THE MEDIÆVAL MASON

AN ECONOMIC HISTORY OF ENGLISH STONE BUILDING
IN THE LATER MIDDLE AGES AND
EARLY MODERN TIMES

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PREFACE

THE first three chapters of this book deal chiefly with the economic history of the stone-building industry in England during the later Middle Ages and attempt a picture of the conditions under which the mediæval mason worked and lived. In the three chapters that follow, various economic problems centring round the mediæval mason—whether freemason, hewer, roughmason or layer—are examined, and in the seventh and final chapter the changes in the economic conditions of the industry during the sixteenth and seventeenth centuries are described.

Our investigation is based on all the printed materials, especially building accounts, we have been able to gather and on a first-hand examination of manuscript records relating to certain large building operations. The information has been used in two series of papers. The first series deals with the building of Vale Royal Abbey, 1278-1280; Beaumaris and Caernarvon Castles in the early fourteenth century: Eton College, 1442-1460, and London Bridge, more especially in the fifteenth century. The Vale Royal paper has recently appeared, and the others will follow it, in Ars Quatuor Coronatorum (the Transactions of the Quatuor Coronati Lodge of Freemasons, No. 2076, London, the masonic lodge of research). The second series deals with apprenticeship, wages and organisation among masons. The paper on apprenticeship appeared in the Economic History Review. April 1932; the paper on wages was published in Economic History, January 1933; the paper on organisation will be printed in Ars Quatuor Coronatorum. It is thus possible to reduce the amount of detail in this book by referring such readers, as may wish to examine our results more minutely, to these preparatory papers.

We have to thank the editors of the Economic History Review, Economic History and Ars Quatuor Coronatorum for allowing us to make such use as we desired of our papers already printed or about to be printed in their respective publications. Further, we desire to acknowledge our indebtedness to Dr. G. G. Coulton, a pioneer in the exploration of the economic conditions of the mediæval building industry. for his interest in our work and for valuable suggestions on various points of difficulty; to the Corporation of the City of London for permission to use their records, and in particular to Mr. A. H. Thomas, Deputy Keeper of those records, for giving us the benefit of his profound knowledge of their contents and skill in their interpretation, and to Dr. Helen Chew for placing at our disposal her unrivalled knowledge of the London Bridge records; to the officials of the Public Record Office for opportunities to consult and use the P.R.O. documents listed and printed in the Appendix to this volume, and especially to Mr. H. C. Johnson for light on the meaning of various terms occurring in them; to the authorities of the British Museum for permission to examine and use manuscripts in their custody; to the Provost and Fellows of Eton College for generously depositing their valuable building records in the Sheffield University Library for our inspection and for allowing us to print in translation one of their compotus rolls; to Mr. V. H. Galbraith, who saved us from several errors and examined for us a manuscript in the Bodleian Library; to Mr. W. J. Williams for giving us information concerning the wills of certain masons and for allowing us to use, prior to publication, his paper "Masons of the City of London" which is to appear in Ars Quatuor Coronatorum; to Mr. W. J. Songhurst and Mr. Lionel Vibert for very kindly reading the first proofs of this book and making various helpful suggestions: to our colleague, Mr. A. G. Pool, for his help in proof correcting, and to Mr. H. M. McKechnie, secretary of the University Press. for his friendly co-operation.

For permission to print or to reprint documents, other than those referred to in the previous paragraph, we have to thank the Dean and Chapter of York; the United Grand Lodge of England; the Provincial Grand Lodge of Yorkshire (West Riding); the Lodge of Edinburgh (Mary's Chapel), No. 1; the Societas Rosicruciana in Anglia (Province of Northumbria); the Surtees Society and the Cambrian Archæological Association.

D. K. G. P. J.

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CHAPTER I.

INTRODUCTORY.

