Communications and Transport in Mediæval Cheshire.

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PREFATORY NOTE.

By reason of its position and the configuration of its surface, Cheshire affords a highway from the middle of England to the north, to Ireland and to North Wales.

The Pennine upland lying to the east of Cheshire compels traffic from the west and south of England to approach the coast of Lancashire as the easiest route to the north, and throws across Cheshire a north-to-south line of communication.

Far more important in the Middle Ages were the other two highways. The English lowlands stretch through Cheshire to the sea, and Cheshire became at an early date the principal avenue of communication between England and Ireland.

Finally, the Cheshire plain (with the bridge at Chester) affords the most practicable route into North Wales and was therefore the highway for the numerous military expeditions against the Welsh.

THE principal roads of mediæval Cheshire were those made by the Romans. It was natural therefore, that Chester, a Roman city, should be the focus of communications. Guarded on two sides by the Dee, protected by its walls and castle, it held the key to North Wales. It was moreover a seaport; it had a weekly market and an annual fair; it was the centre of government. On Chester therefore, the chief roads

converged. They follow no river valleys, but their courses are in some measure determined by natural features, for they pass through gaps in the long crescent-shaped ridge of high land which runs from Frodsham towards Malpas

The traveller from the north crossed the Mersey at Warrington, the Weaver at Frodsham, and passed along the low-lying plain into Chester. From the north-east and east, he came along the Watling Street, crossing the Weaver at Northwich, passing through the narrow gap at Kelsall, leaving the Roman road for two or three miles near Tarvin, but rejoining it at Stamford Bridge, and thence to Chester. Several routes from the south converge on Nantwich, whence the road ran through the " passage " of Tarporley[1] to Chester. A fourth road crossed the Dee at Holt and passed along the right bank of the river through Aldford into Chester.[2] On the western side of the Dee the road from Chester branched out to Flint, Rhuddlan, Conway and Anglesey, to Mold and Denbigh and to Central Wales.

One important highway passed through the county without touching Chester. The road from Lancashire to London crossed Warrington bridge and then proceeded via Northwich[3] and Middlewich to Newcastle-under-Lyme, while another—though less important—road, skirting the Pennine uplands, passed from Macclesfield through Congleton to Newcastle-under-Lyme.[4]

The roads already mentioned may be considered the main arteries of traffic in the thirteenth and fourteenth centuries. They were of sufficient importance to have bridges where they crossed the larger rivers. Bridges, however, were few, and many of the less important roads crossed both streams and rivers at fords. The Dee, for example, could be crossed at several points, though, according to Higden, it was believed that the fords frequently changed.[5] It is not possible to determine the extent to which these fords were used in time of peace. It is clear, however, that in time of war they attained both military and economic importance. Whereas the important crossings at Holt and Chester were commanded by powerful castles, the fords, except that at

Shotwick,[6] were undefended.[7] The extensive arrangements made for the lighting of beacons[8] in the Broxton Hundred during the revolt of Owen Glendower point to the possibility of crossing the Dee in a region where there were no bridges, and the appointment of men to be " keepers of the passes," with power to seize all cattle bought from or sold to the rebels, points to lucrative but illicit trading by way of the fords. Nor was such trade confined to fords along the narrow, inland portion of the river. The estuary itself was crossed and considerable quantities of provisions passed from Wirral into North Wales.[10]

Below Warrington the Mersey was not forded. There were, however, two points at which communication with Lancashire could be maintained by means of ferries. One was at Birkenhead[11] and connected the Wirral with Liverpool. The other was at Runcorn.[12]

Roads from these ferries, from the fords and from the bridgeheads, linked the various parts of the county with one another and especially with Chester. The state of these roads must remain largely a matter of conjecture. Dealing with English roads as a whole, Thorold Rogers argued that they were good,[13] while Dr. Cunningham implied that they were better in the fourteenth century than in the fifteenth.[14] Broad judgments based on evidence relating to the whole country, are not necessarily applicable to a single county. On the other hand the evidence available for a single county may be insufficient to support a broad judgment. In the case of Cheshire, while the evidence is not extensive, some interesting details are to be found concerning both the state of the roads and the character of the traffic.

The maintenance of the road surface within the towns was beginning to receive greater attention. Edward I. no doubt realised the volme of traffic which passed along the roads of Cheshire when he granted to Nantwich and to Chester the right to levy tolls for the repair of their roads and bridges. Chester had a pavage of ½d. on every cartload of firewood and coals,[15] while at Nantwich a toll of ½d. was imposed on every cart laden with merchandise, but goods destined for the army

in North Wales were to be exempt.[16] Outside the towns, however, stretches of bad road were probably so common as to escape mention. Occasional references to the " miry ways " by which men reached Chester,[17] to a road to Dutton rendered "impassable" by the overflow from a mill-pool,[18] to a man drowned in a stream while his horses and cart are saved[19]—these point to what was probably the usual condition of the roads, while in the next century, when it became common to make bequests for the repair of " foundrous ways,"[20] a citizen of Chester bequeathed ten shillings for the " repairs of the bad roads at Wetfield and others like them."[21]

