

THE RABBIT-WALK, FIRLE HILL.



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(The lighter portion of the roadway is the modern horse-tread. The dark shadow at the outer edge is produced by the long growth of summer grass.)

SOME ROMAN ROADS IN THE SOUTH DOWNS.¹

By A. HADRIAN ALLCROFT, M.A.

There was in Romano-British times a cemetery at Seaford²; therefore presumably a settlement, and a road or roads leading thereto. It has become almost traditional to assert that one such road ran from Lewes by way of the present Lewes-Newhaven road past Iford and Rodmell to Southease, across the Ouse at or near Itford, and so to Seaford. The origin of this assertion appears to be Stukeley, who says³ that a Roman road ran from Lewes to Newhaven by way of Rodmell, admitting, however, that he had this information on hearsay. He imagined that one of the four 'royal roads' began at Newhaven, and that it continued past Lewes by way of Isfield and Sharnbridge towards London, apparently overlooking the fact that there was no port of Newhaven until the eighteenth century. In support of his view he cited the name of Rodmell, which he took to mean 'road-mill'; and later antiquaries, mostly accepting this bad guess without comment, have sometimes improved upon it by pointing also to the name of Iford. There was, they argue, a ford here; *ergo*, a road leading to the ford; *ergo*, a Roman road. Dealing in the same way with Itford, they had a satisfactory sequence of three place-names lying in the required line.

Now, though it is true that Iford appears so spelt as early as 1278, the Domesday form of the name is Niworth (Niworde), and the inference is that *-ford* is a later substitute for the original *-worth*. Such substitution can be paralleled in several other cases,⁴ though perhaps not at so early a date. It is therefore unsafe to draw from the later form of the name any inferences

¹ Read before the Institute, 5th May, 1915.

² F. G. Hilton Price and J. E. Price in *Journal Antropol. Institute*, vi, 300 (1877); J. E. Price in *Sussex Archaeol. Coll.* xxxii, 167 (1882).

³ *Iter Curiosum V*. Stukeley elsewhere asserts that five Roman roads met at Lewes. Understanding the expression 'at Lewes'

in a loose sense, the present article will be found to justify Stukeley in regard to *four* roads, if it fails in any degree to justify the fifth.

⁴ e.g. Duxford (*D.B.* Dochessuorde) and Pampisford (*D.B.* Pampesuorde), both in Cambridgeshire, and Poslingford in Suffolk. See Skeat, *Place Names of Suffolk* (*Cambs. Antiq. Soc. Publications*, xli, p. 35).

as to its meaning, quite apart from the fact that the valley of the Ouse is here $1\frac{1}{2}$ miles across, far too wide to be negotiated by any ford at a date prior to the embanking of the river.¹ The name of Rodmell (anciently Ramelle, Rademeld, Rademylde, etc.²) cannot possibly derive from anything meaning either a road or a mill, and perhaps alludes to the markedly 'red mould' of the locality, in contrast with the lighter tints of the surrounding chalky soil.³ There remains then only the name of Itford. This, which to-day attaches to a single farm and farm-house in Beddingham, appears as Iteford in *Feudal Aids* of 1401, and nothing else seems to be known about it. The house was once a manor-house of the Lewknors. That there actually did exist a ford here in very early times is suggested by several reasons. The hills on either side of the river here close in, so as to leave only a narrow passage; it is impossible to believe that the manor, which lay immediately upon the eastern bank of the river, was without some ready means of access to the Lewes-Newhaven road, still the only tolerable high-road in the valley, as it was in Ogilby's time (1675); and to a ford at this spot points an old road from the Long bridge at Alfriston along the northern foothills of the Downs by Berwick, Alciston, Bopeep, Charleston, West Firle, and The Lay. Moreover, here is to-day the only bridge over the river between Lewes and Newhaven. There is, however, no evidence that the ford was available in Roman times, nor is the nature of the ground between Itford and Seaford such as to suggest that a Roman road-engineer would have chosen this course. After spending some years in the fruitless effort to justify Stukeley, the writer abandoned his theory and turned to the Downs between Seaford and Firle. There the road sought for was found at once, together with other matters which may perhaps be thought worth consideration.

¹ R. G. Roberts, *Place-Names of Sussex* (1914), dismissing the Domesday form, interprets the name in the popular way, 'the ford in the marshy ground.' He further confuses the matter by misreading, and then mistaking as meant for Iford, two of the Domesday forms of the name of the

hundred of Easewrith, viz. Ifwirde and Ifewerit (*Domesday*, Isiwirde, Isewerit).

² Redmile (Leices.) was also spelt Rademylde in the thirteenth to fifteenth centuries.

³ R. G. Roberts, *op. cit.* endorses this suggestion, which is not by any means free from difficulties.

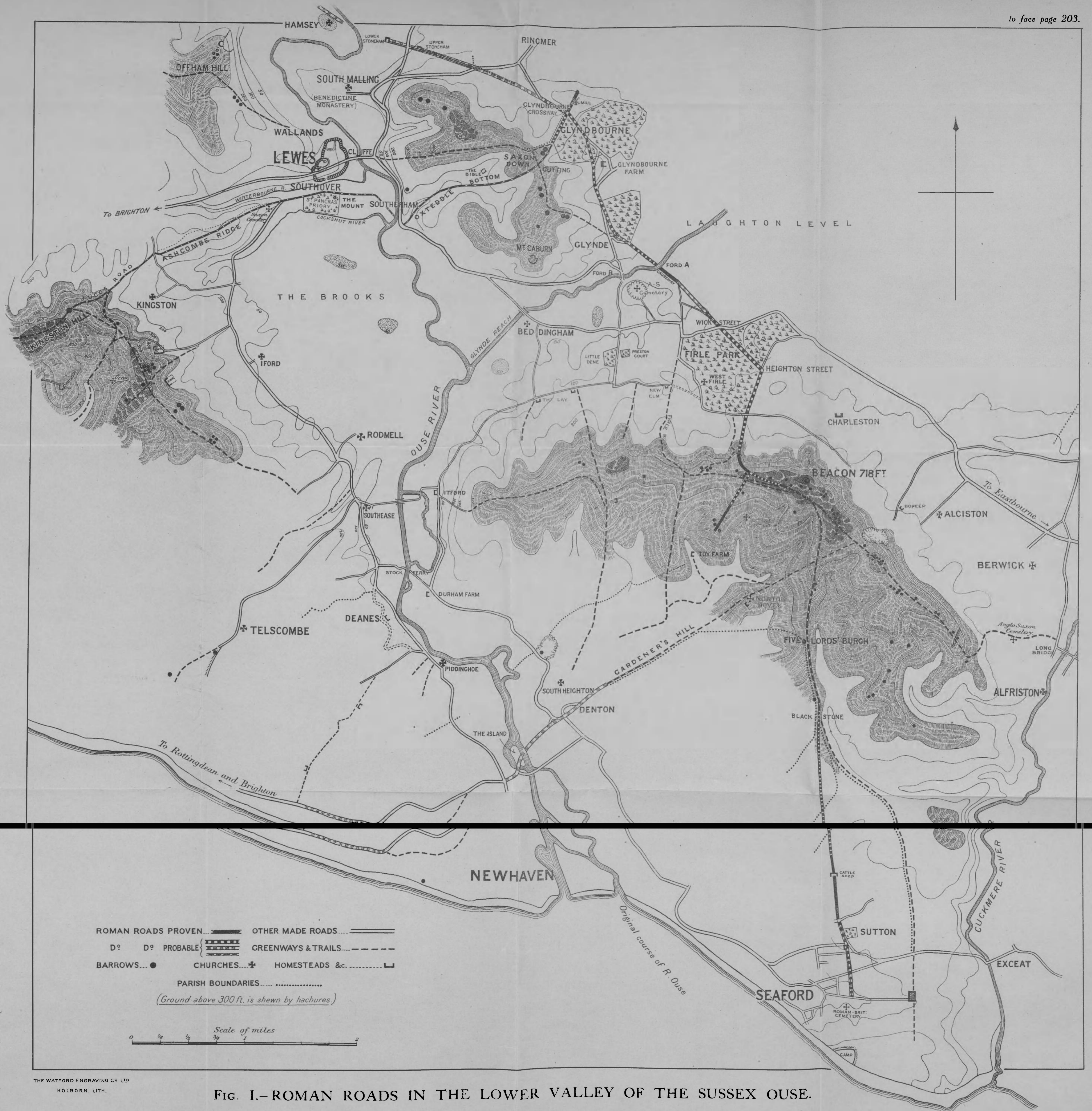


FIG. I.—ROMAN ROADS IN THE LOWER VALLEY OF THE SUSSEX OUSE.

THE ROAD ON TOY FARM.

Firle beacon (718 ft.) is the apex of an insulated mass of chalk which slopes gradually up to this point from the coast at Seaford. The valleys of the Cuckmere and of the Ouse form the boundaries on east and west, while on the north the hills fall, with the abruptness which characterises the whole length of the northern scarp of the Downs, towards the Ritch river or Glynde reach, the chief affluent of the Ouse. The scarp forms a pronounced curve of 90° , about a centre at Bishopstone (between Seaford and Newhaven), one end of the arc lying upon the Cuckmere at Alfriston, the other on the Ouse at Itford, Firle beacon being only a few yards eastward of the middle point of the arc. The down to the immediate west of the Beacon is known as Firle hill, overhanging the village of West Firle, 400 feet below. Beyond the village the foot-hills fall gently to the north, forming a kind of promontory between the levels of Laughton to the east and Beddingham to the west.

