TIMBER EXPORTS FROM THE WEALD DURING THE FOURTEENTH CENTURY.

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The political history of the Cinque Ports has engaged the attention of historians from time to time, but it would appear that no attempt had hitherto been made to describe in detail the commercial activities of the Ports during the fourteenth, fifteenth and sixteenth centuries. This is a subject on which one has gathered a good deal of documentary evidence, but the present article merely endeavours to set forth an aspect of their trade which had rather a special significance

during the early part of the period.

The deforestation of the Weald is always associated with the development of the iron industry, and it is beyond question that the demand for fuel to which that industry gave rise was ultimately responsible for protective legislation on behalf of the forest in Tudor times. In addition to the iron, however, there were other home demands which were met by the Sussex timber, as instanced by the 619 oaks sent to Dover Castle and 60 to Pevensey Castle in Edward II.'s reign, or the wood sent to Boston for the bridge there in 1358.2 We are also told that "the fortifications of Rye were restored by aid of the oaks of Crowhurst and the trees of Brede" in Richard II.'s reign.³ On the other hand, it is not generally appreciated that considerable quantities were shipped across to the continent, either as timber or as fuel, evidently to

¹ S.A.C., Vol. XVII., p. 116. ³ Patent Rolls, 8 Richard II.

² Patent Rolls, 32 Edward III.

meet the requirements of the poorly wooded coastal region. It is known that wood was exported to some extent, but details of the trade have apparently not been grouped systematically in order that a fair esti-

mate of its importance might be gained.

Unfortunately we have no knowledge during the early part of the century of the part played by Englishmen in this trade if, indeed, they participated, owing to the fact that the New Custom of 1303 on general merchandise was levied solely on aliens.² Furthermore, the reign of Edward II. was marked by prolonged civil strife, and the New Custom was in abeyance from 1311 until 1322.³ There will, therefore, be a rather serious gap in our evidence, a gap which is regrettably widened by the loss of accounts for some of the other years. However, a good deal remains for our consideration.

Our first account,⁴ which covers the period Michaelmas, 1307–Michaelmas, 1308, contains the names of 129 alien merchants, some of whom made more than one voyage during the year, giving a total of 151 shipments valued at £307 7s. 8d. Of these, 102 are of wood (lignum), 31 timber, 6 oak bark, 4 bark, 2 wood and oak bark, 2 salt, 1 salt herrings, 1 wheat, 1 horses, and one of which the nature is unspecified. It will be observed that the average value of each cargo is low, only about £2, and that 145 of the 151 shipments are definitely concerned with forest products.

A few ports are mentioned in the account, but they raise a difficulty. In the phrase "Johannis de Axle" is one to assume that Axle is the merchant's native town, or merely that it is his last port of call? It seems at all events reasonable to suppose that there was a keen demand for this wood in Holland, Flanders and N. France, and that the merchants from that region

came across here to get it.

¹ V.C.H. Sussex, Vol. II., p. 233.

² Gras, Early English Customs System, p. 66.

³ *Ibid.*, p. 71.

⁴ Customs Acets., 124/18.

The customs returns for the period 1323-9, though not quite complete, enable us to form a very good idea of the trade during those years, and some of the information which they reveal is given in the accompanying graphs. It will be observed that the curves are somewhat irregular, and that the values appear to bear little relation to the number of shipments. A closer examination will, however, throw some light on these apparent anomalies.

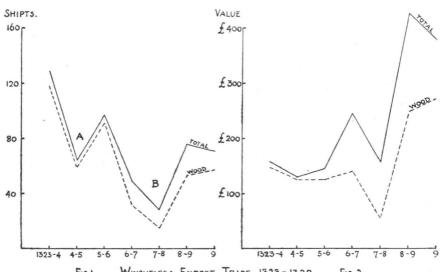


Fig.1. WINCHELSEA EXPORT TRADE 1323-1329. Fig. 2.

