey at Penallt near Machynlleth, where Llwyd noticed a Roman fort, and a broad hard way of pitched stones from it to the waterside in a straight line for 200 yards, and 10 or 12 feet in breadth. This road is supposed to have joined the Sarn Helen coming southwards from Conovium (p. 89).

(16) Llandovery to Carmarthen .- Soon after the river Towy was crossed, a Roman road branched off at right angles to Carmarthen. It has been traced in the grounds of Blaen-nos, and about a mile further on the present main road is supposed to take the line of it, though as far as Llanwrda it lies under a steep hill in a position not usual for a Roman road. Abermarlas the modern road turns south, but the Roman road ascended a ridge of high ground overlooking the Towy valley, and is represented by a line of highways passing by Cefn-glas-fryn, and a mile and a half north of Llandilo. The modern road is crossed two miles west of Llandilo, and again a mile and a half further on at Broad Oak; the line of highways following the course of the Roman road rejoins the present road at Pontdulas, but the Roman road may have crossed the Dulas rather higher up the There is little in the present road, narrow and crooked, though direct in its general course, to suggest a Roman road; but paving here and there may be vestiges of one, and it is locally known as the

¹ Gibson's Camden, p. 652.

Roman road. It seems to have passed over the hill by Pen-cae-gwyn to Halfway House, and in less than a mile an old highway on the south of the modern road takes up the line by Llanegwad to Pen-yr-heol, from which the main road follows the course of the Roman road through Abergwili to Tanerdy near Carmarthen. It seems probable that it continued on in the same direction, skirting the north of the town, and taking the line of Catherine Street to Picton Terrace. Carmarthen is generally supposed to be Maridunum of Ptolemy, one of two towns in the country of the Dimetæ of which he gives the position, the other being Luentium. According to the degrees of latitude and longitude, by which the positions are given, Luentium is about 25 miles south-east of Maridunum, so that if the latter be Carmarthen, the former cannot be at Llanio, nor at Llandovery.

Carmarthen to Llanio.—At Tanerdy on the east of Carmarthen a Roman road appears to have branched northwards along the line now followed by the main road to Llanbyther, except where here and there the old course has been quitted to improve the gradient. It is visible in places and known as Sarn Helen. It passed through Pencarreg, and at the beginning of the last century it was visible in the bank of the river Teifi, and in the meadows adjoining near Lampeter bridge. It no doubt joined the Roman road from Cynfil Cayo near Llanfair Clydogau, and with it continued on to Llanio.

(17) Carmarthen to the West.—Westwards from ¹ Hoare's Giraldus Cambrensis, p. clxiii.

Carmarthen the course of the Roman road appears to be that of the present main road for about three and a half miles. It would seem then to have passed north of Castell-y-gaer, a British earthwork with a Roman camp in the north-west corner of it, and to have followed the line of roads by Pen-yr-heol, through Mydrim, by Caerlleon, to Post Gwynne. Fenton tells us that in 1811 the road was discernible in many places through the vale of Whitland after drought, and that there was appearance of a ridge near Post Gwynne; and that the peasants would track the road, called Ffordd Helen, for miles, though except where it formed the modern road there was little trace of it. Four miles west of Post Gwynne is a road in the same direction, called Park Sarnau, with a parish boundary along it for half-a-mile, crossed by another road in a north-easterly direction, with a parish boundary along it for three miles. After an interval of six miles, a road followed by a parish boundary for four miles runs westward from Castell Hendre, past the remains of a camp a mile north-east of Ambleston, supposed by Fenton to be the station Ad vigesimum of the fictitious Itinerary of Richard. For about two miles west from Ford, and from Brawdy to Whitchurch, the road is marked Roman road on the Ordnance maps to within about three miles of St. Davids.

Parallel to, and about four miles north of this road, is the road called Ffordd Fleming—Latinized into *Via Flandrensica* or *Flandrica*. It passes along the

¹ Historic Tour in Pembrokeshire, p. 479.

top of Prescelly mountain with a parish boundary following it for six miles, and it continues on along the tops of the hills eastwards to the borders of Carmarthenshire with the name of Hên Ffordd (old road). It slants down the south side of Foel Eryr, at the west of Prescelly, and can be followed on to the north of Letterston. According to Fenton it could be traced into the promontory of St. Davids, and he correctly describes its appearance for the greater part of its length as that of a hollow way, or old unfrequented lane; though he says that on the south of Foel Eryr portions might "be distinctly traced in various stages from an open foss to the perfect raised pavement through soft ground." 1 Fenton's accuracy has been questioned, and the raised payement cannot now be found. Many Roman coins have however been found along its course, and it is probably an older road, used, and perhaps improved in parts, by the Romans