One and a half miles due south of West Firle church, upon the southward slope of Firle hill, at 450 feet above sea-level, lies a noticeable group of round barrows known as Firle Lords' burghs.¹ One of them has been destroyed recently for the sake of the flints of which it was largely built, but the remaining two, ranged closely together north and south, are of height and proportions very unusual among the Downs. The 'agger,' now turf-grown, of a Roman road of the first class overlies the south-eastern base of the more southerly of these. From this point it is intact for a distance of 230 paces, running in a straight line 27° east of north, perfectly smooth except where the material has been grubbed in parts near its southern end. The relief is 12 inches, the crown 25 feet in width, and on either side can be guessed, rather than seen, the presence of a fosse.

By the kindness of the landowner, Viscount Gage, and of the tenant, Mr. H. Stacey, I was able to cut a section across the road in September, 1914. The actual measurements proved to be as follows: crown of road,

¹ O.S. (6-ins.) Sussex east, LXVII, s.e.

24 feet; base (bottom of fosse to bottom of fosse), 30 feet. The road was built of smallish flints laid to a depth of 12 to 15 inches upon a bed of chalk-rubble. The surface was heavily cambered, and lying upon it, when the turf was removed, were found scraps of the common Romano-British pottery of this part of England.

A few yards to the south of Firle Lords' burghs the road is lost in the cultivated land of Toy farm. To the north also it has been ploughed out, but at a more remote period: old plough-marks run up to the 'agger' on either side where it is still intact, while they are to be found in numbers crossing the line of its northward projection; a few yards east of the line of this projection there still remains a small barrow, and traces of the hard bed of the road are discoverable in places where cart-ruts have cut across the line. At a point only 300 yards to the east was found in August, 1914, a Romano-British cemetery¹ and 'ustrina.'² Nearer to the brow of the down there is no visible trace of the road, the whole of the ground hereabouts having been disturbed by continual flint-digging, but the line (projected) reaches the brow of Firle hill (600 ft.), midway between Firle Borstall on the west and Firle beacon on the east, i.e. some 500 yards west of the latter, at a point marked by a second and much smaller pair of barrows. It would seem that the two pairs of barrows were taken as sighting-points when the road was laid out. At this spot the ground commences to fall towards the north, gently for some 30 yards, thereafter with extreme abruptness, dropping 300 feet in 600 feet.

The existence of the Roman road on Toy farm is an unassailable fact, and unless we are to suppose that its makers, for whatever reason, left it unfinished, we must conclude that it was carried further. There are only two alternatives possible: either it swung east or west along the ridge of the Downs, or it went immediately down the hill in more or less the original direction. The former alternative is unlikely, for the ridge here swings

¹ *Sussex Archaeol. Coll.* lvii, 217 (1915).

² Writing in *Sussex Archaeol. Coll.* xxii, 76 (1870), the Rev. H. Smith mentions that 'the site of some dwellings has

been discovered on the southern spur of Firle beacon,' associated with Samian and other pottery. I can find no further details of this discovery.

round on a curve of a quarter-circle, the Roman road striking the arc pretty much at the middle point; and a road carried along the ridge could have gone only to Seaford or to Itford. It will be shown presently that a Roman road does so run from this spot to Seaford, though there is no evidence for any running to Itford; but that a Roman engineer, starting from any point between Newhaven and Toy farm, should have laid out a road to either Seaford or Itford on the zig-zag course assumed by this alternative, is incredible. If his road had descended the hill at any other point of the arc, it would be just as difficult to understand why he laid it out as he did; and the face of the hill being for the most part elsewhere little less steep than at this particular spot, the problem of getting down to the lowlands would still remain to be solved. One must fall back upon the other alternative, namely, that the road was somehow carried down the hill at this precise spot, continuing as nearly as might be upon its original line of direction.

THE TWO FORDS AT GLYNDE.

Facing Firle hill, across the valley through which runs the Ritch river, rises two miles away to the north-west the isolated massif of Mount Caburn; and under the eastern slopes of Mount Caburn, on the north bank of the river, lies the village of Glynde, its single street running north and south to the bridge. Towards this spot run out the lower foothills of Mount Caburn on the one side and of Firle hill on the other, here reducing to their narrowest the water-meadows—anciently the bed of the now embanked river—which to east and west broaden out into wide stretches of land still flooded every winter. The bridge stands upon the site of a far older ford,¹ for the sake of clearness to be referred to as ford (B), and before the construction, about the year 1821, of the modern Lewes-Eastbourne high-road by way of Beddingham, the traffic east and west for many centuries

¹ MS. of W. Wisdom. He was a wheelwright and carpenter of Glynde, and he found the ford in 1774, while sinking the

piles for a bridge. The MS. is, by gift of Mark Antony Lower, the property of the parish of Glynde.

passed by this route, there being not more than some 400 feet of wet ground to traverse. Some of the large stones¹ which served either as stepping-stones, or more probably perhaps as marks to guide the traffic,² are said to lie buried beneath the grass upon the northern bank. But 600 yards further to the east there was another ford, which I shall refer to as ford (A), at a point where the northern bank (the Rise) was higher and firmer, although the passage across the tidal flats was longer (1,000 ft.) ; and at a spot about one mile below the point now reached by ordinary tides there remains a straight, level, and boldly-cambered causeway, with a width of 32 feet and a relief of 2 feet, running south-east from this ford and pointing to a spot upon the Lewes-Eastbourne road known as Wick street. Both elements of this name are suggestive. Both ford and causeway are understood to be Roman,³ and the last 200 yards of the line coincide with an ancient roadway, now disused, of characteristic Roman appearance, twelve feet wide, with a well-preserved fosse on either side. The original edition of the one-inch ordnance survey in 1813 shows this roadway continued in a straight line beyond Wick street and across Firle park (of which at that time it formed the north-east boundary) until it fell into the road which now forms the eastern limit of the park. The point of junction still bears the name of Heighton street, and upon the line of the old road hence to Wick street stood the lost village of Heighton St. Clere, of which little is now traceable but the site of the church.

The true objectives of this road have been overlooked owing to the prevalence of the belief that it connected a Roman settlement at Lewes with Anderida, and was therefore supposed to have joined up in some way with the east-to-west road along the foot-hills from Itford to the bridge at Alfriston. Against this belief must be set the facts that there is no evidence whatever for the existence of any settlement at Lewes in

¹ Information of Rev. W. E. Dalton, Vicar of Glynde.

² A coin of Antoninus was found at the spot when the bridge was constructed, but there is no evidence that the ford was in customary use in Roman times.

³ St. Croix, *Hist. of Glynde* (printed in *Sussex Arch. Coll.*). Mr. T. Colgate, Expenditor of the Ouse Levels, informs me that he has seen the actual paving of this ford in the river-bed.

Roman times,¹ and therefore no likelihood of any roads thereto; and that there is no showing the road along the foot-hills to be of Roman date.

THE RABBIT-WALK.

The road now forming the eastern boundary of Firle park from end to end, originally went no further north than Heighton street, and was doubtless extended north-east to the Lewes-Eastbourne road only when the older road direct to Wick street was blocked and the north-eastern part of the park annexed. Its southern terminus at the present day is its junction with the old trail along the foot-hills from Itford to the bridge at Alfriston; but if projected, it would reach the steep slope of Firle hill at a point identical with the easternmost corner of Firle plantation. There are four reasons for the inference that originally it was thus projected: firstly, there are plain indications of the hard bed of the road under the grass at the point last named; secondly, the facts suggest that such a roadway was taken as the eastern limit of the plantation, exactly as the surviving portion of the road served to demarcate the park; thirdly, there still remains, precisely at the required spot in the field-fence crossing the line about midway, an old gateway, for which there is no other means of accounting; and fourthly, the line thus projected coincides exactly with the lower end of the so-called 'Rabbit-walk.'² This is a remarkable green terrace-way which climbs the hill and emerges on the crest precisely at the spot upon which falls the projection of the Roman road on Toy farm. That it should coincide so aptly at either end with what is required is in itself enough to raise the question whether it be not itself a Roman work and part of the original Roman road. When further there are taken into account the peculiarities of its construction, peculiarities which differentiate it at once from the typical hill-ways of the chalk area, there should remain very

¹ The identification of Lewes with Mutuantonis of the Ravenna Geographer has nothing to justify it. The earliest evidence for the existence of a settlement

upon the spot is said to be coins of Athelstan minted here (tenth century).

² Not marked on O.S. (6-ins.) Sussex east, LXVII, N.E.

little doubt of its Roman origin. On the degree to which this can be established depends the entire argument of this article.