THE stone buildings of the Middle Ages in this country have now in great measure become part of a national heritage. Some of them, while the faith of their clergy changed and changed again, have remained in almost continuous use day after day from the distant era of their first erection down to the present age. Others, it is true, have been reduced by the storms of centuries, by the necessities of kings, by the destructiveness of civil war, and by neglect in times of peace, to ruins; and of some no trace remains above the rural turf or urban brick hiding their foundations. Still, the preservation of historic buildings by private munificence and the help of the public authority, is now much more assured than in times past and, for those inclined to such pursuits, it is now relatively easy to study mediæval architecture both by seeing the buildings themselves and by reading a multitude of good books written about them.

There remains, however, one aspect of mediæval architecture about which curiosity has been less active and information is harder to get. It is not always realised that a Gothic cathedral or an Edwardian castle, however they may differ as works of art or of engineering, are alike the product of an organising and administrative capacity not less remarkable, if at first less obvious, than the æsthetic or strategical skill manifested in the decoration and erection of such buildings. It is with that side of the stone-building industry, and with the place of the mason in it, that we attempt to deal in this book. In doing so, we are necessarily occupied with a series of problems part administrative and part economic, and with mediæval solutions of them. The æsthetic, religious, moral and social value of the buildings when erected is not our concern; we intend neither to "tax the royal saint with vain expense" nor to vindicate his spending. We have also, in the main, refrained from discussing the question of the sources from which building was financed. On the other hand, we shall be concerned in some detail with the spending

of revenue. It is quite clear to us that if, as Wordsworth says,

high Heaven rejects the lore
Of nicely-calculated less and more;
So deemed the Man who fashioned for the sense
These lofty pillars, spread that branching roof
Self-poised, and scooped into ten thousand cells,
Where light and shade repose, where music dwells,

the vision of Henry VI. could only be realised because his servants applied both skill and conscience to the meticulous consideration of details concerning halfpence, just as, later, the carvers, to make one whole of the roof of King's College Chapel, had to work accurately to fractions of an inch on its parts. We have accordingly attempted to add to the many books on mediæval architecture one in which the economic problems of the industry are considered, and it is part of our purpose to lay due stress on those characteristics of the industry which show it as less circumscribed than others in its development by manorial conditions, the restrictive influence of municipal authorities and the paucity of private capital resources.

That the industry is important for the economic historian appears first of all from its magnitude. There were in England and Wales between 900 and 1000 monastic establishments.1 collegiate churches and hospitals, most of which were built of stone, many of which were extended and rebuilt at various times, and some of which, as their surviving masonry shows, were on a scale that was for their day stupendous. To these must be added thousands of parish churches, the great majority of which were either originally built of stone or subsequently rebuilt in it. Many, it is true, required little labour and material in the making and repairing of their fabrics, but the construction or enlargement of others gave ample opportunity of pious expenditure to a rising class of wealthy merchants,2 and some were on a scale that misled Cobbett into believing that the population of some parts of England had been greater in mediæval times than in his own.³ Besides the churches, there were royal and other castles, town walls, like those still encircling the older parts of York and Chester, municipal buildings and

bridges, of which those of London and Rochester are probably the best known. Some of these building operations, it will be later shown, were on a very large scale: Eton College. e.g., required in one year, 1443-1444, more than a million bricks: 1 the construction of Vale Royal Abbey needed. between 1278 and 1280, the labours of 15 quarrymen on an average to provide stone, and of 31 carters to transport it.2 Beaumaris Castle at one period, admittedly a time of exceptional activity, found employment for 400 masons. 30 smiths and carpenters, 1000 unskilled workers, and 200 carters.3 The meaning of these figures will be understood if it be remembered that the population of London, in 1377. was probably no more than 35,000.4 of whom, when deductions have been made for women and children, perhaps 10,000 to 12,000 were adult male workmen. In its busiest period, the building of one North Wales castle employed a number equal to 13 or 14 per cent, of the workmen employed in the trades and commerce of the capital.

