

PROCEEDINGS  
OF THE  
CAMBRIDGE ANTIQUARIAN  
SOCIETY

(INCORPORATING THE CAMBS & HUNTS ARCHAEOLOGICAL SOCIETY)



VOLUMES LVI & LVII

JANUARY 1962 TO DECEMBER 1963

CAMBRIDGE  
DEIGHTON BELL

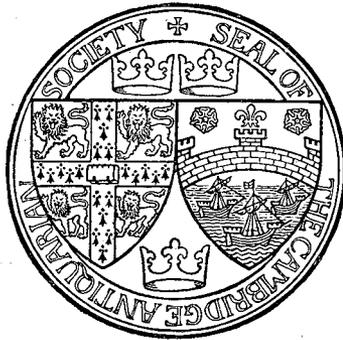
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## WOOL STREET, CAMBRIDGESHIRE

P. C. DEWHURST

The Editor much regrets that the Author died before he was able to see the proofs.

In publishing this article, the Council of the Cambridge Antiquarian Society would like it to be regarded as a tribute to an old and enthusiastic member both of the Society and of Council.

IN the spring of 1959, practically the whole distance of Wool Street, from the Gogmagog Hills south-east of Cambridge to near Haverhill—some 10½ miles—was trenched longitudinally by a power-operated trenching machine for the purpose of laying a large gas-main: see Fig. 1, based on O.S. 1 in. map, sheet 148.

The author, with the encouragement of Dr G. Bushnell and with the advantage of living not far from the route, took charge of the archaeology of the trenching operation throughout the daily progress of the five months work. By tacit consent the author represented the Roman Roads Association of East Anglia and the Cambridge Antiquarian Society—thus facilitating close liaison between the Eastern Gas Board and their contractors and the interests of archaeology. Since the excavation work was under continual observation by the author under the aegis of the Roman Roads Association, they have agreed to allow its publication in this manner. The co-operation of the contractors was also facilitated by there being only one archaeologist for them to deal with.

The utility of a longitudinal trench-section along a supposed Roman road had been doubted in some quarters, but such a trench—particularly of a continuous length of more than 10 miles as in this case—enabled the variations in construction to be ascertained in a manner quite beyond the scope of any practicable number of cross-sections.

### THE TRENCH-CUTTING MACHINE

The trenching machine employed by the contractors was ideal from an archaeological point of view, because its operating method produced a clean-cut trench and provided convenient opportunity to scrutinize the upcast from the trench, both in its passage through the machine and when finally deposited. The actual cutting was performed by a large-diameter wheel, rotating in the line of the trench and furnished near its periphery with a number of rigidly fixed 'buckets' and 'teeth' similar to but smaller than those on a normal mechanical excavator. An endless moving belt travelled transversely across the machine, on to which each bucket discharged as it reached a certain height; in its turn this belt delivered the excavated material in a continuous stream to one side of the trench as the machine proceeded. The evenness of the cut is clearly evident in some of the illustrations. The size of the detritus thus produced ranged from 1½ in. down to dust, and this enabled objects such as coins to be observed either on the transversing belt or when they fell to the lower edges of the

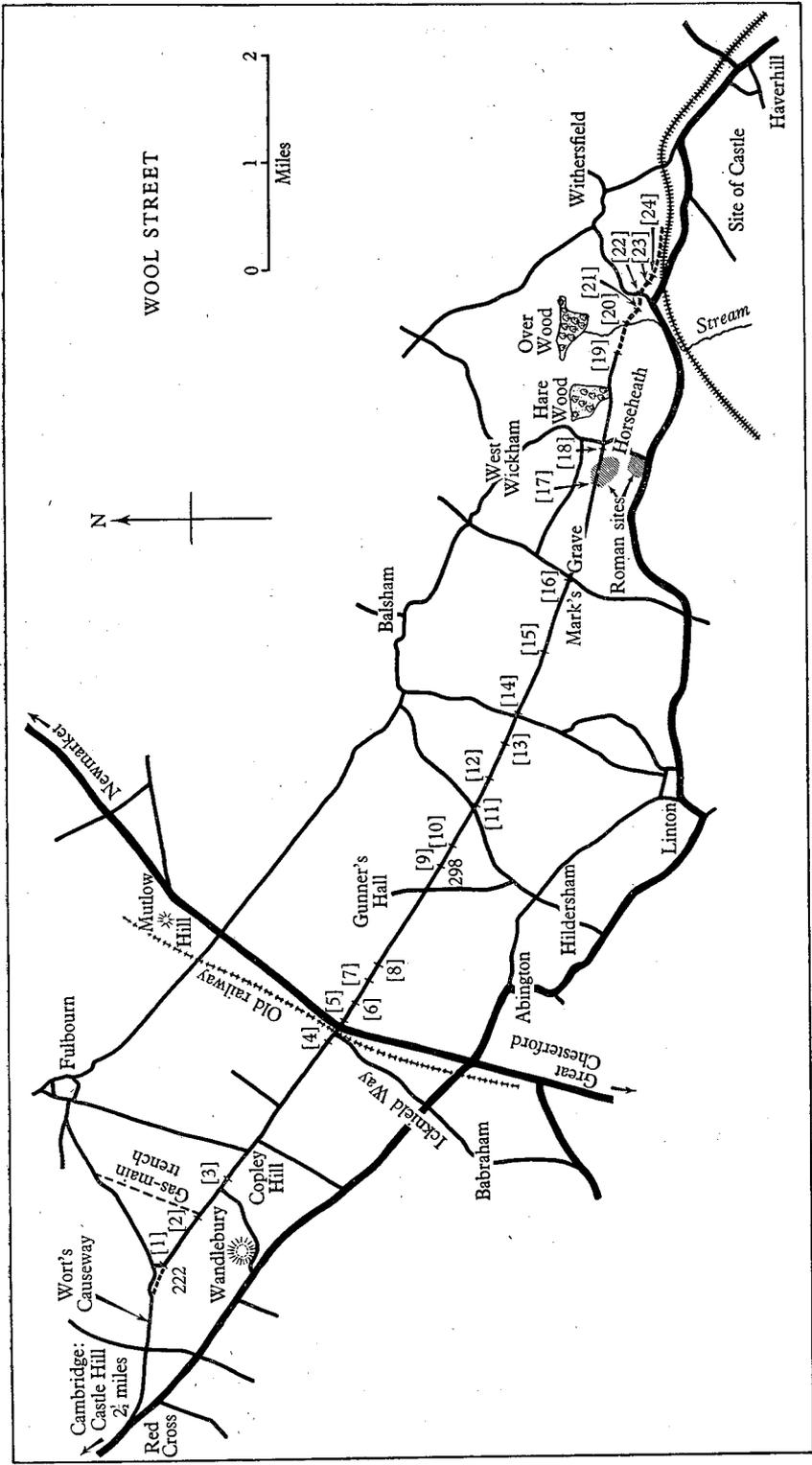


Fig. 1. Route map. Scale: 1 mile = 1 in.

A-shaped continuous discharge-heap deposited along one side of the trench (see Pl. IV *b*). The general principle of working was to cut the trench towards one side or the other of the assumed centre of the Roman road, but in practice, due to waviness of the formation, this could not always be maintained. Nevertheless, the trench was never in the Roman ditch and only rarely was it near the centre of the *agger*.