It is not to be assumed, however, that the roads of Cheshire were universally in a bad condition. Exceptional conditions in limited areas may have led to efforts to maintain good roads. Such a conclusion is suggested by the building accounts of Vale Royal Abbey,[22] which throw a good deal of light on transport in the middle of the county. The stone used in the building of the abbey was drawn from the quarries at Eddisbury. Neither the exact site of the quarries nor the exact route taken can be determined, but at a fair estimate, the distance from the quarries to the abbey must have been from six to eight miles,[23] and the stone was hauled largely in one-horse carts. Now the use of single horses in the transport of such heavy material as stone is noteworthy, for many thousands of journeys were made. It becomes still more remarkable when it is seen that some of the carters managed to make two complete journeys—a distance of twenty-five and perhaps nearly thirty miles—every day for a month at a time.[24] Moreover, the hauling continued during November and December, when usually the roads would be soft. It is true that the district is fairly level. It is possible that the loads were light. It is probable that the work of transporting the stone was executed by men who possessed only one or two horses each. Yet it is scarcely credible that so much traffic could have been borne or that horses could have endured the strain, unless the roads were in a tolerably good state of repair.

This argument, of course, applies only to a small area, and it is quite possible (though no records have survived) that the Master of the Works took measures to secure good roads for the conveyances not only of stone, but of timber and other building materials. In other parts of the county, where the volume of traffic flowed more steadily, the roads were probably poor. They are mentioned whenever metes and bounds are defined.[25] Occasionally their course is the subject of an inquiry.[26] Then they are perambulated and the exact course is placed on record. Sometimes they give rise to a conflict between monasteries whose estates are contiguous.[27] Occasionally some reference is made to timber for the maintenance of roads and bridges, as when a hermit is supplied with oak from Delamere Forest for the repair of Stamford Bridge and Holmes Street.[28] Usually, however, the cost and process of repair escapes mention.

That the volume of traffic along these roads was considerable there can be no doubt. The importance of the county as a natural highway to the north of England, to Ireland and to North Wales has already been mentioned. Wars in Wales hindered trade, foot-soldiers and vehicles conveying provisions passed in large numbers through Chester, and although Edward's armies were in part supplied with sea-borne food, they nevertheless depended on the provisions collected in the wagons of many religious houses and borne along the roads of Cheshire.

During the peace which followed the settlement of Wales, the volume of traffic passing across the county was reduced. Peace, however, supplied the one condition requisite for the economic development both of North Wales and of Cheshire, and the land on both sides of the Dee became prosperous. Lead and coal from the mines of Flintshire were brought into Cheshire, Welsh cattle were brought for the Macclesfield stud farm,[29] and Welsh troops marched through Cheshire to aid the king of England in his wars in Scotland and in France. The port of Chester continued to receive wine, wheat and other goods which were distributed to various parts of the county. Wool was conveyed both from North

Wales and from Cheshire to east-coast ports.[30] Salt was conveyed from the wiches, some of it even being sent to the armies on the Scottish border.[31] Loads of fuel were carried into Chester, and a considerable trade in provisions sprang up with Wales.[32] Moreover, a good deal of heavy building material was carried from the quarries, forests, lime-kilns and lead foundries, for the erection, extension or repair of the castles, abbeys and churches in the county. Peace, therefore, though it depressed the military activities of the county, soon led to a wide use of communications for the normal purposes of a community which is advancing in prosperity.

Both oxen and horses were employed in Cheshire, as elsewhere, for haulage. Oxen, which of course were used for ploughing,[33] drew salt from the wiches[34] and timber from the forests.[35] The size of the team naturally varied with the load. In one instance no less than twenty were hitched to a single wagon (belonging to the Abbot of Vale Royal), engaged in conveying big beams from Delamere Forest to Chester Castle.[36] This, however, was exceptional. The teams commonly seen were much smaller, those mentioned in Domesday being " two or more."[37]

Horse teams similarly differed in size. Both victuals and merchandise were taken into Chester on horses' backs.[38] The stone used in the building of Vale Royal Abbey was conveyed in one-horse and two-horse carts.[39] The baggage of Queen Eleanor and her maids was carried from Rhuddlan via Chester to Macclesfield in carts drawn by two-, three- and four-horse teams.[40] Vehicles drawn by four horses conveyed timber from Delamere Forest to Chester Castle,[41] and a wagon belonging to the lord of Eaton made several journeys to Shirland and to London with nine horses.[42]

Moving along bad roads, the carts frequently needed repair, and the detailed costs of making new wheels, spokes, fellies and axle-trees are noted in the Bailiffs' or the Reeves' Accounts for some of the manors.[43] Iron tires were costly, and only used on the larger, stronger vehicles.[44] Though advantageous for the preservation of the wheels, they were

destructive to the road surface, and in Tudor times they were not allowed to cross the Dee Bridge or pass along the streets of Chester.[45]

Bad roads were only one of the hindrances to trade. An equal, if not greater menace to the transport of goods lay in the chronic disorder in the county. The safety of persons and goods passing along the roads was, in some measure, ensured by the sergeants of the earl of Chester and those of the lord of Halton. At times, however, these sergeants must have been powerless to cope with the lawless bands of men who made the county almost a byword for robbery.

