

ART. XXII. *Notes on the Roman Itinera in North Westmorland, compared with modern measurements.* By the REV. CANON MATHEWS.

*Read at Appleby, July 3rd, 1890.*

I MUST premise that I have no novel suggestions to offer on this subject, but as we shall have our attention drawn tomorrow to the Roman roads, it may be of some interest to point out what correspondence is to be found between the *Itinera*, or way books, of those roads and modern measurements. Often there seem to be difficulties in the way of our identifying the Roman measurements with modern maps; which arise partly from the Roman mile or *mille passuum* consisting of 1000 paces of 5 feet, or about 100 yards short of our statute mile, and partly from the fact that their miles were actually stepped, while our maps present a plane surface, on which the distance from point to point sometimes differs a good deal from the actual pacing over uneven ground.

Happening to possess an old coaching waybook\* in which the distances along all the principal roads are given according to actual measurement, and not map measurement, I have been struck with the correspondence I have found in parts of the country with which I am acquainted, between the distances of the *Itinera* and those of the coach roads which follow them. And if we bear in mind (1) the slight difference in the length of Roman and English miles; (2) that the coach roads often slightly deviate from the Roman ways, when following them generally; (3) that the Romans did not set down fractions of miles, but allowed for them under the saving clause *plus minus*,—more or less; we shall not be surprised when

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\* Patterson's Roads, London, 1826.

we find a close coincidence—one difference balancing the other. This we do find if we apply the test to our North Westmorland *Itinera*,—the routes variously given as II and V along the great road which leads from York to Carlisle.

Taking Iter V first, for a reason which will appear after, we find the distance thus given, compared with the coaching miles.

<i>Eboracum</i> to		York to	
<i>Isubrigantum</i>	xviii	Aldbrough	16 miles
<i>Cataracto</i>	xxiv	Catterick	23 „
<i>Lavatræ</i>	xviii	Bowes	20 „
<i>Verteræ</i>	xiii	Brough	13 „
<i>Broccavum</i>	xx	Brougham	19½ „
<i>Luguvallium</i>	xxii	Carlisle	20 „

The slight excess generally of the Roman mileage being due to the shorter length of the Roman mile. The one instance to the contrary being probably due to deviation of the coach road from the old *via*.

If we now turn to the other *Iter* II, we have

<i>Eboracum</i> to		York to	
<i>Isurium</i>	xvii	Aldborough	16 miles
<i>Cataractonium</i>	xxiv	Catterick	23 „
<i>Lavatræ</i>	x(v)iii	Bowes	20 „
<i>Verteræ</i>	xiv	Brough	13 „
<i>Brovonacæ</i>	xiii	Kirkby Thore	13 „
<i>Voreda</i>	xiii	Plumpton Wall	13 „
<i>Luguvallium</i>	xiv	Carlisle	13½ „

The differences here are curious, and I think instructive. Clearly a V has dropped out by a scribe's error from the day's march to *Lavatræ*, if given as xiii; it must be xviii as in the other *Iter*. And the march from that station to *Verteræ*, variously given as xiii and xiv, it may have been to make up for dropped fractions; and so the *Itinera*, up to Brough are harmonised. But the differences to Carlisle are

are marked, not in the total mileage, which is substantially the same and agrees closely with the actual measurement but the 40 miles are divided into 3 marches of about 13 miles in the one, with stations at *Brovonacæ* and *Voreda*, instead of two marches with one station at *Brocavum*, as in the other. What does this point to?

I should like to suggest, towards the elucidation of this, that (1) neither route indicates the well marked camp at Redlands; and (2) that we find in all the marches through Westmorland half-way forts, not indicated on the *Itinera*, which roughly divide each day's march, partly to keep open the communications—partly to afford a secure mid-day halt. Thus we have the fort at Maiden castle, on the pass of Stainmoor, six miles from Bowes and seven from Brough, and a well marked fort at Coupland beck, six miles from Brough, and seven from Kirkby Thore. and as Redlands is  $10\frac{1}{2}$  miles from Brough and nine from Brougham, I am inclined to think it was a half-way fort on that day's march, when Carlisle was to be reached in two days from Brough with a night's rest at Brougham, instead of three.

We may argue that when the road was first made from York to the Wall, the troops were ordinarily required to make 20 miles a day; which was the distance, we know, commonly made in a Roman Legionary march. The *Iter V* averages 20 miles a day, with the exception of the route between Bowes and Brough, and when we consider what sort of a march it must have been in those days to cross Stanemoor, they may well have been excused if they only made 13 miles, with the burdens that a Roman Legionary had to carry, or if they were inclined to call it 14, as in *Iter II*, instead of 13. But when the country was subdued and opened up, and cross roads made, one joining from Keswick at Plumpton, and the Maiden Way crossing at Kirkby Thore, then the important permanent stations of *Voreda* and *Brovonacæ* were made, which  
divided

divided the route into three instead of two, Redlands remaining a *castra aestiva*, or camp solely for soldiers on campaign, and Brougham becoming a half-way fort seven miles from Kirkby Thore, and six from Plumpton Wall, like Maiden castle or Coupland beck forts.

On this reading of the curious circumstances that two varying Itinera have been preserved of exactly the same main road we should take Iter V as possibly the older way bill,\* or one preserved for troops in actual campaign when it was an object to push on to the great wall, and save a day's march, while Iter II was the route for ordinary marching with *impedimenta*. At least by this hypothesis we preserve both intact, without doing violence to either, and make the vexed questions as to *Brocavum* and *Brovonacæ* intelligible, by fixing each where actual measurements place them, at Brougham and Kirkby Thore respectively.

If however we try to apply the same solvent to the Xth Iter, we find ourselves, alas! no nearer than we were. All we can say with any certainty, is that it ran somewhere through North Westmorland from Manchester: but the road measurements (which are the basis of my paper) only give the following very meagre results:—The mileage from *Mancunium* to *Coccium* agrees with the position of Blackrode on the Lancaster road, where some authorities have placed *Coccium*: and roughly the mileage to *Galacum* and *Alone* corresponds with road measurements to Overborough and Low Borrowbridge. No mileage makes any station agree with the position of Lancaster, Kendal, or Ambleside, and no known station on the Maiden way coincides with the mileages of *Galava* or *Glanoventa*. (Either a V has dropped out the mileage from *Alone* to *Galava*, or it was an exceptionally hilly road, for only xii miles to be required of Roman soldiers on march

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\* By the II<sup>nd</sup> Iter, *Isufrigantum*, the Aldborough of the native Brigantes had become Roman *Isurium*,

in a regular route.) Roughly again the total mileage to *Glanoventa* agrees with the position of either Whitley Castle, or Old Carlisle : which was the true termination, as our president rightly says, will probably never be known until it is revealed by the spade.