The width of the trench cut was 2 ft. 3 in., whilst its depth (except where varied for a specific reason) was automatically maintained at 3 ft. below modern ground surface. When actually trenching the machine could advance at the rate of over  $2\frac{1}{2}$  ft. per minute, giving it a travelling range of as much as  $\frac{1}{2}$  mile a day. Hence the logistics of archaeological attendance were, in practice, simply that of being always present when the machine was working. However, the entire pipe-laying operation is governed by other considerations, and there were cases where as much as 300 yards lay open for three or four days, whilst on the other hand at a given spot the trench might be cut, the pipe laid and the trench filled in within a period of three or four hours.

#### DESCRIPTION OF THE ROAD

(Numbers in square brackets in the text refer to corresponding numbers in the map, Fig. 1)

It is convenient to begin at the commencement of the road, adjacent to O.S. spot-level 222 (Grid 493546), where Wool Street meets other routes which may very likely have a pre-Roman origin [1]. From 222 south-east for the first 5 furlongs the route is untrenched for the gas-main, but the *agger* is plain, and it is apparently in this section that Fox made his cross-cutting showing an *agger* 3 ft. 9 in. high, composed of alternate layers of chalk and earth capped with gravel.<sup>1</sup> The new pipe-trench comes into the line of the road at [2] and proceeds along it; after about  $3\frac{1}{2}$  furlongs the road section, where it was cut across by the pipe-line, was seen by Dr Bushnell at grid 566535 [3]. He found this section less than impressive, the top of the natural chalk not very regular, and what appeared to be its surface in the middle of the road, 35 in. from the present surface. Here it was overlain by (I) a scatter of small chalk fragments mixed with earth about 6 in. thick; (II) over this were 9 in. of soil, overlain by (III) an irregular band of flint rubble about 14 in. thick. At the top were (IV) 6 in. of packed chalk visible here and there. The trench here came along the south-west side of the road and generally seemed to be just clear of it. Back toward the commencement of the road at 222 there was a fairly constant band of chalk rubble, about 9 in. above the top of the chalk; this may have been the feather edge of Fox's top chalk-rubble layer.

The road does not form so high a ridge here as it does nearer to its commencement, where Fox described two sections. Comparison of the present observations with Fox's descriptions suggests that we saw a pale reflection of what he records, and the chalk bands do not exactly agree with his layers. The surface is much damaged by recent wear and to this we ascribed the irregularity of the flint-rubble layer. The chalk at the top of this section may have been a recent filling.

<sup>1</sup> *Proc. C.A.S.* xxiv (1923), p. 21, fig. 1.

The differences between the layers as found by Fox and Bushnell respectively may be due in part to original variations as well as to subsequent repairs. What is remarkable is the finding of a thick layer of flint rubble. At no other place in the whole 10½ miles has such a feature been seen (except at the crossing of a stream 9½ miles further on, near Withersfield), and certainly it suggests medieval repairs of some moment. There is little doubt that medieval traffic used the Cambridge end of the road, as it formed part of the packhorse route for a number of villages adjacent to Wool Street before many of the late medieval roads now in use were made.

#### CROSS-SECTION OF ROAD FORMATION

The outline of the road continues to Worsted Lodge in similar style (see Pl. IV a), whilst the full cross-section at [4] exhibits the impressive height of the *agger* and the width between ditches of 42 ft. (Fig. 2). Also to be noted is the much-simplified formation of the *agger* which, although similarly upstanding to that found by Fox nearly at the beginning of the road, has only the one layer of chalk rubble and the

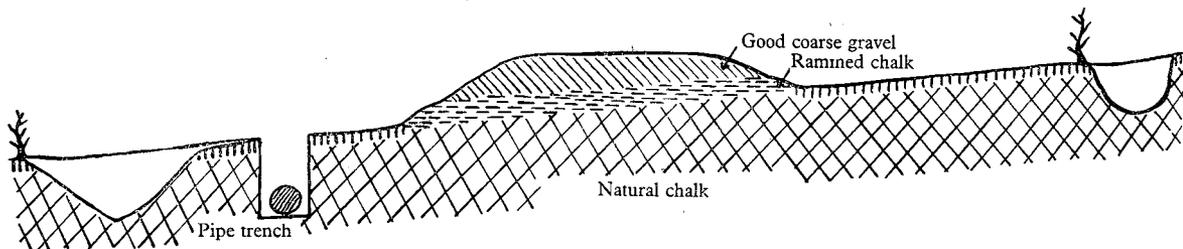


Fig. 2. Cross-section at [4] near Worsted Lodge, looking north-west. Scale: 1 in. = 8 ft.

very thick capping of gravel. It is also significant that the chalk layer had been laid directly upon the original undisturbed turf, as demonstrated by the occurrence of remains of the latter under the lower surface of the chalk layer. This seemed to have been the practice throughout, where a chalk layer was present, and so will not be referred to again. A feature—pleasing even to a modern civil engineer—is that, in this vicinity at any rate, the amount of chalk excavated from the ditches would have closely approximated to that needed for the chalk layer in the *agger*. The simplification in the formation of the *agger* compared with the elaborate layering which was found by Fox and to a lesser degree by Bushnell, seems an early phase in a gradual lowering of standards of construction, as the distance from the 222 end of the road increases.

This cross-section was cut at the highest part of the *agger* [4] some 155 yards on the Cambridge side of Worsted Lodge (3 miles from 222). It was a complete cut including both side-ditches, and the drawing speaks for itself (Fig. 2). The great height of the formation is partly due to the solid chalk being here a kind of outlier from the 'hill' to the north-east, but there is also an extra thickness of 'topsoil' under the chalk layer, composed of loose material comprising many old roots, indicating that some of the adjacent topsoil had been thrown up to make the road even higher at this point. It is also noteworthy that the surface of the gravel appeared

but little worn. The total height of the *agger* from the original topsoil is approximately 3 ft. 2 in. whilst from the solid chalk it is 3 ft. 7 in. The ditches are 42 ft. apart and whilst that on the south-west side is well shaped, that on the north-east is less well defined, perhaps on account of the natural inclination of the land-surface being higher in that direction.

It is interesting to consider the provenance of the material forming the *agger*. The section shows that the amount of chalk removed from the side-ditches was here approximately equivalent to that of the chalk layer, whilst at a distance of less than  $\frac{1}{4}$  mile to the north-east there exists to this day a very large gravel pit.

#### JUNCTION OF ROADS AT WORSTED LODGE

This spot [5] which, after Cambridge, seems to be the most important Roman road junction in the district (Fig. 3), produced much useful information, as it was found possible for a sufficient length of the trench to be left open at one time to expose the chalk layer and other features in line across (Fig. 4), from that portion of Wool Street on the Cambridge side at A to the resumption of the *agger* on the south-east side of the modern main road A 11 at B. The investigations there were complicated, but the result was as follows:

(1) The original chalk layer of Wool Street had formerly been continuous but, most significantly, in the portion between the present main road at C and the integration of the modern successor to the Icknield Way at D, it is laid at a lower level than it is in the *agger* on either side of this complex road intersection. It is interesting to note that the surfaces of the present roads still retain a depression corresponding to the line of the Icknield Way at this spot; also despite the various disturbances arising from the construction of the (now extinct) railway, there exists alongside the short connecting piece of road at C-D, the relic of the south-west ditch of Wool Street.