The normal hill-way of the South Downs is something that has grown with usage. In gradient, in width, in surface, it is merely what the circumstances have made

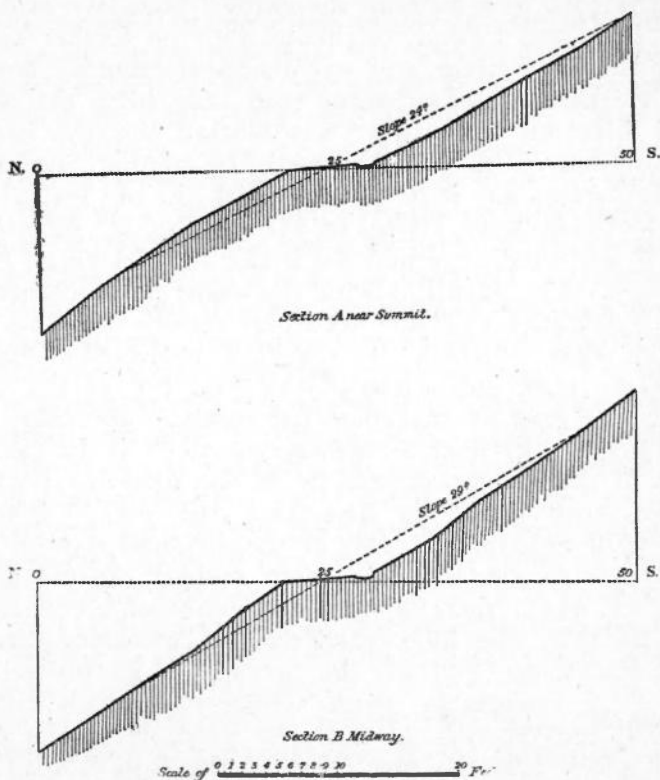


FIG. 2. SECTIONS OF TERRACE-WAY ('RABBIT-WALK') ON FIRLE HILL.

it; steeper or less steep, broader or narrower, smoother or rougher, its qualities vary with every few yards of its course, and if it has one abiding characteristic, it is that the roadway is almost invariably a 'holloway.' It is a mere rut worn in the face of the hill by years of traffic and weather, and in consequence it is as invariably bounded by banks *on both sides*, the height of which is more or less according as the trail has been much or little

used. In every one of these respects the 'Rabbit-walk' is different. It descends the hill, which is an exceptionally steep one with a fall of 1 in 2, by a gradient of mathematical regularity (1 in 5); it has a normal width of 8 feet¹; its surface is smooth and unbroken turf, save that along its inner edge the passing of occasional horsemen has broken the usual 20-inch tread which a horse requires. Nowhere from top to bottom does it show the slightest tendency to become a 'holloway'; and so far from having any sort of bank upon its down-hill side, its edge on that side is clean-cut like a step. It is, in fact a step cut out of the hill's face, the material removed from the up-hill side having been thrown down upon the other to form a wider roadway. The form of its section (fig. 2) is incontestable proof that it was so made, and the point to which the hill was cut back is still distinctly observable at many parts of its length. Lastly, the test of the spirit-level brings out the fact that throughout its course the floor of the roadway has a slight, but decided and uniform, slope from the up-hill to the down-hill side, this being rather less than 1 inch in the foot. No one accustomed to notice the character of his path can fail to be struck by the unusual features of the 'Rabbit-walk,' and the unfailing test of level and measuring-rod must convince any one that the thing is artificial, the work of engineers concerned to make a negotiable roadway down a hill by nature impracticable, and to safeguard their road from the destructive effects of scour by giving it just sufficient tilt to throw off all surface-water. Who were the engineers? The writer has asked himself this question insistently from the day when he first happened upon the 'Rabbit-walk' until, five years later, the answer was furnished by his finding the Roman road on Toy farm. It is suggested that the 'Rabbit-walk' is Roman work, and probably as perfect a piece of Roman road-engineering as Sussex can show. Two views of the terrace-way are given in plate 1.

There is no reason to deny it such an origin, for it is an accepted fact that the Roman engineers habitually constructed terrace-ways up and down the steeper hills

¹ At its lower end, as is usual with hill-ways, the floor of the road becomes wider with the decreasing steepness of the hill.

which barred their roads. There was indeed no other plan to be followed, unless they had avoided the hills; and not the least remarkable feature of their work is the boldness with which they laid out their roads so as to traverse the very highest, or all but the very highest, hills along the line. The Toy farm road is a case in point, and another at the Devil's dyke will be dealt with presently. In what precise manner the terrace-way was constructed might and did vary with the circumstances. In Craven, for instance, the Roman terrace-ways are wide and cambered, whereas here at Firle the roadway is narrow and void of camber. The reason is purely a matter of geology; what was at once necessary and satisfactory upon the precipitous chalk slope of Firle hill would have been neither satisfactory nor necessary upon the gentler shoulders of a limestone ridge in Craven. To have attempted to construct a twenty-foot road on the face of Firle hill, which slopes in places at an angle of 29° , would have been as wasteful an economy as to have attempted to hew a smooth terrace-way out of the intractable Craven limestone.

A glance at the printed descriptions of other known Roman roads of the chalk area will furnish proof enough that such terraces are common there. Thus, to cite one instance only, Codrington, speaking of the road from Silchester to Bath, writes: 'on Morgan's hill it is carried on a terrace about 5 yards wide, *cut into and embanked upon the slope of the hill*'¹; and he has a similar, if less precise, description of the road from Winchester to Cunetio. But Sussex itself provides a yet more convincing example in the course by which the Stane street descends Glatting down towards Hardham and the Weald. This, an unquestionable piece of Roman work, and in some ways the most remarkable Roman road in the country, upon reaching the brow of the down, suddenly abandons the extraordinary triple form observable on the ridge of the hill, and takes the shape of a simple terrace, in some places 30 or even 35 feet wide.² This is vastly wider than is the 'Rabbit-walk,' but on the one hand the Stane street, between Chichester and Hardham, is

¹ *Roman Roads in Britain*, p. 532.

² *Sussex Archaeol. Coll.* lvii, 145 sqq.:

'The terrace was formed by cutting back the slope of the hill.'

both in plan and in dimensions exceptional, and on the other hand the slope of the ground on Glatting down (13° to 15°) is only half as steep as that of Firle hill.

The 'Rabbit-walk,' in pursuing its carefully graded course along the contours of the hill, describes a curve approaching 90° . Its upper end coincides, as has been said, with the projection of the Toy farm road; its lower portion, if projected, would lead direct into the lane skirting Firle park, and so on by Heighton street and Wick street to the Roman ford at Glynde. The double coincidence can hardly be explained away, and any one who endeavours to do so must also provide some alternative course whereby the Toy farm road may have descended the hill. The topography does not admit of any alternative course.

The variations in the gauge of the various sections of the line here traced are remarkable. Thus:

| | | | | | |
|--------------------------------|----|----|----|----|--------|
| Causeway to ford (A) at Glynde | .. | .. | .. | .. | 32 ft. |
| Road near Wick street | .. | .. | .. | .. | 12 ft. |
| Rabbit-walk | .. | .. | .. | .. | 8 ft. |
| Toy farm road | .. | .. | .. | .. | 24 ft. |

Such variations, however, are in no way unusual. The width of the Fosse way, for example, one of the four 'royal roads,' varies from 6 or 7 feet at Radstock to as many yards near Jackment's Bottom, Cirencester.¹ The narrow dimensions of the 'Rabbit-walk,' at any rate, were imposed upon the engineers by physical facts—by the steepness of the hill.

A fortunate accident diverted the traffic of post-Roman times, perhaps because of the rise of Lewes to importance. Travellers thereafter naturally made Lewes a halting-place, and continued their journey by the nearest way to Glynde. This brought them to the alternative ford (B) near the present railway-station and bridge, and crossing the Ritch river there, they pushed on direct towards the hill² by way of Little Dene and New Elm to Firle Borstall, a typical downland 'holloway' which emerges upon the ridge about 500 yards west of the 'Rabbit-walk.' Thence they followed the greenway

¹ Codrington, *Roman Roads in Britain*, p. 12.

² Firle hill is still denominated simply 'the hill' on the local signposts.

along the ridge to a point just beyond Firle beacon, where it forked. One branch went straight on to the bridge near Alfriston, the other swung southward to reach the bridge at Exceat. Both trails ultimately reunited in Eastbourne.¹ The earlier Roman route being abandoned, the 'Rabbit-walk' also went out of use, and this explains its remarkable state of preservation. It is too narrow to have invited any wheeled traffic, when wheeled traffic after many centuries revisited the Downs. The pack-horses of the intervening centuries went by way of Firle Borstall. The 'Rabbit-walk' itself was deserted, and when once those sections of the road which formed the immediate approaches to north and south had been obliterated, there remained nothing to guide the few wayfarers to what is still by far the easiest way up and down the hill. It was forgotten and deserted, and therefore undisturbed.

THE ROAD TO SEAFORD.