An industry in which such large numbers were employed at one place and time would clearly give rise to problems very different from those that had to be met in contemporary agriculture or by the members of merchant and craft gilds in the towns. In periods of less activity and on smaller buildings than those referred to, the numbers employed were certainly less, but were still often sufficient to make a mediæval building operation more comparable to a modern factory than is commonly supposed. It will later be made clear that the difficulties experienced in obtaining a supply of labour were similar in nature, though solved in a different way, to those which faced the pioneers of factory production of cotton goods; that experts in the difficult business of directing the contemporaneous labours of large numbers of men were necessary; that piece-work was by no means unfamiliar; and, last but not least, that the craftsmen employed approximated more nearly than did other mediæval artificers to modern workmen, being mere wage-earners. paid for working on raw material owned by their employer. and with very little prospect of rising above this condition. The building industry, in fact, stands out from the contemporary activities of more or less independent master craftsmen in their little workrooms as the towers of a cathedral

¹ For a list see Gasquet, Monastic Life, pp. 251 seq., or the list of contents in Vols. I.-VII. of Dugdale-Caley, Monasticon Anglicanum.

²See e.g., Unwin, Studies in Economic History, p. 266; cf. Mrs. J. R. Green, Town Life in the Fifteenth Century, I., 18.

³ E.g., Rural Rides (Everyman edition), I., 47-40.

¹ W. and C., I., 385.

² For total numbers employed see V.R.

⁸ Morris, Welsh Wars of Edward I., p. 268.

Thorold Rogers, Six Centuries of Work and Wages, p. 117.

Aberpwll preparing "coynes et asshler." At the erection of Bodmin Church in 1469-1472, the masons frequently worked in the quarry.2 With regard to the regular employment of masons in quarries, in 1377-1378 Ralph Riddell and 10 other latomi called "rough masons and quarreours" were hired at 6d. a day to dig, shape and prepare stones in a Purbeck quarry; an Eton College Account of 1450 relating to the college quarry at Huddleston in Yorkshire, shows that John Wells, the purveyor of Huddleston stone, (provisor petrarum apud Hudleston) paid wages to masons (cementarii) and "scapelers" who rough-dressed the stone.4 It should further be noted that at the quarry there were lodges 5 in which the masons presumably worked. Another case of a lodge at a quarry occurred at Sandgate in 1539.6 In an indenture of 1470 William Orchard, master of the works at Magdalen College, Oxford, in contracting to supply stone for that college and for Eton College, undertook to employ "quarryours," "masones" and labourers in a quarry he farmed from the king at Headington, near Oxford.7 A contract between John Marser, mason, and the Edinburgh authorities in 1502 provides that he is to be rewarded reasonably for brooching and dressing stone at the quarry.8

(b) The purchase of finished or partly finished stone from the quarries was not uncommon. At Westminster in 1253, and in subsequent years, those responsible for the building operations bought considerable quantities of dressed stone. Some came from the king's quarry and some by boat from John of Oxford. Large quantities of stone were supplied by one Roger of Reigate to whom considerable payments are recorded week after week. Whether John of Oxford or Roger of Reigate were mason contractors or dealers or quarrymasters it is not possible to determine from the accounts, but it is not improbable that Roger owned or leased quarries at Reigate, a well-known quarrying area. In the late fourteenth century, several marble pillars were pur-

¹ B. and C. ² Bodmin, passim. ³ V.C.H. Dorset, II., 334. ⁴ W. and C., I., 397. chased for Westminster at a cost of £40 each; ¹ one is definitely stated to have been bought of a mason of Couf (= Corfe), and the fact that on one occasion the expenses of the sacrist while going to Purbeck were paid makes it practically certain that the pillars came from that part of the country.² As these pillars must have been very awkward to move with the primitive appliances then available, it is highly probable that they were shaped and dressed by masons in the quarries. Of one thing we can be quite sure: anyone in a position to undertake to supply one or more marble pillars at £40 a piece must have been a person of very considerable substance, whether he was a mason or a quarrymaster or a dealer in stone, or whether he combined these functions, as is quite likely.