(2) The ancient line of the Icknield Way (before the diversion of the medieval road for the railway) coincides with the depression of the chalk layer of Wool Street, and it is manifest that the lower level of Wool Street at this point which this implies had for its object the avoidance of any serious obstacle to the passage—for instance, of cattle—along the Way (see Fig. 4).

(3) At the point where the main road (the present A 11 from Chesterford to Newmarket) arrives at the junction, the trench revealed a most disturbed subsoil under the modern road; the whole section showed disturbed ground as far down as 4 ft., consisting of remains of the Wool Street chalk layer and other irregular chalk formations. Without a section across the A 11 at some place *away* from the junction, however, nothing definite can be said about the structural formation of this Chesterford road. What can be said, however, is that the chronological order of the roads and tracks here is:

*First*, Icknield Way in existence in some form.

*Second*, Wool Street constructed with special modifications in height, so as to avoid major obstruction to Icknield Way.

*Third*, the present road from Chesterford (presumably Roman, although the author does not know of proof), impinging upon the older intersection.

A peculiarity in the interrelation between the existing roads and the true line of Wool Street had previously led to some misapprehension here. This peculiarity is not readily apparent even from the 25 in. O.S. maps, but is clearly evident on the site

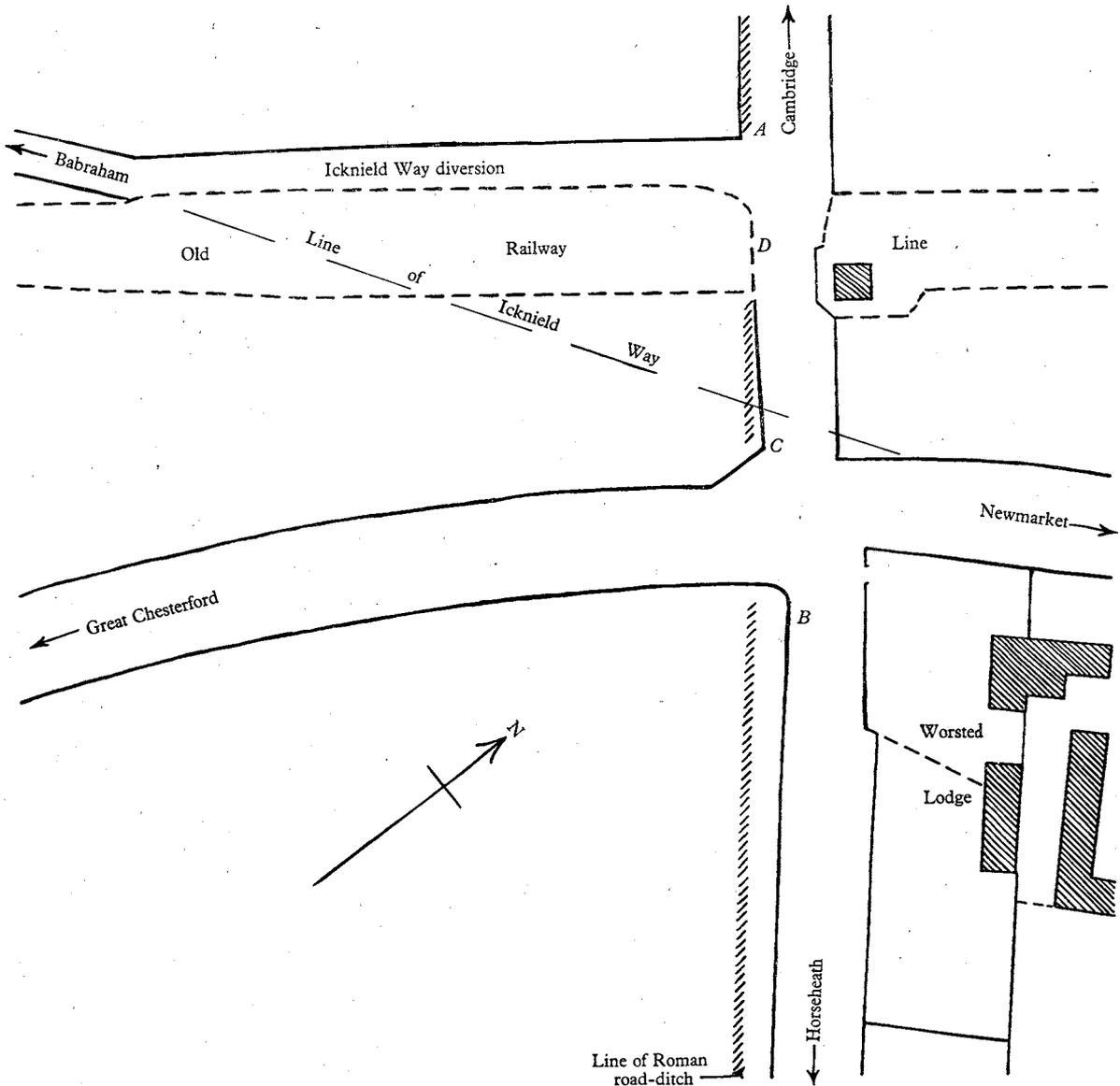


Fig. 3. Plan of road intersection at Worsted Lodge (based on O.S. 25 in. map). Scale (approx.): 1 in. = 110 ft.

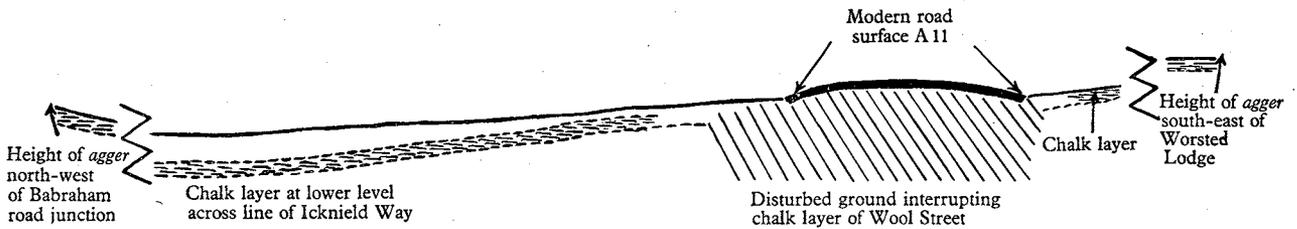


Fig. 4. Longitudinal section along Wool Street crossing of Icknield Way and main A11 road, looking north-east. Horizontal scale: 1 in. = 16 ft.; vertical scale: 1 in. = 8 ft.

plan (Fig. 3). The fact that the present track towards Horseheath—known locally as a part of Wool Street—is on the north-east side of the *agger* of the Roman road led to an erroneous idea that this vehicle passage represented the line of the Roman road and that the *agger* was a defensive linear earthwork against attack from the south-west. Actually—as will be appreciated from Fig. 3, although no cross-section was made here—it is clear from the lie of the land that the south-west ditch is in the adjacent field, whilst the present pseudo-Wool Street occupies the site of the north-east ditch. The official misapprehension regarding the line of Wool Street led to an