On the brow of the hill the upper end of the 'Rabbit-walk' makes a junction with the Toy farm road, at something like a right-angle, but the direct line was also projected straight on towards Firle beacon, quickly falling into the mediaeval greenway and coinciding for some $2\frac{1}{2}$ miles with that branch of it which went to Exceat bridge. Traffic, and the continued activities of flint-diggers, have erased all external traces of this road between the 'Rabbit-walk' and the Beacon, but there remains on the line a broad, shallow trench extending for some distance, and suggesting that the metal has been grubbed. Further on the trail becomes again a recognisable road, although there is no 'agger,' heading due south for the site of the Roman cemetery at Seaford. From the barrow called Firle Lords' burgh onward to Black Stone the road coincides with a parish-boundary (Alciston-Bishopstone). At Black Stone the mediaeval trail diverges to the south-east, but the Roman road, although entirely obliterated for three-quarters of a mile by the East Blatchington golf links, is presently

¹ R. Budgen's *Map of Sussex* (1724).

represented by the line of a fence, and a little further on reappears in its proper form just where a ruined cattle-shed abuts upon the fence. From this point onward it is easily traceable, passing beside Sutton place, and through the adjacent farm-yard, whence it is incorporated in a modern road direct to its destination.¹ Where the original Roman work remains measurable it has a width of 10 feet, and it is to be noticed that its presence unquestionably determined the position both of Sutton farm and of the cattle-shed, the builders obviously availing themselves of so hard and clean an approach. Other examples of the same thing will be cited presently.

TOY FARM TO PORTSLADE.

The measurements and construction of this line of road show that it was in no sense as important as that which ran across Toy farm, and the reason is plain. It served only a small settlement, which was moreover a terminus, and for such purposes a second-grade road would be sufficient. The Toy farm road, however, from its dimensions, was one of the first rank, a 'via publica,' and although it has not as yet been possible to make out its actual course south of Firle Lords' burghs, a glance at the map will show that it can have had but one objective; it must have crossed the Ouse and continued along the coast by way of Newhaven and Rottingdean, through Brighton to Portslade. In all likelihood it went straight on thence to Chichester, its western course being more than hinted at by various discoveries made near Chichester and Aldingbourne, by the lie of parish boundaries, and by the name of the village of Ford. Roman remains are ubiquitous upon the line all the way from Portslade to Newhaven, but thereafter they are lacking, obliterated one must suppose by the alterations in the course of the Ouse, by the construction of the railway, and by the operations of cement-workers and jerry-builders at Denton and South Heighton. Nevertheless there remain certain facts which, taken collectively,

¹ Messrs. Price, in their articles on the Seaford cemetery, noticed the course of this road as far only as Sutton place, leaving its northward extension unexplained

are sufficient to justify the belief that this was the course of the Roman road. Before the coming of the railway altered its character, Newhaven (Meeching, as it was originally called) was a tiny village straggling along one street down to the river, which was crossed, not by the present bridge beside the station, but by another lying in the direct line a little way to the north, where the construction of a recent cut has made what to-day is called 'the Island.'¹ The Island is covered by warehouses, and between this and the railway lies a labyrinth of sidings, but the line is at once resumed in a road leading direct to the foot-hills at Denton. This road originally joined Denton directly with the old bridge, and at this point the passage of the flat lands is shortest, about 1,050 yards only. At Denton an opening in the hills leads up to a long and gradual ascent known as Gardener's hill, along which is carried another road north-eastward by Norton hovel towards Alciston. Norton hovel stands upon what appears to have been the site of a Romano-British settlement, and certain features in the construction of the road, no less than its course, suggest that it is certainly as old as the Roman time. It was therefore a branch thrown off at Denton by the trunk-line, which would pass naturally up the valley on the north of Gardener's hill to Toy farm. It is true that, the bottom of the Ouse being hard throughout its lower course, the river might have been crossed anywhere between Itford and Newhaven, but that it was so crossed is unlikely in view of the increasing width of the flat land as one goes north from Newhaven, the lie of the hills on the eastern side of the valley, and the orientation of the fragment of the road surviving on Toy farm. Moreover there is no trace of any corresponding road upon the western side of the valley save that suggested,² namely the original street of old Meeching, which continued pretty well in the required line towards Rottingdean.

¹ *Map of the river Ouse*, engraved for the Commissioners of the Levels, by J. W. Woolgar, 1842. It contains an inset plan of Newhaven.

² Old maps show a roadway leading across the flats by way of Durham farm, marking it as 'Stock ferry.' There is

nothing about it to suggest Roman work, and there is no means of bringing it into relation with the Toy farm road. The name suggests that it was used by the sheep-farmers of a century or two ago, to move their flocks from one pasturage to another.

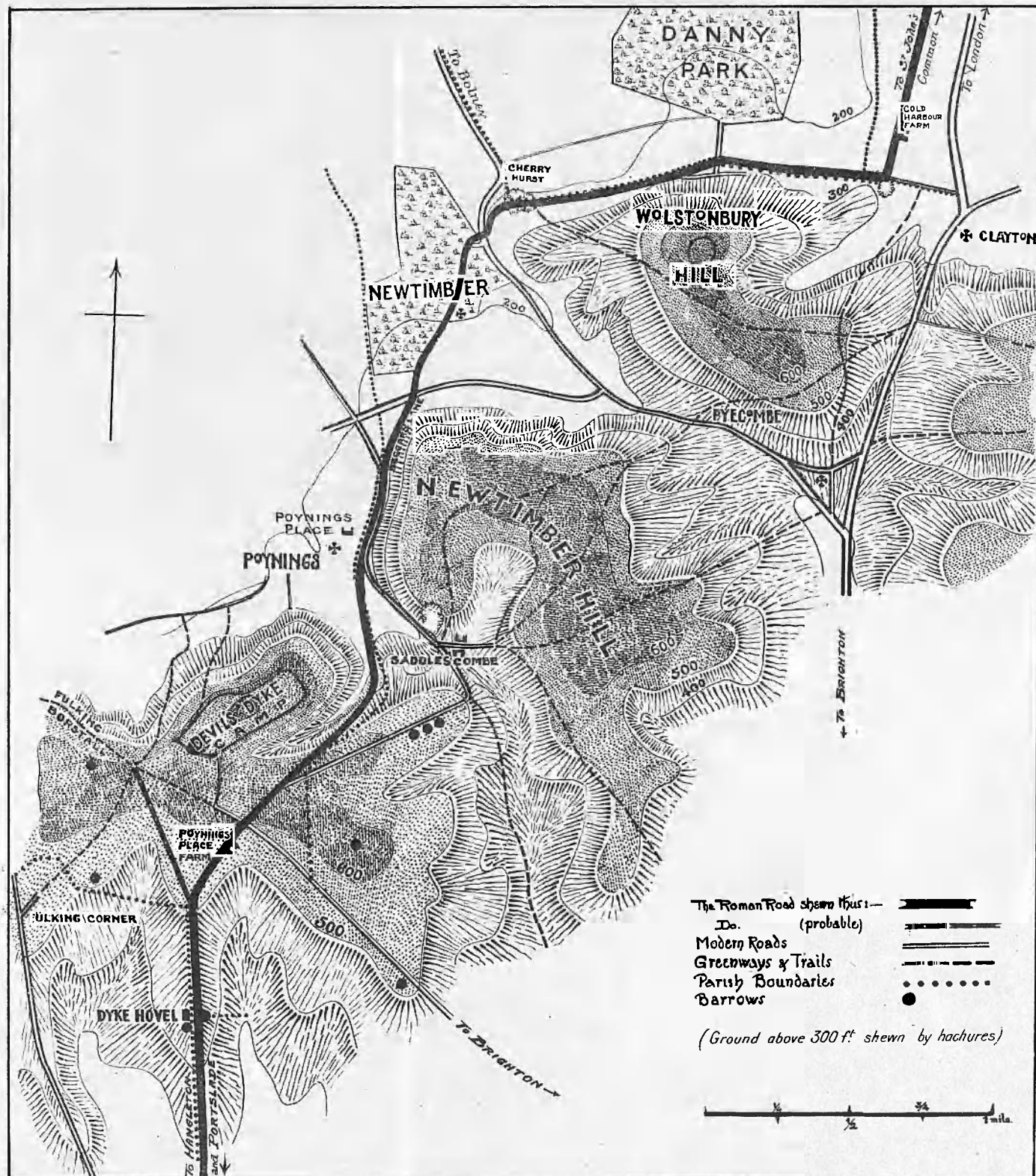


FIG. 3.—ROMAN ROAD FROM DYKE HOVEL TO COLDHARBOUR FARM.

THE BRIDLE-PATH AT THE DEVIL'S DYKE.

Portslade means 'Port's road.' The explanation is an old one, and has the support of the latest authority.¹ Whether or not it ever bore the name of Portus Adurni, it was unquestionably a place of importance in Roman times, for it was the starting-point of another road² which ran northward by Hangleton house in a straight line to the Dyke hovel and onwards. From a point half a mile north of Hangleton house the road coincides with a parish-boundary for $1\frac{1}{2}$ miles, and there are several barrows along its course. Five hundred yards short of Poynings place farm the direct line is lost in cultivated land, but the writer in the *Gentleman's Magazine* says that it went on to descend the northern face of the Downs 'considerably to the left (i.e. west) of the Devil's dyke, or Poor man's wall, on the descent of the old road to Claydon (sc. Clayton).' He uses the term Devil's dyke in its proper sense, denoting the great south-western 'vallum' of the British camp, the 'Poor man' being a Sussex euphemism for the devil. That the road did continue in this direction is highly probable, for the point at which it would reach the brow of the hill coincides with the point reached by the projection of another ancient (? Roman) road coming by way of Mount Sion and Fulking corner; and I believe it descended the hill by the line of what is now known as Fulking Borstall.