The master of the works in charge of the repair of Rochester Castle in 1367-1368 purchased large quantities of "newel," "square ashlar," "skew ashlar," "tablement" and other dressed stone of Ralph Crompe of Bocton.³ This particular stone is hard and strong and would bear the journey in a finished state without much risk of injury. Furthermore, it is said to be worked with least difficulty immediately after it is dug. As the sums paid to Crompe amounted to £119 12s. 31d., equivalent to the wages of 20 men for about 40 weeks, it is clear that a substantial amount of stone cutting was being done at the quarry at Bocton.4 In 1430-1431 the wardens of Rochester Bridge bought 1000 ashlar from John Cartere for £8 16s. 8d.5 In 1442, and again in 1445, the Eton College authorities were purchasing stone ready for use from the quarries of Kent.6 Amongst the quarries named are Maidstone, Farleygh and Boughton.

(iii) In the third place, we have come across several instances of quarriers being promoted to be layers (cubitores) as well as of layers being promoted to be hewers (cementarii). Thus of the 51 layers named in the previously mentioned Beaumaris and Caernarvon Building Accounts, we know that 4 had worked as quarriers and 1 as a "portehache" in a quarry before they became layers. Of the

⁵ In John Medehill's Account for 38-39 Henry VI., under 23rd June, we find, "Paid to John Kechener for thatching (tectura) of lodges (logiarum) in the quarry—5d."

⁶ Sandgate, p. 232.

⁸ Text in R. S. Mylne, The King's Master Masons, p. 9. Cf. Accounts of Dunkeld Bridge, 1513 (R. S. Mylne, op. cit, p. 24), a payment of 24s. to John Anderson, mason, "before he was hired, being in the quarry and cutting stones." Also cf. "eight masons breaking stone at a quarry at 8d. per day" (Acts of Privy Council, 1547-1550, pp. 389-390).

⁹ Scott, pp. 248, 249.

¹ Scott, pp. 258-260.

² Rackham (pp. 9, 10) states that the marble came from Purbeck, and that the "mason of Corfe" was "John Mahu (or Mayew) marberer," who received every year a robe.

Boughton, a quarrying area about 4 miles south of Maidstone.

*Rochester, p. 111. A further sum of £47 13s. 111d. was paid for the carriage of the stone.

Becker, p. 75.

W. and C., I., 385, and John Vady's Account, 24-25 Henry VI., fo. 6.

(i) that between 1301 and 1540, on account of holidays, they were equivalent to five days' wages; and (ii) that between 1541 and 1702, in view of the relative absence of holidays and the frequency of overtime, they were equivalent to six days' wages. The figures, after being adjusted so that weekly real earnings in 1501-1510 = 100, are printed in the last column of Table II. and are graphed in the chart on page 206.

STATISTICS OF WAGES AND PRICES

II.—Table of Money Wages, Prices and Real Wages, 1301-1702.

	Money Wages, 1501-10 = 100.		n indian		DAILY REAL WAGES, 1501-10 = 100.	
Years.	General Average (Steffen)	Oxford, Cam- bridge and London Bridge.	Food Prices, 1501-10 = 100.	General Average.	Oxford, Cambridge and London Bridge.	Real Earnings, 1501-10 = 100.
	6.5	67	62	108	128	108
1301-1310	67	67	81	77	83	83
1311-1320	62	67	77	81	87	87
1321-1330	l -	67	64	100	105	105
1331-1340	64	67	64	91	105	105
1341-1350	58	83	82	99	101	101
1351-1360	8 r		92	98	109	109
1361-1370	90	100	80	127	125	125
1371-1380	102	100	1	135	135	135
1381-1390	100	100	74 84	112	119	119
1391-1400	94	100	84	119	119	119
1401-1410	100	100	89	112	112	112
1411-1420	1	100	85	108	118	118
1421-1430		100		106	106	106
1431-1440		100	94	121	116	116
1441-1450		100	86	1	110	110
1451-1460	104	100	91	114	114	114
1461-1470		100	88	118	116	116
1471-1480	104	100	86	121	1	105
1481-1490	96	100	94	102	105	1 -
1491-1500		100	80	120	125	125
1501-1510	100	100	100	100	100	
1511-1520	100	100	101	99	99	99 76
1521-1530	104	100	132	79	76	
1531-1540	112	103	131	85	79	79
1541-1550	112	108	180	62	60	72
1551-1560	167	163	290	57	56	67
1561-1570	167	172	260	64	66	79
1571-1582	187	192	298	63	64	77
1583-1592		196	318	60	62	74
1593-1602		196	437	46	45	54
1603-1612		200	470	43	43	52
1613-1622		223	506	40	44	53
1623-1632		232	520	47	45	54
1633-1642		251	519	46	48	58
1643-1652		293	557	50	54	65
1653-1662		320	54I	56	59	71
1663-1672		325	554	56	59	7 I
1673-1682		325	596	50	55	66
1683-169	323	329	585	55	56	67
1693-170	2 467	346	682	68	51	61
1 75 "	' '		_			