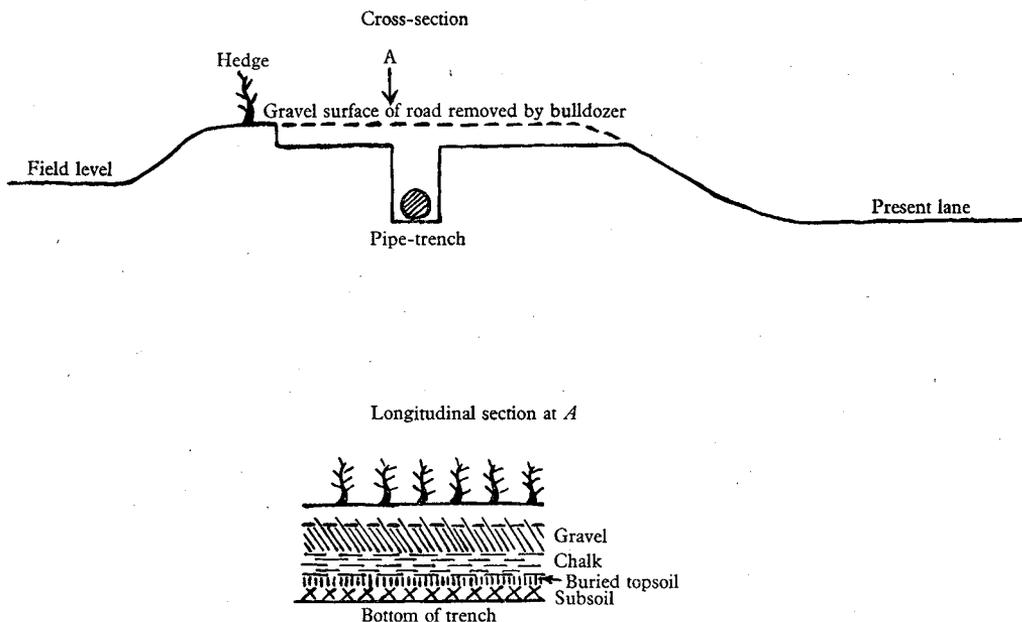


Fig. 5. Cross-section of Wool Street at Worsted Lodge, looking north-west, and longitudinal section of full depth of *agger*. Scale: 1 in. = 8 ft.

amusing operating error: with the idea of keeping the pipe-trench away from the centre of the Roman formation to lessen the depth of the trench, the plans called for the trench to run along what was really the centre of the *agger* (Fig. 5), and some inches of the top of the *agger* were removed by bulldozer. When I became aware of the intended location of the trench in this position, I first thought of raising an alarm, but realizing the difficulty of altering the alignment of the trench already cut through the complicated road junction and, indeed, with a desire to see a longitudinal trench through the full depth of the *agger*, I desisted. This led a little farther on to the situation illustrated in Fig. 5 [6], showing the trench somewhat off the centre of the *agger* but close enough to reveal almost the full thickness of the chalk layer and the superimposed gravel. This case of the archaeologist proving more correct than the official plans impressed the contractors considerably and facilitated further dealings with all concerned.

The photograph (Pl. IV *b*) was taken a little farther on [7], where—although the

*agger* was not apparent—the extreme regularity both of the Roman manual work and of the latest mechanical trenching (with the gas-main lying in its appointed place, 3 ft. from the surface) were most noticeable. The modern machine-cutting shows the marked difference in the sides of the trench between the texture of the original soil below the chalk layer and the Roman-deposited gravel above it. The continuous mound is, of course, the upcast from the trench, not the *agger*, although the top of this upcast is in fact not far from the centre of the Roman structure underground. Incidentally, relative depths here show that the chalk layer and the gravel topping can both be present, without causing a visible *agger*.

#### MODERN ROAD CROSSINGS

It should be recorded that, with the exception of the special conditions at Worsted Lodge already fully described, all the other five crossings of 'made' roads disclosed nothing beyond the normal medieval or post-medieval formation: that of the Hildersham-Balsham road, for instance, showed only three or four inches of gravel and flints, including the most recent layer of bitumen-impregnated material at the modern road surface.

#### FIRST DISAPPEARANCE OF THE AGGER

Proceeding south-east from Worsted Lodge the full *agger* continues for 530 yards when its height gradually lessens, and in a further 200 yards the gravel top disappears; no trace of any formation—chalk or gravel—then occurs for 280 yards, the subsoil being all unadulterated loam as in the adjacent fields; then the chalk layer appears again in the subsoil, but with no indications of any *agger* and with less exactness of direction than before the changes at 730 yards from Worsted Lodge [7] ( $3\frac{1}{2}$  miles from 222). There is no doubt that at this point 'something happened', as besides the aforementioned changes, the alignment which has been exactly observed from 222 comes to an end. This is duly shown on the 6 in. and 25 in. O.S. maps, and can be verified by sight on the ground. It seems that here we may have the first sign of hesitancy in the prosecution of the work to the original exactness. It is emphasized that never again does the full *agger* and its formation reappear, nor does the strict straightness of the road margins recur. This sudden disappearance of the *agger* might suggest wholesale gravel robbing, but this solution is untenable for various reasons, and not even the known voracity of the seventeenth- to nineteenth-century Chesterford-Newmarket road-repairers would explain the utterly complete and clean removal of a substantial road formation, nor why the despoilers went half a mile along Wool Street from the main road before commencing their operations. A repetition of this phenomenon of the entire disappearance of the *agger* recurs some  $1\frac{1}{4}$  miles further on and is dealt with under the 'Transitional Half-Mile'; the conclusion there arrived at is that it is explicable as the result of an unforeseen cessation of work amongst two or more working parties carrying out different operations as parts of a planned job.

## ROMAN COAL

A little over half-a-mile from Worsted Lodge—3 miles 3 furlongs from 222 [8]—the trench cut through a thin layer of coal (Pl. Va); the trench at this spot was located some way from the centre-line of the road formation, although there was actually no *agger* visible above ground. The important point is that the coal deposit—though rather towards the outside feather-edge of a spread—is securely stratified—being on the top of the chalk layer and imprisoned by the gravel topping layer on the surface. As this gravel layer is entirely homogeneous for some hundreds of yards, it is clear that we have here coal deposited upon the chalk layer between the laying of the chalk and the topping by gravel during the construction of the road. To relate the site to its probable source of supply, samples of the coal were kindly examined by Miss M. A. Butterworth of the Coal Survey Laboratory, Chester, and an investigation of the miospore content indicates the coal's affinity with outcrop seams in, *inter alia*, the Nottinghamshire and South Derbyshire coalfields. From this it seems evident that the coal would have come from some Nottinghamshire outcrop site and it is logical to suppose that its delivery route would have been via the Car Dyke, if that water route ever was navigable throughout its length, or—seemingly just as probable,—by Roman roads via Chesterton-on-Nene and Godmanchester. It would appear that this Wool Street find-spot is more remote from the source of supply than other deposits found at Welney and Littleport, but these latter may be 'sea coal' travelling inland via Wisbech. The location of this coal reinforces the author's conclusion that the road was being constructed from the Cambridge end.