Contemporary records abound in references to the dangerous state of Cheshire, though few specific instances of highway robbery are mentioned. Perhaps the most circumstantial is one which occurred during the Welsh wars, when a provision convoy, in charge of some men of Edmund, earl of Lancaster, was attacked as it passed along the Watling Street between Northwich and Chester. The robbers took away both the horses and carts, and although a commission of oyer and terminer was appointed, apparently they were not brought to justice.[46]

Failure to arrest the marauders probably accounts for the paucity of the recorded instances of robbery. The general state of the county, however, is not in doubt. " If you go a little way from Chester," says Lucian, " . . . the road on the left leads to a place called the Valley of Demons—so called because of the hiding place of those who lie in it." And then to make his allegory clear beyond any doubt, he continues: " The wanderer on the left is despoiled by robbers."[47] Such was the state of Hoole Heath, less than a couple of miles from the city gate, at the beginning of the 13th century. The dangers thus indicated were confined to no spot and to no period. " Old men say that the place where the monastery is now set was the dwelling place of bandits," says the chronicler of Vale Royal Abbey[48]; and a century later the marauders who sheltered in the forest of Wirral were such a menace to the citizens of Chester that they petitioned the Black Prince to cause the region to be

disforested.[49] Indeed large parts of the county became at times unsafe for peaceful trading. A letter patent of 20 Edward II to the justice of Chester, refers to " the large number of banished and outlawed persons now congregated in the woods, passes and other places of those parts," and to " the crimes committed by them and the confederacies whereby they escape arrest."[50] A proclamation of 1362 states that " bodies of armed men travelled the country (of Cheshire), committing felonies and trespasses,"[51] while in the reign of Richard II, commission after commission was appointed to arrest "disturbers of the peace," and " malefactors " who " wandered about the county to the terror of the inhabitants."[52]

Under such circumstances, the conveyance of food or merchandise along the roads of Cheshire was a hazardous operation, and it is a mark both of the dangers of the roads and of the importance of the great central market that additional measures were taken to ensure some degree of safety at certain points. Certain tenants of Langdendale were accustomed to " keep (or guard) the roads towards Chester markets,"[53] and a certain Urian de St. Pierre held the " passage " of Tarporley and Kelsall (where the high road emerges through a defile from Delamere Forest), by the service of "guarding the roads at the time of the markets of Chester."[54] A similar measure of protection was afforded at the passage of Lawton and Nantwich where an important highway from the south entered the county.[55] Since the passage of Kelsall was valued at 3s., and the passage of Lawton was farmed (at various sums) it would appear that some form of toll was taken.

In spite of the dangers of the roads, a good deal of material of one kind or another was conveyed along the roads of Cheshire. In all ages a large proportion of the goods carried from one point to another is not of such a nature as to excite attack. Building material, fencing material and fuel may be allowed to pass through the most lawless regions. Usually it is only the transport of specie, valuable merchandise or food that provokes men to plunder.

Specie was, in fact, conveyed from Chester on several occasions during the later years of the reign of Edward II, but on each occasion a suitable guard was provided. The money was placed on horses' backs, while the Chamberlain himself and one esquire were in charge of the party. When the sum of £520 was conveyed thus from Chester to London (in 1325-26), the guard consisted of eight footmen and twelve horsemen, six of whom were sent back when the party had reached Lichfield.[56] In the same year £490 carried from Chester to Kenilworth, was guarded by eight horsemen and twelve footmen,[57] while a further sum of £210 taken to the same place had a guard of six horsemen and six footmen.[58] In the Chamberlain's accounts for the year, he states that "the way was then dangerous," and in reckoning his expenses for a similar escort which guarded the sum of £340 from Chester to Woodstock, he states that "the way was then very dangerous."[59] The condition of the roads was not, however, always so dangerous as to necessitate a strong guard. When two considerable sums were conveyed to London and to Kennington in 1342-43, the only expenses claimed are those of two men.[60]

The exact cost of conveying these sums of money is stated in the Chamberlain's accounts. It is, however, difficult to arrive at any satisfactory conclusion respecting the general cost of transport in mediæval Cheshire. Thorold Rogers considered that the cost of carrying heavy goods by land was about 1d. per ton per mile, whenever the journey backwards and forwards could be accomplished within a single day.[61] There are abundant records of the carrying of heavy goods in Cheshire, but almost invariably some factor material to a calculation is omitted. The cost of transport is included in the price of goods; or costs and prices are grouped together and only the total charge is stated; or (more often) the weight is omitted. Pales, for example, were conveyed from Eulowe to Shotwick at a charge of 9s. 6d. per thousand, but the weight of timber or number of journeys needed is not stated.[62] Even when a complete and precise statement is made, the reader may have some doubts as to

its exact significance. For example, in 1353, one carat and eight feet of lead were carried from Chester to Rhuddlan at a cost of seven shillings,[63] but the weight of lead in " a carat and eight feet " is, in some measure, a matter of conjecture.

A simple and fairly accurate statement of the cost of transport (and incidentally of the earnings of carters) can, however, be expressed in terms of horse-teams and days' work. Some royal baggage was conveyed from Rhuddlan via Chester to Macclesfield[64]—a distance of about seventy miles—in 1283, and the pay accounts indicate that the seven carts used were paid for as follows :—

Cart with four horses	6/-
Cart with three horses	4/4 and 4/8
Cart with two horses	3/4

The document refers to the period for which the carts were hired as four days : this is apparently the time taken on the outward journey. Assuming that the return journey with empty carts was made in two and a half or three days, the carters' earnings work out thus :—

Cart with four horses, about 9d. a day.
Cart with three horses, about 7½d. a day.
Cart with two horses, about 6d. a day.