The first point of note is the preponderance of wood shipments in each year's total. This becomes slightly less marked towards the end of the period, but it is still considerable. Some idea of its importance may be gathered from the fact that between 11 June, 1324, and 2nd September, 1325, there were 93 shipments of wood and nothing else. The drop in the curve at A is very likely due to a severe winter, for we find no

¹ Customs Acets., 32/6 and 147/13.

1323-4 (A	pril-A	April).	1327-8 (April-January).
1324-5	,,	,,	1328–9 (July–April).
1325-6	,,	,,	1329 (April-December).
1396_7			, 1

exports of any kind between October 20th and March 20th, while the drop at B may be partly accounted for at all events by the strained relations with France and fears of invasion. It is significant that for Seaford and Pevensey in 1327–8 a nil return is given "proguerra," whilst on the imports side nil returns for wool and cloth are made "propter guerram." The fact that the totals are for ten months only in 1327–8 matters little, for the missing months are February and March, which were always slack.

The gradual divergence of the curves in Fig. 1 is caused by an increase in the shipments of salt. The yearly totals for this commodity are respectively 0, 1, 3, 14, 9, 13, 18. Now salt was an intrinsically valuable article of commerce, hence in Fig. 2 we find that the divergence between the two curves is much greater. For the year 1328–9 there are also 5 shipments of

expensive Spanish produce.

One or two facts concerning the value of the cargoes of wood may be inferred from a comparison of the two graphs. The 118 shipments of 1323–4 are worth only £146, whereas 57 in 1329 are valued at over £270, thus suggesting either a rise in the price of wood or the shipment of larger quantities than previously. Further, there is no drop in the wood curve in Fig. 2 to compare with the drop at A in Fig. 1. This may mean that a rise in price had an adverse effect on the demand. It should also be noted that the addition of 30 cloths, 2 and $\frac{1}{2}$ sack of wool, whose values are not given, to the total value curve for 1327–8 and 1324–5 respectively in Fig. 2 would cause that curve to be less irregular.

So far we have only dealt with the Winchelsea exports, but the accounts cover the coast as far as Chichester. Apparently the only other wood ports during this period 1323–9 were Pevensey and Seaford, and their trade is almost negligible. In 1326–7 Pevensey's 5 shipments were all concerned with wood, and had a combined value of £15 6s. 8d. In 1328–9

¹ Customs Acets., 147/13.

² 20 English cloths and 10 coloured cloths.

the only 2 shipments at Pevensev were of wood valued at £28, and at Seaford, 4 out of a total of 5 shipments consisted of wood that were valued at £84. This high valuation agrees with the evidence from Winchelsea for that year.

The question of merchants' ports raises the same difficulty as mentioned above in connection with the 1307-8 account; hence it would perhaps be preferable to let the following figures suggest their own interpretation:-

1323-4: Wissant (17), Hildernesse (15), Calais (14), Dieppe (10), Otershell (10), Etaples (8), Dunkirk (7), Ostend (6), ¹Wale (6), Boulogne (5), Newport (4), Axle (4).

1324-5: Axle (12), Dunkirk (10), Hulst (7), Wissant (6), Calais (4),

Etaples (3).

1325-6: Wissant (14), Dunkirk (11), Newport (10), Calais (6), Wale (5), Ostend (4), Etaples (4), Biervliet (4), Axle (3), Dieppe (3).

1326-7: Dunkirk (7), Newport (6), Calais (3).

1327-8: Dunkirk (4), Newport (3), Axle (3).

1328-9: Calais (11), Newport (7), Wale (6), Dunkirk (6), Wissant (4), Axle (4), Sluys (3).

Dunkirk (11), Wissant (8), Wale (7), Axle (6), Gravelines 1329:

It is known that the fourteenth century was a period of fluctuating fortune among the Channel ports, and some indirect evidence from the accounts is of interest. For example, in the period represented by the graphs Winchelsea is the head port for Sussex, and the accounts cover the coast thence to Chichester. Later in the century, however, e.g. 1398, Chichester has replaced Winchelsea as head port, and the associated coastal strip stretches from Romney to Havant.² A special place is seldom given to Winchelsea in these later accounts, whereas Rye (e.g. 1371-2) is given an account of its own, suggesting that it had superseded Winchel-

¹ Sometimes written "la Wale" and may refer to the River Waal in Holland.