## THE TRANSITIONAL HALF MILE

At  $4\frac{1}{2}$  miles from 222 begins what I have christened the 'Transitional Half Mile', because in that distance there are disclosed three stages in the decadence and extinction of the Roman road-building. Commencing at [9] which is at a high point (spot level 298), the road begins to descend fairly sharply; at the summit the Roman road surface evidently coincided with the natural chalk which at this spot has become almost bare of humus from natural causes. Proceeding south-eastwards down the slope, there is at first no trace of an *agger* although a commencement of side-ditches about 40 ft. apart seems indicated; then where the decline steepens there emerges, plain to see, [10] Grid 554502, an *agger* rather to one side of the centre of the present, wide trackway. The cross-section (Fig. 6) shows the profile at this spot. The material of the *agger* is entirely of dug chalk, and it is clear from the irregular profile of the natural chalk on the north-east limit of the trackway that this material was excavated there, being obtained from one side only because the descending road was being built on a lateral declivity.

Advancing farther into the valley the road gradually becomes carried on an embankment made of pure loam, and it seems clear that this was obtained from adjacent topsoil. Proceeding in this form, the embankment now runs horizontally

into the opposite side of the valley. Its direction is almost exactly in line with that from Worsted Lodge, and in order to preserve such a line the road would have had to climb quite a steep ascent; instead of this, the track curves and so reaches the top of the acclivity [11]. Then some distance beyond the Hildersham-Balsham road crossing, the chalk layer reappears [12]—but not aligned with the portions of road hitherto mentioned. At [13], some 480 yards on the Cambridge side of the Linton-Balsham road crossing (Grid 571493), the Roman road is found at a considerable depth, there not only being the chalk layer of 4 in. but also 2½ in. of gravel upon the chalk—the whole being buried some 3 ft. below the present surface. The site is in a

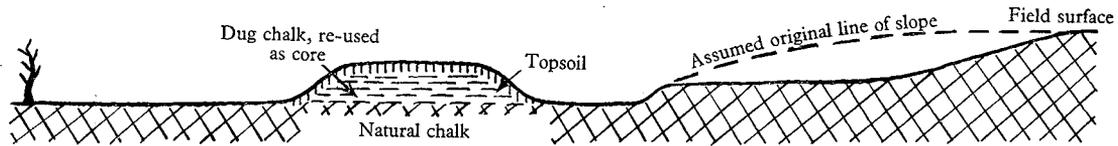


Fig. 6. Cross-section at 'Transitional Half Mile', looking north-west. Scale: 1 in. = 12 ft.

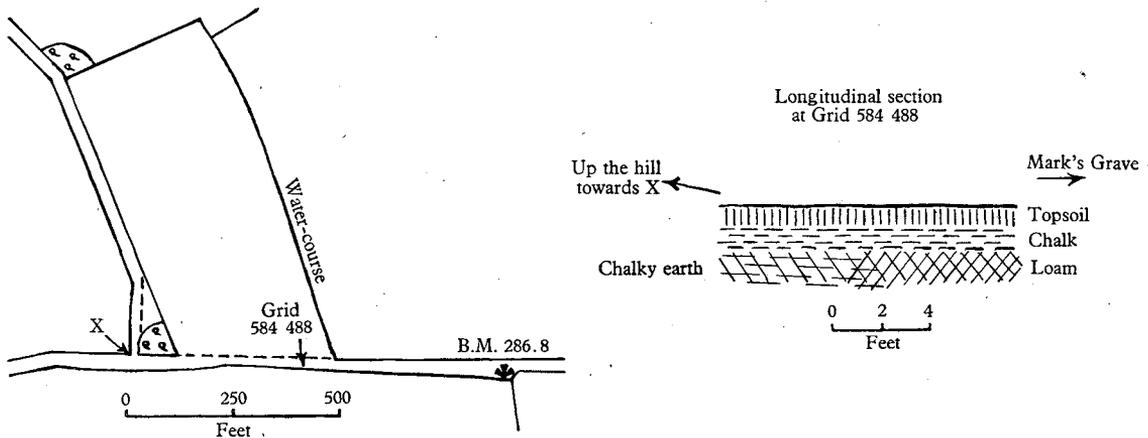


Fig. 7. Last appearance of Roman road formation at [15], Grid 584488. Map of site, and longitudinal section, looking north.

dip in the road, and so in the course of centuries has been silted over with topsoil. What original thickness is represented by the 2½ in. of gravel it is impossible to say, and so the site, although seemingly unique in disclosing gravel topping at such a depth below ground level, does not help in indicating the period of usage of the Roman road surface. Further on other portions of the chalk layer reappear, but again without forming parts of one continuous alignment. This goes on until the crossing of the Linton-Balsham road [14]. Then immediately after this crossing, there are some more substantial portions of the chalk layer, becoming sparser until their disappearance at [15], 6¾ miles from 222.

An ingenious reading of the Half-mile riddle is that we here have, 'frozen' as it were, the exact state of the work of Roman construction, when a radical change in the project occurred. Upon which point it is important to observe that never again

does anything resembling the portions of Roman formation previously described recur. It would seem that when orders were received to abandon the full Romanization project, the work was being constructed with two or perhaps three principal working parties, each engaged on different stages of the job. It may be that the decision to desist had occurred during the winter and that the method of surmounting the difficulty of the incline into which the end of the alignment had run was under consideration, at the time the cessation of work was ordered. This difficulty was never resolved, and to this day the track winds upwards, as can be observed by anyone going to the crossing of the Hildersham-Balsham road adjacent to [11].

At  $6\frac{3}{4}$  miles from 222 near the lowest point between two higher spots [15], Grid 584488, an isolated portion of chalk layer was found, only a few yards long and buried some 10-12 in. down amidst perfectly homogeneous loam (Fig. 7). No gravel was above the chalk and it was clear that the chalk, which was of true Roman laying and was presumably originally at the surface, must have been gradually completely buried by fine loam washed down from the adjacent slope.

This was the last piece of Roman work we found;  $\frac{3}{4}$  mile farther on is the spot known as Mark's Grave [16], and from here onwards the track becomes even more wavy and erratic than before.<sup>1</sup>

#### THE HORSEHEATH SITES

The Horseheath main settlement [17] is on the south-west side of the line of the road, but possibly partly on the north-east side also, in the parish of West Wickham (see p. 56 for the significance of this). The site is ideal, being on the brow of a hill and on its south-western face; it is approached by the track from the Cambridge direction with quite a steep inclination. Furthermore, although in a very well-drained position, springs issue where the inhabited area was obviously placed and there is a convenient stream at the foot of the descent for a carry-away. An account of the finds made in a somewhat limited excavation here at what we may call the upper site, by Miss C. Parsons, was given in these *Proceedings*,<sup>2</sup> and sherds of Romano-British pottery have occasionally been found from 1931 onwards. Recently an important additional feature has been the discovery by Mrs J. Bullen of Horseheath of many similar sherds on the edge of the present village, in the valley. The relative positions of the two sites rather suggests a superior establishment on the higher ground with one or more buildings, connected with a peasant site nearby but lower in the valley. The coins found on the upper site by Miss Parsons were all dated between A.D. 117 and 350, but potsherds from the first century onwards were also found, a few of which may be attributed to the Belgic period.