That is perhaps as much as can be said for the road from Carmarthen westward, but there is ground for supposing that the Romans occupied this part of the country at a comparatively early period. A hoard of 200 Roman coins found enclosed in two leaden boxes, in a camp at Llanboidy, 14 miles west of Carmarthen, in 1692, were none of them of later date than A.D. 91.2

The *Itinerary* of Antonine does not appear to extend further than to the borders of South Wales, to

Historic Tour, pp. 484, 566.
 Llwyd in Gibson's Camden—Gough, iii. p. 135.

Caerleon, Usk, Abergavenny, and Kenchester, but it is evident that Geoffrey of Monmouth's road from St. David's (Menevia) to Southampton, which Higden calls Erming Street, and Higden's Riknild Street from St. David's to Worcester and Chesterfield, represent roads which can still be followed; though the Roman characteristics are not so plain as we go westward. The more noticeable Roman roads beyond the limits of the Itinerary are those which run across these roads from the south to the north, parallels as it were by which the mountain country was divided up and subdued.

CHAPTER XI

CONCLUSION

In the foregoing pages the Roman roads have been grouped, for convenience of description, under the names by which they are now generally known, which have little relation to the original planning of them. It is interesting to try and follow the hints afforded by the roads themselves of the sequence in which they were laid out, and to see how far they agree with what is known of the Roman conquest and occupation of the country.

It may be taken for granted that the first road was from the landing-places at Dover and Richborough to Stangate, where the Thames was crossed to Westminster, and it is natural to suppose that after gaining the higher ground on the north side of the river, roads were laid out to Camoludunum, to Calleva Atrebatum, and to Verolamium. We know that Camoludunum was taken about A.D. 44, and there is reason to suppose that soon after that time the whole of the country as far west as Gloucester and beyond Salisbury was in Roman occupation. The planning of the roads radiating from Calleva to Winchester, Old Sarum, and Cirencester probably soon followed; and from Winchester it is likely that a road was

soon continued on to a port, at Bitterne or Porchester.¹

The road from Silchester to Old Sarum was evidently laid out with the object of reaching that British stronghold. It was continued to the equally strong fortress at Badbury, and thence it would seem in the first place to Poole Harbour. When the road was continued from Badbury westward, the object seems to have been to reach Maiden Castle, the immense earthwork near Dorchester. From the latter access to the sea was again secured by a road to Weymouth.

Judging from its direction, the road from Silchester to Corinium, the capital of the Dobuni, was the original stem from which the road to Bath branched off at Speen. It was soon continued on to Gloucester, where the Roman Clevum or Glevum was planted about A.D. 50, if not earlier. The construction of the road to Bath, and on to the mouth of the Avon, must have followed not long after. The Silures, on the west of the Severn, were attacked by Ostorius A.D. 51 or 52, and the Roman camp at Sudbrook, on the west bank of the Severn, and the two walled stations Venta Silurum and Isca leg. II. Augusta, each as large as Glevum, and of similar proportions, perhaps originated with that campaign. They lie to the south of the high tract of country between the Wye and the Usk, Venta in communication with the passage across the Severn from the mouth of the Avon, and Isca, only eight miles further west, accessible by the navigable

¹ According to Geoffrey of Monmouth, Porchester was one of the landing-places in the invasion of Claudius, A.D. 43.

river Usk. The road from *Clevum* to *Venta*, and that from *Isca* by *Gobannium* to *Magnæ*, completed the hold on that part of the country, which probably was not secured until after the conquest of the Silures by Julius Frontinus, A.D. 76.¹

Parallel with the last-named road from Caerleon to Kenchester and Wroxeter, and apparently marking the successive steps in the subjugation of Wales, are the other roads with a general direction from south to north, already mentioned. Sarn Helen, from Neath to Aberyscir, Castell Llechryd, and Caersws, and continued by Sarn Swsog, is communicated with at Aberyscir by roads from Abergavenny, and from Kenchester, and was doubtless also joined at Caersws by a road from Wroxeter. Again, after the dividing ridge between the Usk and the Towy had been passed over by the Roman road from Aberyscir westward, the latter road is crossed by a road communicating with the sea at Carmarthen, and with Sarn Helen at Castell Llechryd. The more direct road onwards crosses the hills from Llandovery to the valley of the Teifi, and then communicates with another Sarn Helen from Carmarthen, which passes through Cardiganshire and North Wales, and joins the Roman road from Chester to Carnaryon at Caerhûn on the river Conwy.