² Customs Acets., 33/38.

³ Customs Acets., 147/15. For this particular year, however, separate accounts appear to have been drawn up at each port, and although there is none left concerning Winchelsea for 1371-2 it must not be inferred that no account was drawn up.

sea as the main outlet for the eastern section of the Weald.

For over forty years (1329–1371) we seem to have no detailed records of wood shipments from the Sussex ports. That the wood exports continued we may gather from a command given in 1348 that all ships laden with wood along the Sussex coast were to be unloaded and join the fleet.1 When the accounts reappear we find that the tax has been extended to native merchants.² Between Nov. 1, 1371, and Nov. 1, 1372, 44 ships left Romney, every one of which carried wood. Some of these ships no doubt made more than one journey, but since no names are given we cannot be definite. We do know, however, that 25³ of them came from Dunkirk and only 8 from English ports, showing the predominance of aliens in the trade. A greater variety is shown in the forest products than previously, and the totals are as follows:4

Oak bark (tannum): 1 entry ,, ,, 1 7 0 Timber (66 pieces): 3 entries, ,, ,, 3 11 1	l.
Bark (585 qrs.): 12 ,,	0
Oak bark (tannum): 1 entry ,, ,, 1 7 0 Timber (66 pieces): 3 entries, ,, ,, 3 11 1	6
Timber (66 pieces): 3 entries, ,, ,, 3 11 1	$5\frac{1}{2}$
	0
	1
Laths (11,500): 13 ,, ,, 2 15 2	$2\frac{1}{2}$
Boards: 2 ,, ,, 2 14 0	0

During this same year (1371–2)⁵ 15 ships traded at Rye, 14 of which carried cargoes of wood. Of these 14, 6 came from Schiedam (nr. Rotterdam), others from Dordrecht, Flushing, Newport, etc., and only 1 from an English port.⁶ This is the first account in which we have any measure of the quantity of what was presumably fuel, in this case billets; 16 entries of these amount to 233,000, with a total value of £41 8s. 6d.

¹ S.A.C., Vol. XVII., p. 146. ² Gras, op. cit., p. 81.

³ Not necessarily 25 different ships for the reason given in the previous sentence.

⁴ Customs Acets., 125/11 (Nov. 1-Nov. 1).

⁵ Nov. 1-Nov. 1. ⁶ London.

Richard II.'s reign was a period of great activity, but the majority of the trade still lay in the hands of aliens. The "particular" and "controller's" accounts for 1378-9 are both badly damaged, but one has been able to make an estimate of the wood trade during that year by comparing the two. Although Chichester is the head port, yet it is relegated to the end of the account, and is preceded by Shoreham and The first part of the account, and by Winchelsea. far the most important, appears to apply to Rve. although no name is given; it may be inferred from the order of the other ports³ and by the type of shipment. Our approximate totals for Rye will then be 161 entries of wood, largely in the form of "bosci," valued at £424, and 7 entries of bark worth £8. Winchelsea has 15 entries valued at £62, including a little bark and some boards and masts,4 whilst no wood is shipped at Shoreham and Chichester.

In 1379–80 (29th September—22nd July)⁵ we find Rye occupying the leading position with 87 shipments of wood valued at £225 approximately, Winchelsea having 16 shipments worth £60. The Rye total includes nearly a million "boys,"⁶ which appear to be synonymous with "billets," "bosci" and "bossii." No other ports from Winchelsea to Portsmouth are mentioned.

Of the 14 shipments for 1382–3 (Winchelsea to Portsmouth), 7 13 are of wood valued at £43 16s. 8d. It will be noticed that this strip of the coast excludes Rye, a fact which seems to be responsible for the small number of wood shipments, for during the period 2nd December, 1383—29th September, 1384 (the customs were apparently "farmed" between 25th

¹ Customs Acets., 32/6 (Mich.-Mich.).