<sup>1</sup> Immediately east of the Mark's Grave cross-roads, where the track takes a southward bend, the Roman line was thought by the late Mr R. Rainbird Clarke to follow straight across, as it were along the chord of this southward bend. In June 1936 he noted that 'the track of the Roman road is indicated in the growing corn of this field [i.e. north of the present trackway], by a broad dark belt, flanked on both sides by a thin white line' (MS. note on O.S. 6 in. map—Ed.).

<sup>2</sup> *Proc. C.A.S.* xxxi (1931), p. 99.

A great deal of Roman road-remains is stated by Walker<sup>1</sup> to have been found in a cross-trench through the line as it passes adjacent to—or through—the upper settlement. Yet the present longitudinal trench, although passing right alongside—or through—the settlement, revealed no clear evidence of any regularized stratum of Roman road construction; there were however signs of disturbance of the ground where the Roman road appeared to have run, giving the impression of a poorly made (though at this point straight) road, which had subsequently been patched many times; also it appeared that the formation alongside—or through—the settlement was of greater proportions than in parts some little distance away.

#### FALSE CHALK LAYER

Shortly after leaving the upper settlement the existing track becomes a sunk road between fields higher than itself, being waterlogged because the subsoil hereabouts is riddled with springs. In this section [18] the machine-cut trench showed what at first sight appeared to be a recurrence of the Roman chalk layer. Plate *Vb* shows this feature and it seems worth reproducing as a warning. The trench-cutting crew hailed the reappearance of the chalk layer with enthusiasm and so at first did I, until on getting down into the trench where the full length of the layer was exposed I noted its irregular composition compared with previous appearances. Close examination disclosed the layer to be resting on waterlogged rough soil and then, well under the layer, pieces of relatively modern brick appeared. A day or so later, a 'local' recollected having heard that several years ago a nearby farmer had had many loads of chalk laid there!

#### MARK'S GRAVE TO THE WITHERSFIELD ROAD-CROSSING

From the road crossing at Mark's Grave [16] to the Horseheath site and from thence to the presumed crossing of the Withersfield road [22], only one doubtful vestige of Roman setting-out is observable, except when passing the Horseheath settlement and at one other place now to be mentioned, although evidence of the trackway is clear and practically continuous. The exception [19] is some  $\frac{1}{4}$  mile from Hare Wood, where the line is straight and a portion of this length exhibits extreme lateral limits of the trackway approximating to the limits of the fully Romanized portions. At the end of this stretch the line arrives at the crossing of the stream running down from Silver Street Farm and Over Wood [20] and here there is a thin and irregular layer of chalk on both sides of the water-course; this layer is evidently the result of medieval or more recent filling-in, in the style of that now existing at [18] (Pl. *Vb*). A continuation of the straight line before mentioned beyond the stream-crossing would lead the track into a steep incline and the parish boundary indicates that a curved contour-line was followed [21], bringing the crossing of the Withersfield Road approximately to where it would have arrived had the straight alignment been followed [22]. This circumstance is mentioned because the gas-main trench was cut,

<sup>1</sup> *Proc. C.A.S.* xiv (1909), pp. 161-3.

by ordinary pick-and-shovel methods and to a considerable depth and width, partly on the line which would have comprised prolongation of the straight alignment, yet no sign of any track was disclosed, proving that the contour-line route was not a subsequent deviation from any straight Roman alignment. Thus almost at the extremity of the route with which this paper deals, there is definite evidence against a Roman alignment, but there is a pale reflection of Roman practice respecting the overall width, for a short distance.

### END OF THE TRACK AT WITHERSFIELD

The portion of the route after Withersfield road-crossing [22] may be considered of particular interest, in view of the supposition that the Roman-designed route carried on through Haverhill, perhaps on the line of the present main street of that town;

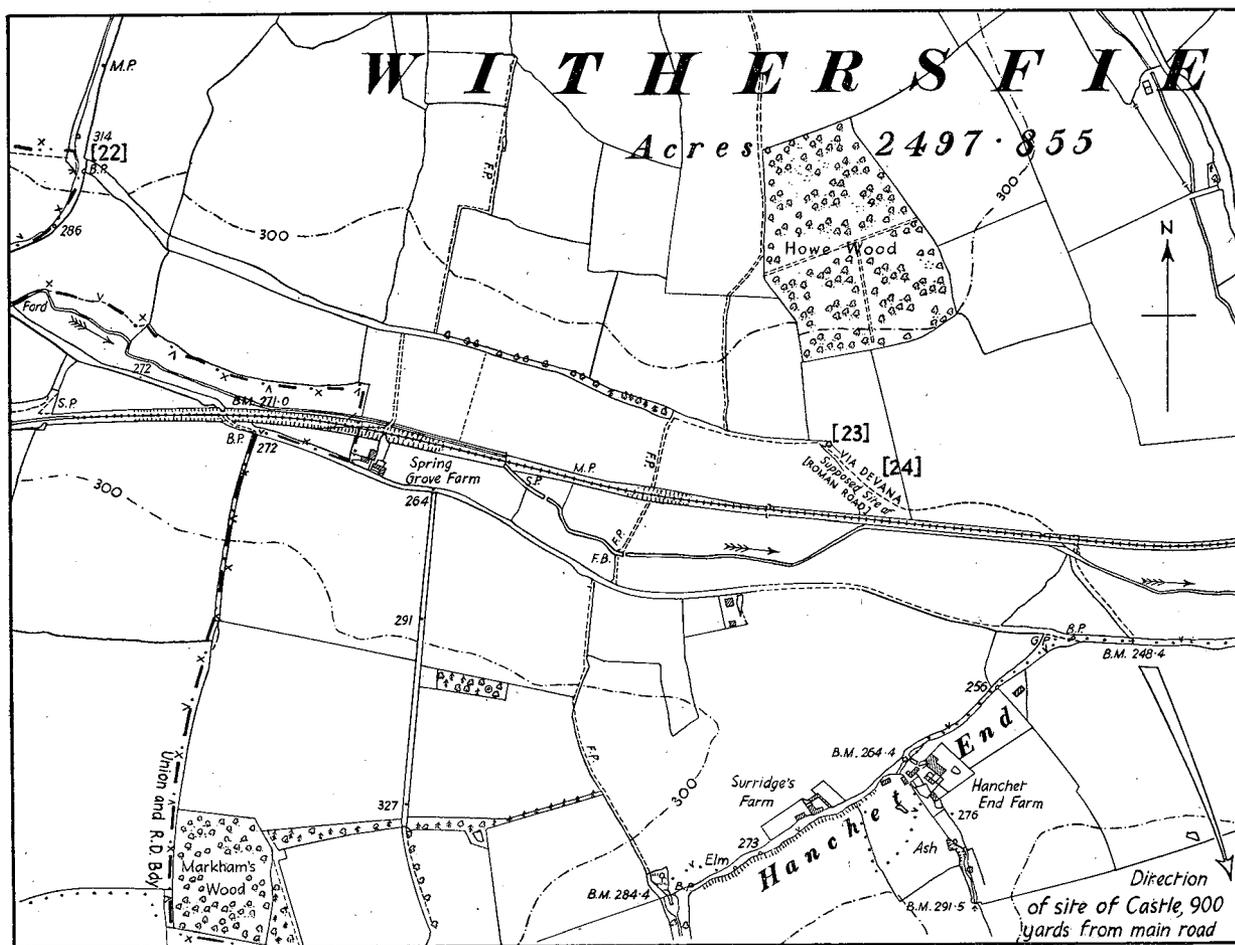


Fig. 8. End of the track, near Withersfield, based on O.S. 6 in. map.