¹ Frontinus, after he was succeeded by Agricola, became Curator Aquarum at Rome, and he has left us interesting information concerning the water-supply of the city in his work, De Aquis Urbis Roma. A treatise of his on Stratagems, unfortunately is without any reference to his campaign in Britain.

It is to be observed that all four roads are in connexion with the sea at their southern ends, and it may be that it was by way of the sea that the country to the west of Carmarthen was occupied at the early date which seems indicated by the coins found near Llanboidy, none of which were later than A.D. 91.

The cross-roads from Winchester to Old Sarum, and that from Winchester by *Cunetio* to join the road from Speen to Cirencester, are probably later than the roads radiating from Silchester. The pig of lead found at Bossington on the former road, dated A.D. 60, proves however that at that date the road existed.

The course of the Foss Way lies across the general direction of the Roman advance. It is possible that it was laid out parallel to the frontier when the Roman province was bounded by the Severn and the Trent, as it apparently was for some years before Paulinus' expedition to Mona, A.D. 59.¹ There is, however, little to suggest a defensive purpose in this Foss Way. One camp only, or name suggestive of a camp, is to be found on it in the 74 miles between Leicester and Cirencester.

The way in which the Foss road enters and leaves Cirencester and Bath shows that it is of later date than the roads leading from Silchester to those places, and it appears to be later than Akeman Street, which it joins before entering *Corinium*. The Foss joins Erming Street on the south of Lincoln as if it were laid out after the latter road, but the milliary found

¹ Rhys' Celtic Britain, p. 80.

on the road to the north of Leicester proves that the Foss road there was in existence A.D. 120.

The twist in Watling Street on the high ground between Brockley Hill and Elstree suggests that the road may have been laid out from Verolamium, already at the time of the Claudian conquest, A.D. 43, an important place, as well as from the south. Onwards to Wroxeter, Watling Street appears to be a work in itself, carefully laid out to keep on the high ground of the water-parting, between rivers flowing to the north and to the south, and making for its objective point without passing through any place of importance. Viroconium is supposed to date from about A.D. 50. The continuation southwards along the Welsh border to Kenchester and Abergavenny could hardly have been laid out before the defeat of the Silures, A.D. 50 or 51, and it probably was not constructed until after the conquest of that people by Frontinus 20 years later, by which time it would have been joined by a road northwards from Caerleon.

The branching off of the road to Chester at an obtuse angle from Watling Street, seems to indicate a later laying out of a communication with the port at the mouth of the Dee, which was to form a base for the expedition of Suetonius Paulinus against *Mona*, A.D. 58-60. The road to Carnarvon, branching from this road almost at right angles several miles to the south of Chester, must have been made before A.D. 78, as we may judge from the rapidity of Agricola's advance to *Mona* in the autumn of that year.

The advance into Lancashire is perhaps marked by the road which must have branched from the road from Watling Street to Chester, and which can now be traced from Nantwich, by Kind Street, crossing the river Mersey near Warrington, and the Ribble at Walton above Preston, and continuing on to Lancaster; keeping in communication with the sea, and avoiding the neighbourhood of the high land between Lancashire and Yorkshire, then occupied by the unsubdued Brigantes.

This line of advance isolated the Brigantes of the high ground on that side, but access further to the north was barred by Morecambe Bay and the estuaries connected with it, and by the mountains and fells of Cumberland and Westmoreland. Agricola's advance to the north, as described by Tacitus, must have been along the east flank of the high land, and Riknild Street branching from Watling Street at Wall, and leading to Isurium, the capital of the Brigantes, probably represents the line of it. Part of that road may have been laid out as early as the campaign of Cerealis against the Brigantes (A.D. 70), but the continuation northwards is probably connected with Agricola's advance (A.D. 80-84). The branching of the road to Carlisle at an obtuse angle with the road onwards to the north suggests a later date for the former road. The inscription to Hadrian, found at Bowes, and dated by Horsley A.D. 110,1 seems to prove that it existed at that date. The numerous camps along it suggest that the primary

¹ Britannia, p. 311.

purpose may have been to intersect the high moors of the country of the Brigantes. The roads across the range between Lancashire and Yorkshire also appear to be connected with the subjugation of that people, which was not completed up to the time of Hadrian. The road passing through Manchester in a northeasterly direction was evidently laid out with the high moor beyond Oldham for its objective point, and there can be little doubt that it continued on to join Riknild Street. From Mancunium, a station of no great size on that road, another road in a more northerly direction was laid out across Blackstone Edge and Rumbles Moor to Isurium, being joined at Ilkley by a road from Ribchester which continued on to York.