² Customs Acets., 159/1 (Mich.-Mich.).

³ The order from west to east is: Chichester, Shoreham, Winchelsea, Rye (?).

⁴ No discrimination is made in these two accounts between imports and exports, but we may infer that the masts were imported.

⁵ Customs Acets., 33/7.

⁶ Anglo-Norman for "wood."

⁷ Customs Acets., 33/12.

May, 1382, when the account is supposed to begin, and 2nd December, 1383), the account for the region Dover to Winchelsea, which includes Rye, gives details of 49 shipments of wood worth approximately £210. Many of the cargoes consist of billets, of which there are 991,000, and 3 shipments of bark, amounting to 200 quarters, are valued at £12 4s. 4d. Bark evidently varied a good deal in quality, for whereas one merchant shipped 40 quarters worth £6 16s. 8d., another only paid £3 7s. 8d. for 100 quarters.

The aliens' account for 29th September, 1383—29th September, 1384,² covering the coast from Winchelsea to Portsmouth, contains a few of the entries which appear in the last account. By subtracting these duplicates we find approximately 52 entries dealing with wood valued at about £110. Bark appears once or twice, but nearly every entry relates to "boscus." Tar, boards and masts appear among the imports.

In the following year the aliens' account for the same stretch of coast only mentions 3 shipments of wood worth £7 6s. 8d.³ For the next year 1385–6,⁴ trade is still very slack, and only 9 shipments of wood are made by aliens. These have a total value of £35 13s. 4d.

Between 30th November, 1390, and 4th February, 1391,⁵ we find the same coast (Winchelsea to Portsmouth) exporting 181,000 "bosci," valued at £26 13s. 11d., in 10 shipments.⁶ It is noteworthy that 8 of these 10 ships came from Schiedam in Holland and the other 2 from Calais. Twenty-five spars valued at 6s., 22 pieces of timber worth £1 13s. 4d., 20 quarters of oak bark worth 13s. 4d., 1 "tabula sarr" worth 1s. 8d., and 600 "shotbord" also appear among the exports.

During the period 29th September, 1392–29th September, 1393,7 we find the region extended on the east

¹ Customs Acets., 126/7.

² Customs Accts., 33/15.

³ Customs Acets., 33/17 (Mich.-Mich.).

⁴ Customs Acets., 33/18 (Mich.-Mich.).

⁵ Customs Acets., 33/24.

⁶ Seven of these were made on Dec. 15.

⁷ Customs Acets., 33/25.

as far as Dover, thus giving us the whole of the Sussex coast in one account. The totals for the year are as follows:

						£	s.	d.	
109	entries	of	"bosci" (1,272,300),	valued	at	181	7	4	
3	,,	,,	"billets" (5,800),	,,	,,	0	15	8	
7	,,	,,	laths (11,700),	,,	,,	1	10	5	
3	,,	,,	timber (92 pieces, 20 of them						
			"squarrat"),	,,	,,	0	9	4	
12	,,	,,	bark ¹ (133 seams),	,,	,,	4	3	2	
13	,,	,,	oak bark (92 seams $+66\frac{1}{2}$						
			quarters),	,,	,,	5	12	$10\frac{1}{2}$	
1	entry	,,	chests (2),	,,	,,	0	13	4	

For the last four years of the century we are fortunate in having complete returns, whose totals are set out in the following tables:

ALIENS.							Denizens.							
Goods.	En- tries.	Amount.	Value.			En- tries.	Amount.	Value.						
Billets	55	510,000	£75	4	11/2	11	106,000	£16	3	0				
"Bosci"	13	169,000	£25	6	8	1	10,000	£1	13	4				
Oak bark	28	166 seams	£15	0	4	2	$50 \mathrm{seams}$	£2	8	4				
(tannum)		+226 qrs.					+8 qrs.							
Bark				_		1	8 qrs.		4	0				
Spars	5	119		19	1	2	70	£1	2	6				
Beams				_		1	6	£6	0	0				
"Gystes"	-	-		_		1	100	-	_					
"tabul' Sarrat"	-					2	1700 feet	£1	18	10				
"Sawedbord"	_	_		_		2	2900 ,,	£2	18	0				
"Clowbords"				_		1	52	£1	6	8				
Laths	1	1000		5	0	-		_	_					
Timber (unspecified)	2	140 pieces	£1	18	4	3	_	£8	10	4				

Table 1: Dover-Portsmouth, 29th Sept., 1395–29th Sept., 1396 (Cust. Acets., 33/28).

¹ A "seam," according to Rogers, *History of Agriculture and Prices in England*, Vol. I., p. 169, is 120 lbs. Since a seam of bark was approximately the same value as a quarter of bark, we may assume that a quarter of bark weighed about 120 lbs., but this is not by any means conclusive.

		DENIZENS.								
Goods.	En- tries.	Va	alue		En- tries.	Amount.	Value.			
Billets	21	171,000	£26	7	1	1	26,000	£4 2	4	
"Bosci"	18	242,500	£38	16	0	-	_			
Oak bark	10	140 seams	£5	8	5	_		1		
Spars	1	20		5	0	_		_		
"Gistes"	1	14		6	8	_	_ [_		
Laths						1	1000	3	4	
Wainscot	1	15		1	8	-	_			
Timber (unspecified)	1	6 pieces		1	6	1-		_		

Table 2: Dover-Portsmouth, 29th Sept., 1396-29th Sept., 1397 (Cust. Acets.,* 33/30 and 33/31).

^{* 33/30} is altered to Romney-Havant (Feb.-Sept., 1397).

	A	DENIZENS.										
Goods.	Amount.	Value.		Value.		Amount. Value.		En- tries.	Amount.	Val	lue.	
Billets	86	970,800	£147	19	$\frac{5\frac{1}{2}}{}$	1	15,000	£2	5	0		
"Bosci"	6	64,000	£10	13	4				_			
Oak bark	32	409 seams $+137 grs.$	£19	8	$11\frac{1}{2}$	-	_		_			
Spars	10	132	£1	19	1	_	_			į		
Stakes	1	1000		2	8				-			

Table 3: Romney–Havant, 29th Sept., 1397–29th Sept., 1398 (Cust. Accts., 33/35).

		DENIZEN	s.							
Goods.	En- tries.	Amount.	nount. Value.		Value.		Amount.	Va	lue	
Billets "Bosci"	66	735,500	£116	16	11	3	36,000 4000	£5	18 13	10
Oak bark	16	$150 \mathrm{seams}$	£5	6	4	1	19 seams		15	0
Spars	6	119	£1	5	9			-	-	
"Cokbord"						1	150		15	0
Timber (unspecified)	2	19		8	4	-	_	-		

Table 4: Romney-Havant, 29th Sept., 1398-15th Sept., 1399 (Cust. Accts., 33/38).

It is possible in these tables to arrive at the relative contributions of alien and denizen merchants towards the wood trade, and it will readily be seen that the former have practically a monopoly. Greater variety is shown among the articles of export as the century progresses, and the various types of sawn wood suggest a beginning in manufacture, though not yet sufficient to meet all home demands. In the year 1395–6, for example, there are imports of 12 masts, 1600 "shotbord," 50 boards, 1 "tabul' mensal'," and 200 wainscots.¹ The importation of masts reminds us of the scarcity of conifers in Sussex, whereas the large quantities of oak bark exported indicate the importance of the Weald as a source of supply for the continental tanning industry.

The values of the wood shipments at the end of the century are almost identical with those before the Black Death, and although the customs duty was raised from 3d. in the £ during the first half of the century to 6d., and then 1s. 0d. in Richard II.'s reign, the demand was sufficiently strong to bear these increases, and it is not too fanciful to suppose that in the old merchants' palaces of Bruges and Ghent to-day there may yet be found beams from the oaks which

once gave shelter to Downland sheep.