Reproduced from the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office, Crown copyright reserved.

but the ending of the track in the manner it does gives no support to that idea. On the contrary, the meandering of the track (Fig. 8) supports the opposite view, plus the fact that although the trench cut through the meanders as they are shown on both 6 in. and 25 in. O.S. maps, no signs of any Roman road or road-material were found either on the meandering line or in the various lengths of trench adjacent thereto. If therefore there had been such a trackway—and presumably there must have been to have given rise to the indications on the maps—its formation hereabouts must have been extremely slight and certainly not Roman. From where the track abandons any pretence of straightness [23] on Fig. 8, it at first follows a curved sunken route [24]—very similar to a much-worn packhorse trail—which is now tenanted by a water-course; it could be that it indicates where a subsidiary medieval track, splitting from the main track on the higher ground, ran down to cross the river, but no vestige remains to justify a supposed prolongation of any relatively straight portion on to Haverhill. Such a meandering breakaway track might indicate a subsidiary—or even a primary—way, leading down to cross the river and onward to what the maps describe as ‘Castle Site’ (Grid 655456),  $\frac{1}{2}$  mile south of where the old track seems to have crossed the present main road; but this is a matter outside the scope of this paper. In any case it is extremely difficult to harmonize the sinuous ending of this track with its being part of a purposely made road, such as would normally be visualized for a route ‘from Colchester to Chester’.

#### COIN AND POTTERY FINDS

The scarcity of finds of any kind along the route—only one coin (indecipherable) and very few sherds of pottery—is no doubt principally due to the trench hardly ever being cut on the site of the ditches or margins of the road formations. Nevertheless such paucity, combined with the lack of even minor settlements adjacent to the route, is not to be expected upon a length of over 10 miles of a supposedly busy Roman through-route. At the Horseheath settlement itself, partial excavation (mentioned above) produced 29 Roman coins ranging from Hadrian to practically the end of the Roman occupation. This represents at least 250 years, although the pottery also indicates very early Roman, if not actually Celtic, occupation of the site and presumably—although not necessarily—of the road itself.

#### CORRECTION OF SOME MODERN ERRORS

The theory lately advanced by Mr T. C. Lethbridge, supported by Sir Cyril Fox, that Wool Street was in fact a defensive earthwork,<sup>1</sup> now becomes superseded. Whether the unusual profile of the road line (see Fig. 5) and the anomalous position of the present track south-east of the Worsted Lodge crossing (see Fig. 3) conspired to suggest a defensive barrier facing south-west, or whether the irregular profile of that portion of the *agger* and track in the Transitional Half Mile (see Fig. 6) was

<sup>1</sup> *Place-Names of Cambridgeshire* (T. H. Reaney, 1943), p. lix.

responsible for the idea, I do not know; both sites are misleading on superficial knowledge. Likewise the suggestion of Professor T. McKenney Hughes<sup>1</sup> that a portion of the Roman road near spot level 222 extended towards War Ditches is also rendered untenable.

The author considers it fortuitous that the alignments from Cambridge both to the north-west (to Godmanchester), and to the south-east coincide—thus suggesting the so-called 'Via Devana'. Whatever justification this name may have for the Roman road north-west of Cambridge, it is clearly shown by the present facts to be inapplicable to Wool Street. It is agreed of course that the land level on a direct line from spot level 222 to Cambridge Roman station may have been subject to floods; there is also the fact that the alignment south-east from 222 only persists as such for  $4\frac{1}{4}$  miles and that from no part of that alignment (following the mythical assumption that it was constructed *from* the south-east) is 222 in sight for a sufficient length to align it upon Castle Hill; also that such an objective as Cambridge could have been reached more reasonably than by going up to 222. The author's view is that point 222 was selected for the purpose of joining an existing trackway, or part of a Roman road, from the direction of Newmarket or Exning to the settlements near Trumpington and Hauxton in the Cam-Granta valley, probably by way of Wort's Causeway.

#### ORIGIN OF THE NAME WOOL STREET

The origin of the current name Wool Street has been much debated, but this writer believes it to be fairly simple, although differing from previous suggestions. The early references dating from 1207 to 1573<sup>2</sup> carry as their main stem—with minor variations in arrangement of letters—WOLVUESTRATE. On p. 112 in the same work, under West Wickham parish, appears a reference to IpmR for 1470 Wikam Wolvis; Wolvis referring to the knight's fee held in 1373 by William Wolk (Close Rolls). Now, West Wickham parish has Wool Street as its south-west boundary with the parish of Horseheath for nearly 3 miles; the Horseheath Roman settlement is about midway along this length and may have extended partly into West Wickham parish. As said elsewhere, the route from Cambridge seems to have had a special relation to the Horseheath site, which in early medieval times may well have been considered the road's objective; so the track could logically have assumed the name of the knight's fee ownership of one of the two adjacent parishes to which it obviously led—Wolvis Street—without any need to invoke the wolf population of the district or a special addiction to the transport of wool.

#### PROLONGATION TO COLCHESTER AND THE VIA DEVANA MYTH

Notwithstanding the factual proofs now brought to light showing that the hitherto accepted view of the status of Wool Street is incorrect, it is thought that a résumé of what has appeared from time to time in the literature may usefully be included,

<sup>1</sup> *Proc. C.A.S.* x (1903), pp. 457-8.

<sup>2</sup> According to P. H. Reaney, *Place-Names of Cambridgeshire* (1943), pp. 31-

particularly as the results of the present investigation in the field are so totally at variance with long-established beliefs. A comprehensive study of the literary evolution of what the author considers the growth of a myth has been made; there are some 15 authorities altogether (see Appendix), of which the first half-dozen or so have added their quota to the Via Devana theory.

The first appearance—so far as the author can trace—of the suggestion that Wool Street was part of a planned major through-route from Colchester to the Midlands and the north-west is in Salmon, *A New Survey of England—Essex* (1731). He is quoted by Thomas Walford of Birdbrook in this district—a great protagonist of the 'Via Devana' school—as saying 'The military way from Colchester to Camboritum (Gogmagog) makes 35 miles. It leads through Ford Street, Colne, Halsted, and at Castle Hedingham returns into the Ikening Street, which comes from Maldon; thence by Yeldham, Ridgewell, Baythorne, to Haverhill; thence by a broad and direct way crossing [at Worsted Lodge] the road from Newmarket to Bourn Bridge, goes up the hill to Gogmagog.' Dr Salmon is here quoted in full because his statement is typical of all the accounts which followed him, with the exception of Walford and 'Agricola', who will be dealt with further on. All fail to cite any actual evidence until after (i.e. west of) Haverhill; even then nothing factual is mentioned until they reach the neighbourhood of Horseheath and Worsted Lodge, when some of the writers give a description which seems to denote that they had seen that portion of the road. This author has no confidence in such writers, his experience being that if in a continuous account of a Roman road—or any other like matter—portions of the subject are given in detail, whilst other portions are skated over, it is because the writer is reasonably informed about the former but knows nothing or relatively nothing of the latter. It seems that this rather ruthless criterion should here be applied, i.e. that when formal statements are made without citing supporting evidence it is likely that such supporting evidence did not exist.