This calculation is based on the expenses of a single episode, but there is a large body of evidence to support the view that in the reign of Edward I, a Cheshire carter, with two horses, might earn 6d. a day.[65] The building accounts of Vale Royal Abbey deal with the transport of a very large quantity of stone from quarries to the site of the abbey during the years 1278 to 1280.[66] Carrying proceeded during the greater part of the year, but the number of carters engaged varied according to the season. Carting was suspended during the greater part of August and October, and very little was done in May. At other times, however, the work continued fairly steadily, the number of carters varying from thirty to about sixty and reaching seventy-three in November and December of the first year.[67]

As more than thirty-five thousand cart-loads of stone were carried during the three years, there is considerable material for forming a judgment. In no case, however, is there any statement of the weight of stone carried. Carters were always paid by the journey according to the number of horses they were using, and throughout the three years the greater part of the transport was effected in one-horse carts, making one or two journeys a day.

Pay days were not frequent, and after the first seven months, the number of days' work for which payment was made was always a round number (thirty, forty or sixty). Throughout this period, individual carters made the same number of journeys every day. This number would appear to depend only partially on the season of the year. Two journeys per day were made as commonly in November and December as in July. It seems probable that contracts were accepted for, say, forty or eighty loads at a time, and that a carter was then committed to one load or two loads per day for forty days.

At the beginning of the work, when few men were engaged in carting, the price paid per one-horse load was 3d. After three months' time it fell to 2½d., and after another four months to 2d. At this figure it remained throughout the remainder of the three years. A carter with one horse, might, therefore, earn 2d. or 4d. a day, and the number of working days (for carters) in the three years was 208, 240, and 200 respectively. None of the men, however, were occupied in carting stone on the maximum number of working days. Indeed, only a few were occupied for more than half that time. Simon, son of Alexander, for example, was engaged in carting stone during the first year on sixty-eight days, making forty-two journeys at 3d. a journey, and fifty at 2½d. a journey.

In July of the first year, a few two-horse carts were employed in carting stone, the price per journey being 3d., and in a few cases 3½d. It was possible, therefore, for a carter with two horses to earn 6d. or 7d. a day, and since this figure remained constant for two and a half years, and

covered some seven thousand journeys, it may be considered an accurate statement of the cost of transport in two-horse vehicles.

The work of conveying this stone was evidently largely carried out by men who lived in the neighbourhood. Unlike the labourers and plasterers they could not devote themselves wholly to the building operations. They were not professional carters. The majority of them were poor men who had only one horse, and devoted themselves to carting when they could spare time from their agricultural work. The money they earned would be very welcome, but the figures quoted above need to be slightly discounted because of the long delay before payment was received. As the work progressed, pay-days became less and less frequent, till in the third year payment was made for one hundred and twenty (working) days at once.[68]

With the exception of boats in the estuarine portion of the Dee, there was very little water-borne traffic in mediæval Cheshire. Above Chester, the Dee is of moderate depth, not too rapid in its current and not more subject than other rivers to floods. Its banks are neither precipitous nor marshy. A causeway at Chester prevented continuous navigation, but since it must have helped to maintain the depth of the water above the city, it would aid navigation in the middle course of the river. There were many fishing boats on the Dee both above and below Chester bridge,[69] and some of these may have been used for transport. There are, however, only scanty references to traffic on the river, and it is probable that the traffic was very little. The reason for this is to be found in the nature of the country through which it flows. In Wales its course is rapid and its bed rocky. At no point is it navigable, and at no point was there any town of importance. Having reached the plain, it flows across the march of Wales, a region not unfertile, but subject to such frequent raids that no considerable village was found anywhere along its course. A Cistercian abbey had been founded at Poulton and might, under happier circumstances, have become the nucleus of a settlement. But Welsh incur-

sions had rendered the site unsafe, and the convent had been removed (in 1214) to Dieulacres, in North Staffordshire.[70] There was, therefore, little occasion for traffic in the middle course of the Dee, and beyond an occasional quantity of timber sent down from Overton to Chester,[71] (even this may have floated down), there is no certainty of any other goods having been borne along the river.

The basin of the Mersey, though immune from border raids, was almost as sparsely populated as that of the Dee. A large area on both sides of the river consisted of low-lying, marshy land, quite unsuitable for cultivation. On the Lancashire side a town had arisen at the only bridge, namely, Warrington, and a little town was beginning to grow at Liverpool. But a great part of the Cheshire bank was a strip of waste and there was scarcely a settlement of any importance overlooking the waters. A small vill at Runcorn lay at the foot of the rocky eminence opposite Widnes. Ince stood on a low hill that rises from several miles of marsh. Stanlaw Abbey stood in a lonely, barren spot on the waters' edge till recurring floods[72] rendered it uninhabitable, and the monks quitted it for Whalley.[73] At Birkenhead was a small priory.