From the other side of the county comes another accepted Roman road from the neighbourhood of London by way of the Caterham valley to Godstone, and thence by Wakehurst place to St. John's common, Burgess Hill.³ Although its precise course from that point southward has not been proved, there are the best of reasons for believing that it ran in a straight line on past the Roman cemetery at Stonepound (Hassocks) straight to Coldharbour farm under the northern slopes of Wolstonbury hill. There is an old road in the grass field immediately

¹ R. G. Roberts, *Place-Names of Sussex*.

² *Gentleman's Magazine*, 1818, pp. 107-8.

³ *Gentleman's Magazine*, 1781, pp. 306-307. It was found on St. John's

common in 1779, '18-20 ft. wide, and made of flints laid to a depth of 8 inches.' The material was grubbed to pave the present London-Brighton road by way of Clayton hill.

north of this farm, which lies in the required line, and passing through the farm-yard continues as a metalled lane to the east-to-west road now connecting Clayton with Danny park. That its ultimate objective was at Portslade has never been questioned, but how it was carried up and over the Downs, and where, if one existed, was the missing link connecting it with the road from Portslade by Hangleton house towards the Devil's dyke, are problems which have never been satisfactorily answered, in spite of the efforts of the antiquaries of a century and a quarter.¹ The analogies provided by the 'Rabbit-walk' furnish at once the answers required.

From the point, just north of the Dyke hovel, at which the direct line of the Portslade-Hangleton road is lost, a hard cart-way diverges to the right passing through the yard of Poynings place farm. Projected for a few yards it would fall direct into the modern high-road to Saddlescombe and coincide therewith for some 300 yards, i.e. to the point at the head of the Devil's dyke valley where that high-road swings to the right to descend the slope of Summer Down into Saddlescombe. Precisely at this point commences a green terrace-way² which threads the entire length of the eastern side of the valley, and crossing the little stream at its mouth, continues on round the foot of Newtimber hill to Poynings. Here it traverses the grass field in which stands Poynings place, and the evidence of the ground suggests that the original house once stood actually upon the road, precisely as do Poynings place farm and Hangleton house, the three being the only old homesteads on the whole line between Coldharbour farm and Portslade. For some hundreds of yards it continues as a foot-path overgrown with coppice, and so runs direct into the road (Beggar's lane) leading to Newtimber. Beggar's lane is a modern reconstruction of the older road. Passing Newtimber park it crosses the high-road (from Brighton to London by way of Bolney) near a spot known as Cherry hurst, where an immense chalk-quarry has destroyed it for some

¹ In *Sussex Archaeol. Coll.* xvi, 176 (1862), is mentioned a theory that the road passed by way of the Devil's dyke and Saddlescombe, but it is not stated

who was the author of the theory, nor is any evidence adduced to support it.

² O.S. (6-ins.) *Sussex east*, LII, s.e.

distance ; but on the eastern edge of the quarry it reappears as a narrow gamekeeper's foot-path, skirted on either side by the relics of very ancient hedges, and pointing almost due east continues straight on under the slopes of Wolstonbury hill until it falls into the east-to-west road from Clayton to Danny park, and so reaches the St. John's common-Coldharbour road. A parish boundary follows this line from the head of the Devil's dyke valley to its junction with Beggar's lane ; another coincides with it from Cherry hurst onward to its junction with the Coldharbour road. From the slopes of Newtimber hill immediately overlooking Poynings place has come a remarkable earthenware costrel in the form of a barrel,¹ and other Roman pottery, building tiles, plaster, etc.

For long stretches this is a hard road of unmistakably ancient make, and excepting where modern work has overlaid it, it may be seen and trodden almost from end to end. Nor is its course so devious as it sounds : the crow-flight line from Coldharbour farm to the road-head by the Dyke hovel is $3\frac{1}{4}$ miles, while the route by Cherry hurst and Poynings adds only a quarter of a mile to this total. On the other hand, the aggregate of the ascents to be negotiated along the crow-flight line is more than 1,000 feet, whereas that of the Cherry hurst-Poynings road is not 600 feet.

The total length of the terrace along the side of the Devil's dyke valley is over 1,000 yards. At the lower end, where the fall of the hill-side is comparatively gentle, the floor is 24 feet across, and well preserved. As it ascends the terrace grows narrower, because the fall of the hill becomes more and more abrupt, until it is almost lost near the head of the valley. Of its being identical in origin with its companion on Firle hill I feel no doubt whatever : it shows the same careful gradient, the same clean edge on the outer side, the same absence of any retaining bank, the same slight slope from inner to outer edge, and like the 'Rabbit-walk' it is cut out and embanked upon the slope of the hill. That this is so is proved in a remarkable fashion at a point about midway, where the made earth has slipped for several feet, dividing

¹ Described and illustrated in *Brighton and Hove Archaeologist* (1914), p. 40.

the floor of the road lengthwise into two strips : one of these preserves the proper gradient, and represents that part of the terrace which is cut out of the solid hill-side ; the other represents the part embanked upon the hill.

It will not be out of place to remark that the precise course of this road north of Godstone towards Croydon has not been satisfactorily determined. It has been suggested to me by Mr. Albany Major that it followed the line of a terrace-way observable for some miles along the eastern side of the valley. In places this measures upwards of 30 feet wide, and it is so smooth that, where it passes through the gardens of the villas about Warlingham, it is sometimes made use of as a lawn. That it is of artificial origin there is as little reason to doubt as in the case of the Devil's dyke terrace-way ; and if sufficient reason can be adduced for believing that to be Roman work, the Warlingham terrace may reasonably be referred to the same origin.

The local name for the terrace-way at the Devil's dyke is the 'Bridle-path.' It is nowhere so well preserved as is the 'Rabbit-walk,' and the reason is not far to seek : it has carried, and still carries, very much more traffic. This has never been wheeled traffic, as the smooth surface at the lower end testifies, and from this fact one infers that at its upper end it was never wide enough to invite a modern cart, or at any rate that it had ceased to be so wide when wheeled traffic was revived. Horses have done most of the damage here, abetted by the tendency of the chalk hill to 'creep.' 'Creep' may develop on any steep slope, and that it has not occurred at Firle hill is a fortunate accident. At the Devil's dyke it did occur, and naturally where the slope was steepest, i.e. at the upper end of the terrace. In consequence the roadway became blocked to such an extent that no cart could use it ; and the face of the valley being from one end to the other too steep to allow of any deviation from the path, the entire terrace went out of use save for pedestrians and a few horse-folk coming over from Brighton for a gallop. Also the terrace proved a convenient means of access to the arables on the hill-top. These, the land of Poynings place farm, have long been farmed by the occupant of Saddlescombe, and his heavy teams have tramped up and down it for

years going to and from their work. This alone would have wrought great damage, but the mischief has been aggravated tenfold by the action of the roadman who deliberately diverted the surface-water from the modern Saddlescombe road so that it ran into the terrace-way. The scour of this water has played havoc with the floor of the terrace, cutting as deep as 3 feet in places. If there had been no horse-traffic to break the turf, the water would have drained off direct into the valley below, and this is why the Roman engineer sloped his terrace from up-hill to down-hill side; but horse-traffic having once broken the turf and formed ever so narrow a tread in the surface, the water of necessity followed this, and scoured it into an ever-deepening channel. About mid-way, however, as the map shows, the valley makes almost a right-angled bend. This bend prevented the further spread of the damage, for it gave the water a chance at last to get off the road. From the top of the valley to the bend the terrace is mauled almost beyond recognition; below the bend it is little damaged, and near the mouth of the valley, as has been said, it is virtually intact. Even the passing of the cart-horses has not broken it there, because the width of the terrace is such that it is not needful for the animals to follow exactly in one another's tracks. Their footfalls, scattered over a surface 24 feet wide, have not even broken the turf.

Budgen's map (1724) shows that the head of the Devil's dyke valley was an important junction of the traffic of the time, the great east-to-west trunk-route here intersecting other trails which came up from Clayton and Pyecombe by Saddlescombe and so on to the passage of the Adur at Old Shoreham. Luckily this traffic all avoided the Roman terrace-way, and followed a line more or less identical with that of the modern Saddlescombe high road. Otherwise the 'Bridle-path' would have lost even more of those features which stamp it the fellow of the 'Rabbit-walk.'

Here then is a second case in which a terrace-way of peculiar construction provides the connecting link between two otherwise disconnected sections of Roman road. This may justifiably be claimed as proof of the argument that both terrace-ways are Roman work, nor is there any sufficient reason why their Roman origin should

be denied. Even if it were still maintained that both are natural formations, though their character and construction is wholly opposed to such an origin, it would still, I think, have to be admitted that the Roman availed himself of them and incorporated them in his road-system.

BRIGHTON—KINGSTON HILL—GLYNDEBOURNE CROSSWAY.

Since the writer first drew attention to the matter there have been brought to his notice some half-dozen other hill-roads upon the South Downs, which, upon examination, may very possibly prove to be of the same origin. It is certainly a curious fact that in all but one case they are situated exactly where other evidence suggested that one should look for a Roman road. The one exception deserves consideration, because it seems to bear out the writer's belief that the recognition of such terrace-ways may quite possibly lead to the determination of other Roman roads where they have never been suspected.