Reference should first be made to Dr Mason who is always credited with the bestowal of the name 'Via Devana' upon the route. Dr Mason appears to have had no more local knowledge than had Dr Salmon; at least he seems never to have published any such during his lifetime and afterwards his papers appear to have become untraceable. He must surely have known Dr Salmon's military-way theory of 1731 and as he was active in Cambridge circles until 1762 there was ample time for him to deal with the matter. There is, in this author's opinion, an aroma of Stukeley-ism about the 'Via Devana', and it is perhaps significant that the period coincides with the Druids at Stonehenge and Bertram's Richard of Cirencester.

Returning to the other authorities, 'Agricola' of 1795 requires particular notice since he differs from the others by citing something tangible. He was a frequent writer of letters to the *Gentleman's Magazine* and says—making reference in part to Dr Mason '... from Colchester this road proceeds, obscurely it is true... by Colne, Sible Hedingham (where I once saw some remains of it), Yeldham, Ridgewell and Haverhill to Horseheath; whence it runs quite visible and still very high raised over the open country and crossing the Icknield Street [at Worsted Lodge], continues

straight to Gog Magog Hills'. It is to be noted that 'Agricola' is at pains to emphasize a close acquaintance with Dr Mason's views: he states 'the information I have received from' him. The fact would seem to be that Dr Mason possessed little more information than 'Agricola' himself, since otherwise the latter would have embodied it in his letter.

Here again we have the same nebulous commencement, gradually becoming more factual (in this case on reaching Horseheath) towards the Cambridge end of the road. This account however accentuates what is actually the case today—that from Horseheath onwards the route is relatively well marked. The aforementioned criterion again applies: if 'Agricola' had known of definite traces of Roman roads nearer Colchester he would have said so—particularly as he was writing to the magazine more or less as a mentor knowledgeable in Roman road matters.

'Agricola' mentions that he *saw* the remains of a Roman road at Sible Hedingham and this will doubtless have been located in one of the straight portions—called Swan Street—of the present main Colchester–Cambridge road in that area. There are other fairly straight stretches in the present road; one for instance known as Pool Street being  $2\frac{1}{2}$  miles nearer Haverhill and obviously forming part of a valley road; the distance between these two portions tends to support the author's view that we are dealing with a pre-Roman trackway Romanized in parts—not only so far south-east, but also in many parts of the section still called Wool Street north-west of Haverhill, which we have here covered in detail. There are three other '... street' place-names further on in the general direction of Colchester, but so situated as to preclude their consideration as possible clues to a general line of road.

The only other authority needing our attention is Thomas Walford who lived at Birdbrook, Essex, and contributed a paper to *Archaeologia* in 1801 entitled 'A Roman Military Way in Essex'. In his paper, Walford treats extensively of what he describes as Roman roads in his district, but his approach to the subject is remarkably uncritical and he only cites one factual instance of Roman road, if such indeed it be. He was imbued with the Military Way theory, quoting largely from Dr Salmon, but his unsupported suggestions concerning various lines of road are unconvincing, there being many instances in his account of incompatibility between the text and his own accompanying map. Walford's discovery of the two portions of the Roman road  $\frac{1}{2}$  mile south-west of Ridgewell village—if correct—renders untenable much of his other allegedly Roman roads, since they lie parallel to his supposed lines of road through the village. In addition the route he suggests (following Dr Salmon) for a Roman road running via Ridgewell, Baythorne End, Sturmer and Haverhill, has only to be followed on his own map between Ridgewell and Sturmer via Baythorne End to be found ridiculous as a Roman line. In brief, the author has some difficulty in according full credence to some of the statements in Walford's book, and is even uncertain whether the often-quoted pieces of *agger* at Ridgewell were really Roman and not (as inspection of the site suggests) portions of a non-Roman valley-bottom road, perhaps used by the inhabitants of the Roman villa which is adjacent to the road. It is interesting, now that the matter of place-



(a) Wool Street between [2] and [3] looking north-west. Pipe trench (indicated by white labels) partially refilled. On the right, the 3 ft. high *agger*; its side has been partly cut away and then covered by the upcast from the trench. Note thorn bushes beyond far edge of *agger*.



(b) Trench south-east of Worsted Lodge, looking north-west, showing chalk layer overlying natural and surmounted by gravel topping.



(a) Wool Street. Roman coal deposit, sealed by gravel topping.



(b) Near Horseheath. Recent chalk resurfacing of the track.

names is no longer on a speculative basis, to observe that the name of Ridgewell has been in the past used (erroneously) to imply the existence of a Roman *agger* in that parish.<sup>1</sup>

The whole of this matter of the track—now mostly unknown—from west of Haverhill in the direction of Colchester calls for further investigation. The author is aware that in recent years a branch road has been found leading off from the London-Colchester Roman road near Lexden and pointing in the general direction of Cambridge, which it has been conjectured might connect with the *Via Devana*. However, this branching-off road may belong to another line of road, having the Cambridge area via Chesterford as its objective, rather than a direct connection with Wool Street; but this is a matter beyond the scope of this paper.

The author is also aware of some suggested traces of Roman road running eastwards near Haverhill; but research in the area and inquiries amongst its inhabitants have failed to provide any evidence which he can consider satisfactory.

#### WOOL STREET: GENERAL CONCLUSIONS

A summary of the Wool Street trench excavation shows the following results: it was a pre-Roman trackway, probably connecting with other pre-Roman routes in the vicinity of spot level 222; it extended south-eastwards at least to within  $1\frac{1}{2}$  miles west of Haverhill and almost certainly continued in some form or other via the Colne valley to Colchester; it was Romanized in parts only, and this work was commenced at the Cambridge end—the full Roman construction only extending  $4\frac{1}{2}$  miles from 222. This project may have been planned either by Cambridge influence alone, or in combination with a growing Romano-British community at Horseheath; the project of a full-style Roman construction was carried on for a comparatively short period, and when the full-style plan was abandoned the various gangs engaged upon the work had reached different stages of construction at different places. Some stretches of the old track were also semi-Romanized at fairly frequent intervals as far as Horseheath and it was somewhat improved beyond, until within  $1\frac{1}{2}$  miles west of Haverhill, the most defective places being patched with a poorer grade of road formation; some minor straightening of the route was undertaken, but no attempts were made to line up the improved portions with each other. What is quite evident from all the factual indications on and below the ground, is that Wool Street south-eastwards from 222 was not part of a nationally inspired Roman main road from Colchester to the north-west via Cambridge, the road consistently and increasingly shedding its Roman character as it proceeds south-east; thus the author considers it established that it was only a Cambridge-area enterprise. No central government authority—Roman or other—based on Colchester or in that area would commence making a road at the farther end—some 40 miles away from Colchester—and work towards itself. In actual fact it is only for the first  $4\frac{1}{2}$  miles from the Cambridge end (spot level 222) that the fully developed Roman construction extends. Consequently

<sup>1</sup> See *Place-Names of Essex*, P.N. Soc. xii.

any claim to a title corresponding to the 'Via Devana' of Dr Mason entirely fails. Further confirmation that the work was a Cambridge-region project is provided by the discovery of the layer of Roman coal deposited during the construction.

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#### APPENDIX

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or to—Colchester are given.)

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