These few settlements could scarcely have occasioned any water-borne traffic. There was, however, one considerable vill near the Mersey, namely Frodsham. Sheltered under the abrupt rock in which the range of sandstone hills terminates, standing on the highway between Chester and Warrington, close to the bridge across the Weaver, it had grown into a populous manor and was the possession of the Earl of Chester. It is properly on the Weaver rather than on the Mersey, but it is only three miles from the confluence. Frodsham is the only place on the Cheshire bank designated a " port " in mediæval records, and ships coming to Frodsham, of course, came along the Mersey. In 1280 the profits arising from the tolls of ships coming into the port were valued at £10 per annum.[74] These ships were principally those of Irish merchants bringing cargoes of grain.[75]

Occasionally therefore, a small merchant vessel passed up the Mersey to Frodsham. Occasionally the Duke of Lan-

caster's eight-oared barge was rowed along its waters.[76] A few boats put into the little port of Liverpool,[77] and Edward II sailed up the river from Liverpool to Ince.[78] Some boats may have put in at Tranmere.[79] Ferry boats plied between Birkenhead and Liverpool.[86] But for the most part, the waters of the Mersey bore very little traffic.

Cheshire therefore, had little water-borne traffic—less, indeed, that the existence of such waterways as the Mersey, the Weaver and the Dee might lead one to expect—but where settlements are few and the population is sparse, there is little occasion for river traffic.

As for the roads, there was little to distinguish Cheshire from the neighbouring counties, or indeed from England as a whole. A few well-defined routes converged on certain market-towns, the chief of which was Chester. Bridges were few. Roads were dangerous. Turbulence in a greater or less degree was chronic. And trade could not develop freely. The community was, however, accustomed to such conditions, and endured them.

Lawlessness was probably a more serious menace to communications in Cheshire than in the neighbouring counties, but from the point of view of road-surface, Cheshire was no more backward than her neighbours. Indeed, in the light of the dates of pavage charters, she was well ahead of them. The earliest recorded pavage charter of Liverpool[81] was granted in 1329, fifty years later than that of Chester, and the moneys raised for pavage at Wigan, Warrington, Liverpool, Preston and Lancaster at a still later date were misappropriated.[82] Nor were the towns of Staffordshire enabled to impose tolls for the paving of their streets so early as were Nantwich and Chester, viz., 1277 and 1279. The earliest grants of pavage for the chief Staffordshire towns are as follows:—Stafford, 1295[83]; Lichfield, 1299[84]; Newcastle-under-Lyme, 1302.[85]

In this respect at least, Cheshire was ahead of her neighbours, but the progress thus indicated was due to her geographical position in relation to Wales rather than to her economic development.

NOTES.

[1] *Cal. of Inq.*, Misc., Vol. 2. No. 256. *Cal. of Inq. p.m.*, Vol. 5. No. 251.

[2] *Liber Luciani de laude Cestrie*, 64. (The Roman road from Aldford to Chester had crossed the Dee at Aldford and had passed along the left bank of the river).

[3] The route from Warrington to Northwich was defined in 28 Edward III. It was then found that there were two roads in use—one *via* Appleton, the other *via* Wilderspool and Hullscliff. The two roads joined near Stretton. Toll was charged on the latter road "because it was not of right the highway." (*Deputy Keeper's Reports*, No. 28, p. 47)

[4] In addition to numerous references to roads in documents relating to Cheshire, Gough's *Itinerary of Edward I.* is useful.

[5] *Polychronicon* ii., 24. It is probable that the course of the Dee has varied a little during the lapse of centuries. An undated document (in *Ancient Deeds*, Vol. vi., c. 6299, p. 325) refers to land "in a place called Wademedo in the town of Caldecot, adjoining the old and present courses of the river Dee."

[6] See Stewart-Brown: *The Royal Manor and Park of Shotwick in Cheshire*, 9, 10.

[7] Except in time of war when some kind of guard was kept. For example certain lands at Crabwall (near Blacon) were held subject to the payment of one penny for all secular service "salva custodia vadi de Dee, sicut custodiri solet tempore guerrae" (Ormerod ii., 577).

[8] *Recog.*, 27, 55, 63, 68, 108, 117, 164, 211, 225, etc.

[9] *Recog.*, 367.

[10] *Recog.*, 253, 534.

[11] Mortimer: *The Hundred of Wirral*, 309, and *vide infra*.

[12] Beamont: *History of the Castle of Halton and the Priory or Abbey of Norton*, 163. See also *Victoria County History of Lancashire*, Vol. iii., 389.

[13] *Six Centuries of Work and Wages*, 133, 135.

[14] *Growth of English Industry and Commerce*, i., 450.

[15] *Cal. Pat. Rolls* (1272-1281), 311 (date 1279).

[16] *Cal. Pat. Rolls* (1272-1284), 233 (date 1277); *ibid.*, (1281-1292), 25 (date 1282).

[17] *Vale Royal Ledger Book*, 42.

[18] *ibid.*, 176.

[19] *ibid.*, 81.

[20] Abram: *Social England in the Fifteenth Century*, 14.

[21] Morris, *Chester*, 351.

[22] *Vale Royal Ledger Book*, Appendix G, 192-231.

[23] Concerning the site and distance from the abbey, Rev. G. S. Payne, the present rector of Delamere, states: "The Eddisbury quarry lies about half a mile from Delamere Church near a place called 'the old Pale,' and along the old Watling Street road (which runs parallel to the main road at this juncture, about a third of a mile from it). This Eddisbury quarry is a very old one . . . . and is quite six miles from Vale Royal."

[24] See Appendix.

[25] *e.g.*, *Vale Royal Ledger Book*, 143-4; Morris, *Chester*, 497.