The ports of registration² are given for most of the ships and those appearing most frequently are:

1395-6: Ostend (8), Lombardy (7), Calais (5), Schiedam (4), Dunkirk (4), Delf (3), Saltcote in Flanders (3), Walravensithe (3), Anst (3), Loone (3).

1396-7: Ostend (5), Gowde (5), Schiedam (4).

1397-8: Dunkirk (9), Ostend (8), Newhythe (8), Schiedam (7), Newport (5), Lombardy (5), Walravensithe (4), Sluys (3), Gowde (3), Loone (3).

1398-9: Dunkirk (11), Ostend (9), Schiedam (5), Gowde (5), Newport (4), Newhythe (4), Walravensithe (4).

During the four years there is not a single case of aliens shipping in denizens' boats, although numerous examples occur of denizens shipping in boats belonging

¹ Customs Acets., 33/28.

 $^{^{2}}$ Subject to the same difficulty as expressed above in connection with the Winchelsea shipping 1323-9.

to aliens. Comparison with the lists of ports for 1323–9 will indicate that the region supplying the ships was approximately the same in both cases. The most notable absentee in the latter period is Wissant, which was superseded by Calais after the passing of the latter into English hands in 1347.

The foregoing evidence of Sussex timber trade during the fourteenth century is sufficient, one feels, to justify the contention that continental demands played an extremely important part in the deforestation of the Weald prior to the large scale developments of the iron industry, and we pass on to the consideration of

another problem.

The silting up of Sussex rivers during the last few centuries has attracted the attention of archæologists and geologists, and various theories have been put forward to explain the phenomenon. We may, for example, look upon the cutting down of large areas of woodland as exposing the hill slopes to rapid denudation, with the consequent accumulation of alluvium along the beds of the rivers.

But it would seem that the deforestation had a serious indirect result, if what has just been said is looked upon as a direct result. It is very noticeable in the accounts for 1323-9 that the merchants exporting wood do not appear on the imports list except very occasionally. Also, in the accounts for Richard II.'s reign ships which export cargoes of wood very seldom arrive here first with dutiable goods. Now since everything imported was liable to taxation we must assume either that these merchants had unloaded their goods at a neighbouring port and had come on to Winchelsea or Rye for their wood cargoes, or that they came direct to these Sussex ports with ballast. If the former were the case we should expect to find their names among the accounts for these neighbouring ports, Sandwich for example, or Dover, but this is not the case. Consequently we may assume that the ships came direct with ballast. This would have to be thrown overboard before the wood cargoes were

taken in, so we can easily see that many thousand tons of sand and shingle would be deposited in the Rother during the course of the century. That this happened on a large scale can be inferred from the following passage relating to 1 Henry IV.:

". . . It is given us to understand that many mariners, both native and foreign, daily trading to the port of Winchelsea in ships and other vessels, have filled up and obstructed the Channel of the said port from a certain place called Camer (Camber ?) as far as Bodyham, with stones, sand and other ballast, so that vessels, laden with merchandise, have been unable conveniently to enter the port as formerly, which tends to the destruction and danger of our town and its adjacent haven. . ."

This is followed by a commission "to supervise the said port from Camer to Bodyham" and appoint

special places for the discharge of ballast.

In conclusion, a word of warning may be issued against a too ready assumption that the extent and importance of a Sussex port's trade at this period is directly proportional to the amount of customs duty passing into the Exchequer. Sir J. H. Ramsay, in discussing the Customs Revenue of Edward II.² refers to the amounts from such ports as Winchelsea and Rochester as "trifling sums," but we know that in the case of the former there was considerable activity, giving employment, doubtless, to many types of men, although the value of the products in the aggregate was relatively small.

¹ S.A.C., Vol. IX., p. 296.

² English Historical Review, Vol. 26, 1911, p. 97.