The case in question is on Kingston hill,¹ $1\frac{1}{2}$ miles south-west of Lewes. The hill juts out squarely like the corner of a box from the mass of downs behind Rottingdean, and after falling steeply for 300 feet trends more gradually downward, throwing out a long outlier, known as Ashcombe ridge, in the direction of Southerham and the massif of Mount Caburn. An old road, known by the name of 'Jugg's road,' follows this ridge.² At the one end it runs into the main street of Southover, skirting the site of the ancient priory of St. Pancras; at the other end it runs up to the commencement of the steeper slope of Kingston hill. Here, however, it divides: one branch ('Jugg's road') climbs up its northern face and continues westwards over the downs to Brighton by way of Newmarket farm and the Race hill³; the other climbs the eastern face and points southward as if making

¹ O.S. (6-ins.) Sussex east, LXVI, N.E.

² 'Jugg' is said to be a local name for the Brighton fishermen, and the trail is said to have got its name from the fact that those fishermen used it when bringing their fish for sale in Lewes. That traffic must have ceased to be of any importance nearly a century ago.

³ It probably continued on the line of what are now Elm grove and New England road into the present Old Shoreham road, keeping to the dry ground north of the old arm of the sea now represented by the Old Steine.

for Newhaven or for Rottingdean. There are several barrows on Kingston hill, and it is noteworthy that the two largest lie just where the two terraces reach the brow of the hill.

Neither of these terraces bears at first sight the slightest resemblance to the 'Rabbit-walk,' or even to its less well preserved fellow the 'Bridle-path.' On the contrary both are superficially very like the average hill-way, differing one from the other only in that, whereas the western branch is still occasionally used for wheeled traffic, and is therefore in places worn deeply into the chalk, the eastern branch has long since reverted to the turf. A more careful examination, however,

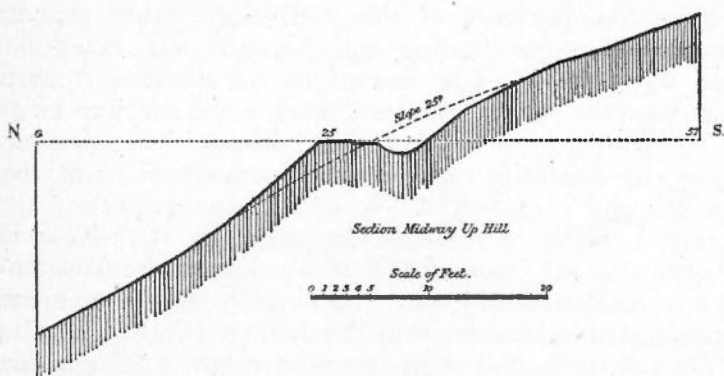


FIG. 4. SECTION OF TERRACE-WAY ON KINGSTON HILL, WEST.

discloses in both certain peculiarities which justify a different conclusion.

Of the western branch, badly mutilated as it is, little will be said. At the upper and the lower end alike it is deeply sunk in the hill, but whereas the 'holloway' at the lower end is the natural and obvious result of wheeled traffic, that at the upper end is to all seeming due for the most part to the original engineers. The smooth contour of the hill-side is here broken by a sort of buttress. The ordinary 'holloway' would simply have climbed over this obstacle; the Roman, it might be supposed, would have carried his terrace-way round its face. The actual road takes neither course, but is carried *through* the buttress by a deliberate cutting sunk sufficiently deep

to maintain the average gradient of the whole terrace. Another example of such a cutting will be described in the sequel, and a better-known parallel may be found on the admitted line of the Portslade-London road at Godstone. Here, just north of the village, the Roman road is carried through a much larger cutting for a distance of three furlongs, with much less reason than was present at Kingston hill.¹ Here is given (fig. 4) a section of the western terrace-way on Kingston hill at a point immediately below the cutting, and it will be seen that it shows the same clean-cut edge, and the same absence of parapet, as were noticed in the 'Rabbit-walk' and the 'Bridle-path,' while traffic has at this spot done but little damage to the floor.

For the purposes of this article the other (eastern) terrace is more illuminating, because less exceptional and less altered. The first of its peculiarities to strike the eye is its perfect gradient, much too perfect to be the outcome of any accident. The second is the presence, upon the down-hill side, of a continuous bank or parapet, smooth and even, with a clean-cut outer edge, and of a uniform width of some 3 feet only (fig. 5). Now the presence of an outer bank is an invariable feature of every accidental hill-way. Such hill-ways being merely exaggerated ruts worn into the face of the hill, like any other rut they must of necessity have two sides enclosing them. Occasionally also the outer bank or parapet of such a hill-way, having been found to be a convenient footway, will be trodden to a certain degree of flatness and smoothness. But no amount of tread could possibly produce a continuous strip of lawn-like turf, smooth as a floor and of one uniform width for many scores of yards, uniform too in its gradient, and always presenting the same unbroken edge. Still less could it produce another feature, namely, a uniform, if slight, slope from the up-hill to the down-hill side. The spirit-level proves the existence of such a slope here, exactly as it proves it in the 'Rabbit-walk.'

In fig. 6 are given two sections of the Roman terrace-way on Glatting down (Stane street), which at once

¹ Hilaire Belloc notices two similar cuttings on the course of the Stane street, the one at Ashurst between Coldwaltham

and Petworth, the other between Alfoldean and Dorking (*The Stane Street*, pp. 236, 258-259).

explain what has occurred on Kingston hill. At some period not very remote the terrace-way on Glatting down was found to be a convenient means of approach to a large chalk-pit, and the passing of carts to and fro had the inevitable consequence: it broke through the original floor of the terrace and gradually wore out a 'holloway' along it, in some places as much as five feet deep; but the slope of Glatting down being relatively

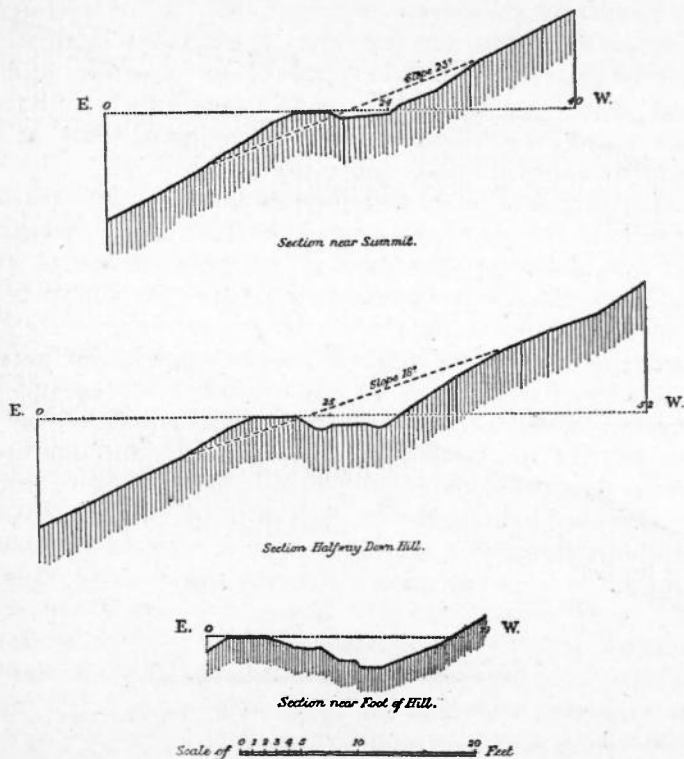


FIG. 5. SECTIONS OF TERRACE-WAY ON KINGSTON HILL, EAST.

gentle, the Roman had here been able to construct so spacious a terrace, that there still remains unbroken a part of the original floor. One of the sections in fig. 6 shows this surviving only upon the outer side of the roadway, the other shows it surviving on both sides; and a dotted line joining the two would represent the original appearance of the Roman's work.

Something similar has occurred in the case of the

eastern terrace on Kingston hill, of which three sections are given (fig. 5). The peculiar stepping of the 'holloway' is the result of horse-traffic, for there is no sign, and no memory, of any wheeled vehicle having ever used this path. The tread of horses has worn away the surface of what was once a terrace like the 'Rabbit-walk' or like that on Glatting down, leaving intact a

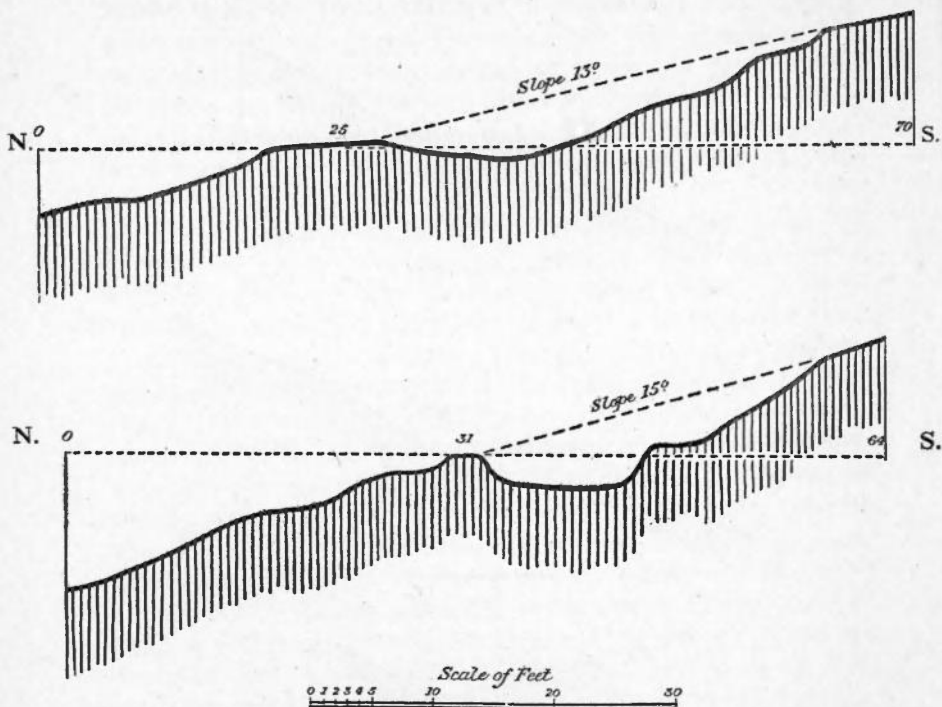


FIG. 6. SECTIONS OF TERRACE-WAY (STANE STREET) ON GLATTING DOWN.