[26] *e.g.*, Northwich to Frodsham, *Deputy Keeper's Reports, No.* 28, p. 47; Warrington to Northwich, *ibid.*, p. 55. There are many instances of diversion of paths or roadways, during the first half of the reign of Edward III. (*Deputy Keepers Reports*, xxviii., 22, 23, 24, 26, 27, 28, 48, 49, and Ormerod ii., 797, iii., 495).

[27] *e.g. Coucher Book of Whalley Abbey.* Vol. i., 532-3.
[28] *Recog.*, 110.
[29] *C.C.A.*, 124.
[30] *Cal. Pat. Rolls* (1272-1281), 235. *Cal. Close Rolls* (1307-1313), 141. *Cal. Close Rolls* (1337-1339), 430. *ibid.*, 490. *Cal. Close Rolls* (1339-1341) 54.
[31] *Cal. Patent Rolls* (1307-1313), 81.
[32] Morris, *Chester*, 223. ibid. (Doc.) 556, 561. *Cal. Pat. Rolls* (1272-1279), 225.
[33] *Cal. of Inq.*, Misc., Vol. ii., (1307-1349), No. 2084
[34] Tait, *Domesday Survey of Cheshire*, 223.
[35] *C.C.A.*, 43.
[36] *ibid.*, 80.
[37] Tait, *Domesday Survey of. Cheshire*, 223.
[38] Morris, *Chester* (Doc.) 561
[39] *Vale Royal Ledger Book*, 198-203.
[40] Taylor, *A Flintshire Royal Princess*, printed in the Flintshire Hist. Soc. *Journal*, 1914-1915, 22.
[41] *C.C.A.*, 80
[42] Beamont, *A Reeve's Account*, 11.
[43] *C.C.A.*, 191, 196. Also Beamont, *A Reeve's Account*, 5.
[44] *C.C.A.*, 82. *Vale Royal Ledger Book*, 81, 196.
[45] Morris, *Chester*, 268, 276.
[46] *Cal. Pat. Rolls* (1281-1292), 49.
[47] *Liber Luciani*, 64.
[48] *Vale Royal Ledger Book*, 7.
[49] Cox, *Royal Forests*, 132. The charter of Edward III confirming the disafforestation of Wirral is printed (in English) in R. Stewart-Brown's *Disafforestaton of Wirral*, 8.
[50] *Cal. Pat. Rolls* (1324-1327), 350.
[51] *Recog.*, 93.
[52] *Recog.*, 97, 128, 135, 137, 138, 160, 313, 497.
[53] *De Lacy Compoti*, 45, 60. Miss Alice Law, writing in the *Victoria County History of Lancashire*, vol. ii., 282, and referring to these "roads towards the Chester markets," infers that "definite *attempts were made to mend the road for* commercial purposes." The two entries in the *Compoti* are, however, "pro warde viarum," and "pro custodia viarum." Moreover, the *guarding* of roads towards market towns was not uncommon. *Cf. Victoria County History of Derbyshire*, Vol. ii., 164.
[54] *Cal. Inq., p.m.*, Vol. v., 136, 137. *Cal. of Inq. Misc.*, Vol. ii., 256.
[55] *The passage of Lawton*: At Lawton the road from Newcastle-under-Lyme entered Cheshire and was divided into two branches leading to Congleton and Macclesfield on the one hand, and to Middlewich and Northwich on the other. Ormerod says that Lawton belonged to the earldom. (*Cheshire* iii., 15). The farm of the passage varied greatly. In 1301-2 it was 5 marks, in 1311 £4, in 1334-5 £2 16s. 8d., in 1347 £2 6s. 8d., in 1350 £1 5s. 0d. By 1389 it had risen again to £2. The passage was often designated the passage of "Lawton and Nantwich," and sometimes "Lawton and Huggebridge." (*Recog.*, 27, 58, 127, 227, 249, 282, 325, 358, 407, 512). (*C.C.A.*, 2, 250).
[56] *C.C.A.*, 97.
[57] *ibid.*, 97-98.
[58] *ibid.*, 98.
[59] *ibid.*, 98.
[60] *ibid.*, 117.
[61] *Six Centuries*, 134.
[62] *C.C.A.*, 215.
[63] *ibid.*, 215.

64 Taylor, *A Flintshire Royal Princess*, 92.

65 Where the number of horses used is greater than two, the evidence is not so clear. For example in 1312-13, four carters hauling timber in *four-horse* carts from Delamere Forest to Chester Castle received 12d. a day. (*C.C.A.*, 80). The use of such teams was however much rarer than that of two-horse teams, and it is probable that no well-defined rate of payment was current for larger teams.

66 *Vale Royal Ledger Book*, 198-203.

67 See Appendix.

68 See Appendix.

69 Boats belonged to the prioress of Chester (*Morris*, Chester 139; St. Giles' Hospital, Boughton (*ibid.* 156); Robert de Eton (2) (*ibid.*, 501); the abbot of Dieulacres (*Chartulary of Dieulacres, Historical Collection*, Wm. Salt *Arch. Soc.*, Vol. ix., N.S.) as well as the ferry boat. In addition to his two boats on the Dee, Robert de Eton had also a ferry boat at Eaton (Ormerod ii., 832).

70 Dugdale, *Monasticon* (ed. 1849), Vol. v., 628.

71 *C.C.A.*, 42.