The road from Manchester to Ribchester branches off from the Blackstone Edge road, and is apparently of later date. It constituted perhaps part of a line of communication by way of Kirkby Thore with Carlisle, and by the Maiden Way to the stations along the Wall.

It is uncertain when London rose to such importance that a bridge over the Thames, and roads communicating with it on the south side of the river, became necessary. The Sussex Stane Street points straight to the bridge, as if it were the objective point, and the branch road from Watling Street along Old Kent Road and Kent Street (now Tabard Street) joined it at an obtuse angle nearly half-a-mile from the bridge, and thus would seem to be no older than Stane Street. The roads must have crossed the embanked marsh on raised causeways, and the

Roman remains hitherto found on the south of the river generally lie along the course of them, or along the river embankment.

The road southwards by Caterham through Sussex to Clayton (p. 62) appears to branch from Stane Street near Streatham. It may have led to the mouth of the river Adur, where Camden and others have placed the Portus Adurni of the Notitia. may possibly also have communicated with Anderida by a road along the downs, through Lewes, and following a very old road through Glynde and Alciston. The Roman walls of Anderida at Pevensey, enclosing an area of 220 yards by 115 yards, remain, but there are no traces of a Roman road to it. It is almost surrounded by land but little, if at all, above the sea level, and the natural access is from the west, and it was from near Eastbourne, in that direction, that the squared blocks of calcareous sandstone came with which the Roman walls are faced.

On the north of the river Thames, Erming Street is in line with the Roman bridge, but there is no reason to connect it with the road that bears the same name in Surrey, and is called Stane Street in Sussex. It is rather to be supposed that Erming Street was directed northward from outside the east gate of the earlier Londinium, before the extension of the city included the bridge, and presumably before the bridge was built.

After going northward in a direct line for 19 miles, Erming Street turns off to Braughing, suggesting

that the purpose of the road in the first place was as much to give access to East Anglia by the road on to Newmarket, as to lead to Lincoln and the north. After skirting round the Fen country it makes straight for the Humber, and the roads on the north of that river continue the same general direction; one line along the edge of the Wolds, and on by Wade's Causeway to the sea, probably at Whitby, and another by Stamford Bridge and Northallerton to join the road to the north by way of Riknild Street. York does not seem to have been much considered in laying out these roads.

The road to York by Doncaster, Castleford, and Tadcaster, which branches from the road to the Humber a few miles north of Lincoln, may be supposed to date from the early part of the second century, when Eburacum was rising into importance, and when a road to the new capital without crossing the wide Humber was required. The way in which the newer road is laid out to avoid the lower courses of the rivers draining into the Humber, brings it within a few miles of the older Riknild Street between Castleford and Aberford, where both roads are still plainly traceable. It is very likely that in Roman times the traffic to the north was diverted from Riknild Street to the newer road. York evidently became a centre from which newer roads radiated while the older ones remained, and consequently the traces that are now left present a somewhat perplexing network of roads.

The Northumberland Watling Street from Catterick Bridge northwards to the river Deerness points in the direction of the river Tyne at Newcastle by way of Chester-le-Street, and the turn almost at right angles to Lanchester and Corbridge suggests a later laying out of the road in that direction. A course which avoided the high moors, and gave access to a seaport, seems to be one likely to be chosen for the first advance.

The manner in which Watling Street passes the Wall of Hadrian seems to show that the road is older than the Wall; and the reasons for thinking that other Roman roads which pass through the Wall were made before the date of the Wall (A.D. 120-129), have been given. It seems unlikely that the forts established by Agricola (A.D. 81) between the Forth and Clyde were left without roads to give access to them, and it may be supposed that all the roads as far as the Wall of Antonine were made before Hadrian's Wall.

It has been thought that the Roman road to the north of the Forth, to Stirling and Perth, dates from the expedition of Severus to beyond the Dee, A.D. 209. It may, however, be doubted if there was time in that campaign for such a work, and the road may belong to a period before the construction of the Wall of Antonine, A.D. 140.

It is probable that systematic excavation in the ridges or mounds of Roman roads would afford evidence of their date by which speculation would be

superseded. Although most of the Roman work has been covered up or destroyed in the making of modern roads, there are many ridges remaining where exploration might be carried on without inconvenience with that thoroughness without which little result is to be expected.

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