(The lower fig. shows part of the original Roman floor preserved on each side of the holloway).

strip of it only. Upon a steep slope the traffic instinctively hugs the up-hill side, exactly as is illustrated by the position of the horse-tread on the 'Rabbit-walk,' and in consequence the destruction of the original surface proceeds gradually from the inner to the outer edge of the roadway. Happily it ceased on Kingston hill, while there yet remained that tell-tale 3-foot strip of the original floor which now forms the parapet of the resultant 'holloway.' Incidentally the sections illustrate another

feature of all hill-ways, namely, that a 'holloway' decreases in depth as one nears the top of the hill. And it will be noticed also that here, as in the case of the 'Bridle-path,' the original terrace-way was much wider at the lower end than at the upper, because of the diminishing steepness of the hill-side.

If this reasoning is sound, the eastern terrace on Kingston hill is another example of Roman engineering. How far do other facts corroborate this conclusion? At the foot of the hill the two terraces unite, as has been said, in the old road along Ashcombe ridge. This road has all the characteristics of Roman work; it is hard, straight, and laid out to follow the axis of a ridge leading towards the river Ouse at Southerham. A parish-boundary runs beside the road for a mile. The road passes the priory of St. Pancras, a fact of a certain significance; and on the site of the priory, or along the line of the road thereto, have been picked up a large proportion of the few Roman coins preserved in the museum of the Sussex Archaeological Society at Lewes. Between the priory and the river the road is represented by the modern Ham lane, which is to-day a cul-de-sac, the low ground between this and the foot-hills beyond the river having been entirely altered by the embanking of the river and the construction of the railway. On the opposite bank, however, commences another road, in the required line, which threads the long valley running up through the Caburn massif towards Saxon down. In this valley (Oxtedde¹ bottom) Gideon Mantell dug up a large number of Roman urns about 1820,² and its slopes are still covered with that peculiar type of small and rectangular lynchet which, in this part of Sussex, is generally associated with Romano-British remains. Here, too, is the undated rectangular earthwork known

¹ So named from its having once contained an ox-stall (*steddle*, Lincs. and Kent, 'a stall'), the foundations of which are still visible in the form of a three-sided rectangular earthwork, at the northern foot of Ranscombe hill. The work measures 80 feet in length and 24 feet broad, i.e. it represents stall-room for ten pairs of oxen allowing to each pair the standard space of 8 feet. There is another of these works on the floor of the Devil's dyke valley, of the same breadth, but of

a length of 96 feet, i.e. to accommodate twelve pairs of oxen. It is to be noticed that the stall in Oxtedde bottom lies actually *upon* the Roman road, like the byre at Sutton and the farm-building of Hangleton house and Poynings place farm.

² Horsfield, *Hist. of Sussex*, i, 48. Unhappily it seems impossible to trace what has become of these, and their discoverer appears to have left no record of the particulars.

anciently as 'The Devil's book' and latterly as 'The Bible,' while the Late-Celtic fortress on Mount Caburn, and its older fellow Ranscombe camp, overhang the valley from the south. The roadway is in some places a turf-grown terrace and in others visibly metalled; a section cut across it disclosed a well-made bed of flint, 6 feet wide and 6-9 inches in thickness. It crosses the saddle of the hill at Saxon down by a cutting some 90 yards in length and 12 feet in depth at the maximum; and this cutting is the purposed work of engineers, no accidental 'holloway.' The tread of the later mediaeval pack-trails which cross the line has filled up the cutting to a depth of 3 to 4 feet, proving the latter to be very much the older work; and if the silting is removed, the original floor of the cutting (which was not metalled) is at once exposed, smoothly cut in the solid chalk, 8 feet wide, and having the angles at either side still clean and unbroken. Beyond the cutting the road continues for a short distance as a terrace-way very similar to that on Kingston hill, passes immediately beside another rectangular earthwork of which the maps take no account,¹ and falls direct into a remarkable straight green-road known by the suggestive name of 'Week lane,' 550 yards in length and 22 feet wide,² so reaching the Glynde-Ringmer road at the point called Glyndebourne crossway. Week lane is a parish-boundary. Beyond the crossway the road is continued in the same line, pointing for the high ground of Crowborough.³ At the crossway were found in 1879 a series of Saxon interments,⁴ and the surface-mould is full of fragments of Romano-British pottery.

It can hardly be that the road from Kingston hill to the western bank of the Ouse, and that from its eastern bank to Glyndebourne crossway, should so aptly correspond unless they were parts of one and the same route, and connected by a ford or ferry upon the river. The position of the priory of St. Pancras certainly suggests

¹ Local opinion declares this earthwork to be the site of a mediaeval homestead, but it is possibly very much older, for (1) the road appears to overlie the fosse of the work, (2) the soil is full of Romano-British pottery, and (3) the work encloses a perfect little barrow. There appears, however, to have stood within it a very recent farm-building.

² It was required by law that a Roman road should be very much wider at a crossway or other turning.

³ O.S. (6-ins.) Sussex east, LIV, S.E. The only portion of the line shown upon the O.S. is that eastward along Week lane. The various trackways and earthworks about Mount Caburn are for the most part ignored.

⁴ *Sussex Archaeol. Coll.* xxxiii (1883).

that in mediaeval times there existed at this point some such means of reaching the other bank; and what was practicable in mediaeval times cannot have been impracticable to the Romans. It is perhaps hopeless to expect that actual proof of the matter will ever be forthcoming, seeing that the railway has caused, and the river has suffered, so many alterations; but it must be remembered that the Roman was quite familiar with other means of crossing a stream than bridges and fords. Ovid speaks of that form of ferry-boat familiar to University men as a 'grind':

Amnis, arundinibus limosas obsite ripas,
Ad dominam propero; siste parumper aquas.
Nec tibi sunt pontes, nec quae, sine remigis ictu,
Concava traiecto cymba rudente vebat.

Amores, III, vi, 1.

It is at any rate matter of history that at no very remote period the river traffic of Lewes was centred just at this spot, a long way from the modern bridge; while yet more recently (about 1820) there was a strong movement in favour of constructing a bridge here and carrying the traffic of the Eastbourne-Lewes road direct across the river into Southover, so as to avoid the awkward approaches and narrow dimensions of the Cliffe bridge. The extreme distance between the river bank at Southerham and the present termination of Ham lane is some 500 yards.¹

GLYNDE—GLYNDEBOURNE CROSSWAY—HAMSEY.

The present-day Glynde-Ringmer road represents a series of reconstructions. The original Roman road appears to have connected, almost upon the site of the present church of Glynde, with that leading to ford (A) and the causeway and so towards Firle hill. From this point it followed in the other direction a course slightly west of north almost direct to Glyndebourne crossway. Bishop Trevor, who rebuilt the church (1763-1765), also deflected this road so that it now lies a little to the west

¹ Immediately contiguous to the road, where it passes Lewes railway-station, lies the large mound called the Mount, commonly asserted to have been constructed by the monks of St. Pancras priory as a calvary. To all appearance it is a Norman

'motte,' and if it be admitted that the road is indeed Roman, the otherwise unaccountable position of such a work is at once explained. In Sussex, at any rate, Norman castle-mounts, like Domesday manors, are valuable clues to the course of Roman roads.

of the original line, the latter being preserved in the private road (the 'Bishop's walk') through the grounds of Glynde place, with which the older buildings and offices of the mansion are aligned. At Lacy's corner the two lines coalesce again for some 300 yards, when the modern road turns to the right and presently curves back towards the crossway along the western wall of the grounds of Glyndebourne house. The older road ran straight on, and is to-day represented by a field-way passing just west of Glyndebourne farm, where it comes to a stop. There is no reason to doubt that it was continued in the same line across the fields to the crossway, but this ground having been long under cultivation before it was parked, no trace of the road is visible, unless it be the presence of a gateway in the fence to the north, exactly at the point assumed. Again coalescing with the modern road it crossed Week lane and descended the further side of Glyndebourne hill in a due north-west direction. A fragment of the old road—a terrace-way—can be seen close beside 'Reservoir cottages.' The cottages were built to accord with it, and like it they stand some feet above the new road. The new road now again bears to the right, but the old road projected follows the course of an old hedge, a parish boundary, and a field-road, as far as the modern Lewes-Ringmer road, and crossing this, reappears as the remarkably straight by-road leading to Upper and Lower Stoneham.¹ Here it reaches the water-meadows of the Ouse immediately opposite to the rising ground on the other side of the river where stands Hamsey church. There must have been a ford or ferry here in Roman times, as there is to-day. There are men alive now who were wont to drive their cattle across at that spot. The line, if continued, would aim direct for the village of Street. This village occurs as Estrat in Domesday, and unquestionably points to the presence of a 'street' in the locality. I find in the Manuscript of W. Wisdom the statement that in his time (about 1800) the tradition of Glynde was that 'the Romans crossed the Ouse at Hamsey.'²

¹ From Glyndebourne crossway onward the field-fences are all laid out in relation to this line of road, and without regard to the course of the modern highways.