72 *Annales Cestrienses*, 106. Cotton MS., Vesp. A.V. 12 f. 40. Mortimer, 259.

73 Dugdale, *Monasticon*, v., 644. The removal was effected (after much delay) in 1294.

74 Ormerod ii., 50.

75 *Cal. of Inq.* Misc., (1307-1349) No. 53.

76 Beamont, *An Account of the Rolls of the Honour of Halton*, 42.

77 In the reign of Edward III., Liverpool was used as a port of embarkation for troops. (Picton, *Liverpool Municipal Records*, 12, 15).

78 Beamont, *History of the Castle of Halton and Priory of Norton*, 40

79 Ormerod ii., 451. Richard Starkey, in 27 Edward III., claimed to have boats in the Mersey "to fish and to carry . . . . to all manner of lands being in the place of the Lord the King."

80 A letter patent of Edward II. indicates that a ferry was in existence between Birkenhead and Liverpool in 1318, and grants the prior and convent of Birkenhead licence to construct houses for the accommodation of travellers and the sale of provision. (*Cal. Pat. Rolls* (1137-1321), 108). The right of ferryage from Birkenhead to Liverpool was conferred on the priory in 4 Edward III. (Mortimer, *Hundred of Wirral*, 310). In 1354 in answer to a quo warranto the prior stated the charges thus:

Man and horse laden or not laden - - - - -	2d.
Man on foot - - - - - - - - - - -	½d.
On Saturday (Liverpool market day) man - -	½d.
,, ,, ,, ,, ,, man and baggage	1d.

(Mortimer, *op. cit.*, 310). These charges were deemed excessive. (*Lanc. and Chesh. Hist. Soc.*, Vol. xlii., 146). There had been a complaint of excessive charge in 1318, when the jurors of Wirral stated before the Justice of Chester that "Richard Praty 'fermon' of Lyverpul, takes a passage toll which is unjust and beyond due measure, for where by law he ought to take a farthing, he requires a penny for the crossing between Lyverpul and the county of Chester." (*Lanc. and Chesh. Hist. Soc.*, Vol. lxxi., 89.

81 Picton, *Liverpool Municipal Records*, 10

82 *Cal. Pat. Rolls* (1340-43) 313.

83 *Cal. Pat. Rolls* (1292-1301), 144.

84 *ibid.*, 408.

85 *Cal. Pat. Rolls* (1301-1307), 69.

APPENDIX.

TABLE I a. b. c. d.

Tables I and II are complementary.

Tables Ia, Ib, Ic, Id furnish complete details for the three years working and are self-explanatory. They afford statistics of the number of men, or horses, or carts, engaged at any date.

TABLE Ia.

Vale Royal Abbey—Carriage of Stone—1st Year of Building. (*V.R.L.B.* 198-201).

Pay Day	Number of Men	Number of Days Worked	Journeys per Day	Number of Horses	Total Journeys*	Cost per Journey in Pence	Total Cost £	s.	d.
30th Jan.	6	12	2	1	144	3	1	16	0
	6	12	1	1	72	3	0	18	0
20th Feb.	12	18	2	1	432	3	5	8	0
	10	18	1	1	180	3	2	5	0
20th Mar.	16	24	2	1	648	3	9	12	0
	13	24	1	1	312	3	3	18	0
24th April	25	26	2	1	1300	$2\frac{1}{2}$	13	10	10
	20	26	1	1	520	$2\frac{1}{2}$	5	8	4
29th May	14	12	2	1	336	$2\frac{1}{2}$	3	10	0
	14	12	1	1	168	$2\frac{1}{2}$	1	15	0
26th June	20	22	2	1	880	$2\frac{1}{2}$	9	3	4
	20	22	1	1	440	$2\frac{1}{2}$	4	11	8
30th July	24	24	2	1	1152	$2\frac{1}{2}$	12	0	0
	20	24	1	1	480	$2\frac{1}{2}$	5	0	0
	1	16	2	2	32	$3\frac{1}{2}$	0	9	4
	6	16	2	2	192	3	2	8	0
2nd Oct.	30	30	2	1	1800	2	15	0	0
	20	30	1	1	600	2	5	0	0
	12	30	2	2	720	3	9	0	0
	1	30	2	2	60	$3\frac{1}{2}$	0	17	6
18th Dec.	20	40	2	1	3200	2	26	13	4
	40	40	1	1					
	12	40	2	2	960	3	12	0	0
	1	40	2	2	80	$3\frac{1}{2}$	1	3	4

* Most of the numbers in the building accounts are given in the "long hundred." The numbers given above are corrected accordingly.

Table Ib.

Vale Royal Abbey—Carriage of Stone—2nd Year of Building (*V.R.L.B.* 201-202).

Day Day	Number of Men	Number of Days Worked	Journeys per Day	Number of Horses	Total Journeys	Cost per Journey in Pence	£	s.	d.
2nd April	50	60	1	1	3000	2	25	0	0
	8	60	1	2	480	3	6	0	0
	2	60	1	2	120	3½	1	15	0
4th June	20	40	1	1	800	2	6	13	4
	6	40	1	2	240	3	3	0	0
	2	40	1	2	80	3½	1	3	4
30th July	24	40	2	1	1920	2	16	0	0
	6	40	2	2	480	3	6	0	0
	1	40	2	2	80	3½	1	3	4
8th Oct.	24	40	1	1	960	2	8	0	0
	6	40	1	2	240	3	3	0	0
	1	40	1	2	40	3½	0	11	8
23rd Dec.	3	60	2	2	360	3½	5	5	0
	8	60	1	2	480	3	6	0	0
	30	60	2	1	1800	2	15	0	0

Table Ic.