² This is a few yards above the point on the Ouse marked as 'highest limit of ordinary tides.'

GLYNDEBOURNE CROSSWAY—CROWBOROUGH.

It can hardly be supposed that a Roman road running from Portslade by Newhaven over Toy farm should have had for its real objective such a point as Street. The line from Glyndebourne crossway by Hamsey must represent merely a cross-road, and the course of the main road must be looked for at the crossway, in the north-eastward continuation of Week lane, which is intact for some 500 yards, demarcated by old hedgerows long since overgrown so as to cover the whole road. Where this road is measurable it is 14 feet across, but it is evident that it has at this point been encroached upon by the plough, for the over-all width of the double hedgerow elsewhere is as much as 36 feet. Fragments of pottery are numerous all along its course. As marked upon the ordnance map the bearing of this line is 27° E. of N, which is identical with that of the road on Toy farm. The reason for the devious course of the road from Firle hill to the crossway is to be found in the two facts that, firstly, the low ground of Laughton level prevented, and still prevents, the construction of any firm way in the direct line, and secondly, only from this north-eastern side was there any approach to the insulated high ground about Mount Caburn which was permanently secure from flood.

GLYNDE—SOUTH MALLING (MEDIAEVAL ?).

Local antiquaries, as has been remarked, commonly assert that the ford (A) and causeway at Glynde form part of a line of Roman road running from Lewes to Eastbourne or Pevensey. They suppose the road to have crossed the Ouse where now is the Cliffe bridge, to have climbed immediately up the face of Cliffe hill by way of the existing 'holloway,' and, following the high ground to Saxon down, to have swung thence to the right and descended direct into Glynde along another deep holloway, pointing directly to ford (A). Without committing oneself to the assertion that there was no such line of road in Roman times, it is quite permissible to point out reasons against it. In the first place, there being no evidence for the existence of a settlement on the site of Lewes in Roman times, there is no ground for assuming the existence of a road along this course; and the existence of such a road is the less likely if satis-

factory evidence has been produced for the probable existence of others immediately to the north (Hamsey) and the south (Southerham). In the second place, it is extremely unlikely that there existed any regular means of passing the river at the foot of Cliffe hill. The present bridge cannot be shown to have existed before the thirteenth century, and the river here making a considerable loop to the east, the force of the current and the depth of the water must have been at their greatest at just this spot. To make a landing on the abrupt eastern bank here must have been a matter only more difficult than to find a way up the face of the hill. The bridge once constructed, and the river by implication more or less embanked, the case was completely altered, and mediaeval traffic gradually wore the existing holloway which leads up to the golf-links. But this holloway preserves no single feature to suggest a Roman origin. There is moreover a significant scarcity of barrows along the line proposed from the holloway to Saxon down. Of the mounds along the line from Saxon down towards Glynde the principal are merely the steads of old windmills, though it is quite possible that some of these were originally barrows, subsequently utilised as steads for mills; and the fact that there once were windmills on this hill as well as an old chalk-pit upon its eastern face, goes far to account for the depth of the holloway leading into Glynde. If any Roman roadway existed where is now that holloway, the joint trafficking of mediaeval pack-horses and later-day carts has cut it entirely away. The one argument in favour of the theory is the fact that the holloway aims direct for the Roman ford (A); but as there is no means of knowing at what date that ford went out of use in favour of the later ford (B) on the site of the modern bridge, it is quite conceivable that the trail had become already well defined and the holloway formed before the later ford came into use. It is, however, quite possible that a Roman by-way did take this course, to avoid the long detour by Glyndebourne cross-way; and it may quite conceivably have been continued beyond Saxon down, its objective being not Lewes, but the promontory of South Malling, where there was at one time a ford leading to Landport farm. The banks of the Ouse at this point offer no obstacle, the breadth

of flat land to be crossed is small, and the river-bed is hard. Along this line there occur, on the ridge of the hill, a large number of barrows, but the character of the track on the descent of Malling hill is that of a mediaeval road only.¹ The line was continued behind the north-western extension of Lewes known as the Wallands, whence have come a few Roman coins, and so up the downs past Mount Harry, as local antiquaries (e.g. Horsfield) have asserted.

Those who are accustomed to the painful, if enthralling, amusement of endeavouring to trace Roman roads, will at once ask why there has not been taken the obvious first step towards proving these terrace-ways on Firlie hill and at the Devil's dyke to be Roman ways, why no sections have been cut across them to lay bare the road-metal. The answer is, that apparently they never were metalled, so that this seemingly facile and conclusive method of proof is not here applicable. Experimental investigation of the Glatting down terrace has revealed nothing that could properly be called metalling,² and if this be the case with so important a trunk-line as the Stane street, it need be no matter of surprise to find it so in the case of lesser roads. Neither the 'Bridle-path' nor the 'Rabbit-walk' shows any signs of metal, unless it were the very thinnest sprinkling of gravel or small flints beaten into the surface. Nor is it possible to believe that they were once more heavily metalled, and that the metal has been grubbed, because in the first place it is not credible that such grubbing could have left a terrace so smooth, uniform, and regular, as is the 'Rabbit-walk,' and in the second place there was no room for much metal. So narrow is that terrace-way that, even if it were not systematically constructed with a slope to the down-hill side, the metal, if laid to any appreciable depth, would simply have rolled off down-hill. The only means to prevent this would have been to dig out the terrace as a holloway, leaving on the outer

¹ The church of St. Michael, South Malling, is reputed originally to have been founded by Ceadwalla of Wessex in 688, a date long prior to any known evidence for the existence of Lewes as a town. The manor, which was an important one, belonged to the see of Canterbury, and the Benedictine monks of South Malling long ante-dated the Cluniac priory of

St. Pancras in Southover. It was probably to their presence that this line of road was due.

² 'Its surface was apparently not covered with a layer of stones, for in no part of it examined did we find any evidence that the surface had been made up in any way.' Eliot Curwen, in *Sussex Archaeol. Coll.* lvii, 145.

edge a balk of chalk to serve as a retaining-bank to hold the metal in place. Had this been done, one of two results must have followed : either the metal, if ungrubbed, would be found in situ, or if grubbed, would have left a holloway. But there is no metal in situ, and the terraces show no sign of hollowness, except such as can be otherwise accounted for. It is difficult to see any other alternative. By what means the traffic of Roman times negotiated in wet weather a terrace-way carved upon the slope of a chalk hill, however gentle its gradient, is a question more easy to ask than to answer. It has been suggested that the floor was possibly covered with timbers laid transversely in the fashion of a corduroy-track. So far there is forthcoming no evidence either for or against this theory. It is not impossible that the original turf of the hill, removed in the process of making the terrace-way, may have been replaced thereafter. That such a course would be eminently practical is proven by the fact that, at the present time, these smooth and sloping track-ways with their carpet of ancient turf are yet the easiest ways up and down the hills, be the weather never so bad.

POSTSCRIPT.—Since the foregoing was completed there has vanished beyond recovery one important piece of evidence, namely the strip of original Roman road-surface which, as shewn in fig. 6, had until then survived intact upon the inner (up-hill) side of the Stane street terrace-way, proving what had been its original form and dimensions. It has been entirely destroyed within the measure of a single year by the unhappy, and mostly futile, method adopted in 'repairing' these deep-worn holloways of the chalk hills, that is, by pulling down further material from their sides to fill up the ruts. Fortunately the section, for which I am indebted to Dr. Eliot Curwen, was made (1914) before the mischief was done, and, I may add, at a time when neither Dr. Curwen nor I suspected how valuable it was to prove in suggesting the Roman origin of the terrace-ways on Kingston hill, and, by consequence, of the line of road thence to Glyndebourne crossway.

Nor is this all. The 'Rabbit-walk' itself, which a twelvemonth ago was virtually intact as the Romans left it, has now been discovered by the military, and there have passed up and down it during a single summer more horsemen than ever came and went in a century before. That they should have preferred it beyond any other of the hill-ways about may be taken as testimony to its admirable engineering, but this preference has already done great damage to the surface, and will probably do more. Within another five years the 'Rabbit-walk' may very likely be as sadly cut up as is the 'Bridle-path,' but as yet it still shows all the essential peculiarities noticed in the text.

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