Vale Royal Abbey—Carriage of Stone—3rd Year of Building. (*V.R.L.B.* 203).

Pay Day	Number of Men	Number of Days Worked	Journeys per Day	Number of Horses	Total Journeys	Cost per Journey in Pence	£	s.	d.
20th April	3	80	1	2	240	3½	3	10	0
	6	80	1	2	480	3	6	0	0
	30	80	1	1	2400	2	20	0	0
22nd Dec.	1	—	—	2	240	3	3	10	0
	12	60	2	2	1440	3	18	0	0
	40	120	1	1	4800	2	40	0	0
	1	—	—	1	60	2	0	10	0

TABLE Id.

Vale Royal Abbey.—Carriage of Stone.
Summaries of three years' work.

	1st year	2nd year	3rd year
Number of "carting" days	208	240	200
Total number of journeys made (all carts)	14,708	11,080	9,600
Number of journeys made by two-horse carts ...	2,044	2,600	2,400
Largest number of men engaged in carting stone	73 (Nov.-Dec.)	60 (Feb.-Mar.) 41 (Nov.-Dec.)	54 (Nov.-Dec.)
Price per journey:— One-horse cart ...	Jan-Mar. 3d. Apl.-July 2½d. Sep.- — 2d.	2d.	2d.
Price per journey:— Two-horse cart ...	3d.	3d.	3d.

NOTE.—3½d. per journey was paid in the first year to one carter with two horses, in the second year to two such carters, and in the third year to three such carters.

TOTALS

	Loads of Stone	Cost £ s. d.
1st year	14,708	150 17 8
2nd year	11,080	104 11 8
3rd year	9,600	91 10 0
	35,448	346 19 4

TABLE II.

Table II contains a statement of the work done by 27 men who had each a one-horse cart. The number of working days in the first year was 208, but many of the carters worked for only one or two of the periods indicated. The 27 men selected are representative of those who were engaged in carting most regularly, and there is a touch of human interest in the fact that William Lesquier, whose one-horse cart was utilised throughout the period from January to June was in possession of two horses in November.

The Table should be read thus :—

" On 30th January (1278), Simon son of Alexander received payment for 12 days carting, on each of which days he had made two journeys at 3d. a journey," etc.

It is thus possible to determine the earnings of individual carters, and the number of days and the seasons when they were able to engage in carting.

It will be seen that no work was done during August and the greater part of September.

Vale Royal Abbey—Carriage of Stone—1st year.

Journeys made by certain carters with one-horse carts.

Pay Day	30th Jan.	20th Feb.	20th Mar.	24th Apl.	29th May	26th June	30th July	2nd Oct.	18th Dec.
Number of days for which paid	12	18	24	26	12	22	24	30	40
Payment per journey	3d.	3d.	3d.	2½d.	2½d.	2½d.	2½d.	2d.	2d.
Simon son of Alexander	2	1	—	1	2	—	—	—	*
Richard Davy	2	2	2	—	2	—	—	—	1 or 2
Robert son of Davy	2	2	—	2	2	—	—	—	—
Dyke Richard Dauwe	2	1	—	2	—	—	—	—	—
John Davy	—	2	—	—	—	—	1	—	1 or 2
Robert de Eton	—	—	1	—	—	2	—	1	—
William de Eton	—	—	—	1	2	—	—	—	—
Adam son of Fille	—	—	1	1	—	—	—	—	1 or 2
Hamond son of Fille	—	—	1	—	—	—	2	2	1 or 2
Warin le Halewes	—	—	1	1	—	—	1	2	1 or 2
Pimme le Harpour	—	—	2	1	1	—	—	—	1 or 2
Thomas le Harpour	—	—	2	2	1	—	1	2	1 or 2
Richard Hervi	—	—	1	—	—	—	—	—	1 or 2
Matthew Lambard	1	—	2	2	—	—	1	2	1 or 2
William de la Lawe	—	1	—	2	—	1	—	—	1 or 2
William Lesquier	1	2	1	2	2	1	—	—	2†
Richard Leper	—	—	1	—	1	2	—	—	1 or 2
Adam Malle	2	1	—	2	2	—	—	—	—
William de Nethirton	1	2	—	2	—	—	—	1	1 or 2
Hamond de Sutton	—	2	2	2	—	—	—	—	1 or 2
Robert de Sutton	—	2	2	2	1	1	—	—	1 or 2
Adam Ubbe	1	2	—	2	2	—	—	—	1 or 2
Richard Ubbe	2	—	2	—	2	—	—	—	—
John Valentin	—	—	2	1	1	—	2	—	1 or 2
Richard Valentin	—	—	2	2	1	—	—	—	1 or 2
Robert Wolvet	—	—	2	1	2	—	2	—	1 or 2
William Wolfron	—	—	1	1	—	—	—	—	1 or 2

* It is not possible to determine whether individual carters made one or two journeys per day during this period. One third of them made two journeys per day, and the remainder one journey per day.

† For this period William Lesquier used a two-horse cart.