5. Wage Assessments under the Statute of Artificers.

In Table III. we have arranged chronologically a number of wage assessments, in so far as they relate to masons. Where two or more rates are given from the same assessment, they relate to different classes of mason. The reference for each assessment is given in a footnote to the table.

III.—Table of Wage Assessments by Justices of the Peace under the Statute of Artificers, 1563.

Year.	Place of Assessment.	Masons' Daily Wages Without Food.		/ages d.
1563	Kent.1	13d.	9d.	
1563	Rutland.2	13d.		
1564	Exeter.3	10d.	8d.	
1570	Chester.4	6d.		
1586	London. ⁵	13d.		
1592	Hertfordshire.6	12d.	10d.	8d.
1593	East Riding.7	rod.	8d.	
1595	Cardigan.8	8d.		
1595	Lancashire.9	8d.	6d.	
1597	Cheshire.10	8d.		
1603	Wiltshire.11	11d. 7d.		
1610	Surrey.12	12d.	rod.	,
1610	Norfolk.13	18d.	16d.	12d
1610	Rutland.14	12d.	rod.	
1621	Lincoln.15	12d.	10d.	
1621	Faversham.16	14d.		
1630	Suffolk.17	16d.		
1632	Hereford.18	12d.		
1632	Gloucestershire.19	12d.		
1647	West Riding.20	12d.	8d.	
1651	Essex.21	18d.		
1655	Wiltshire.22	15d.	12d.	
1655	Gloucestershire.23	20d.		
1663	Worcestershire.24	12d.		
1680	Lincolnshire.25	12d.	rod.	
1684	Warwickshire.26	16d.	12d.	
1685	Somersetshire.27	14d.		

¹ E.H.R., April, 1926. ² Rogers, IV., 122.

³ Hist. MSS. Com. Report, Exeter MSS., p. 55.

⁴ Morris, Chester, p. 306.

⁵ Tawney and Power, Tudor Economic Documents, I., 369. ⁶ Hertford County Records, I., 8. ⁷ Rogers, VI., 688.

⁸ Tudor and Stuart Proclamations, I., No. 175.

⁹ Rogers, VI., 691. 10 Morris, Chester, p. 306.

¹¹ Hist. MSS. Com. Various, I., 165. 12 Archæologia, XI., 200. ¹³ E.H.R., XIII., 522. ¹⁴ Rogers, VI., 691.

¹⁵ Hist. MSS. Com. Rutland, I., 460. 16 Arch. Cant., XVI., 270.

¹⁷ E.H.R., XII., 307. 18 Hist. MSS. Com. Portland, III., 31.

¹⁹ Rogers, VI., 694. ²⁰ Econ. J., XXIV., 221. ²² Hist. MSS. Com. Various, I., 169.

²¹ Rogers, VI., 695.

²³ Rogers, VI., 694. 24 Hist. MSS. Com. Various, I., 323.

²⁵ V.C.H. Lincs., II., 336. 26 Rogers, VI., 699. 27 Hist. MSS. Com., VII.. 698.

"because that their trade has not been regulated in due manner, by the government of folks of their trade, in such form as other trades are; therefore the said Mayor, for maintaining the peace of our Lord the King, and for allaying such manner of dissentions and disputes, and for nurturing love among all manner of folks, in honour of the said city, and for the profit of the common people, by assent and counsel of the Aldermen and Sheriffs, caused all the good folks of the said trade to be summoned before him, to have from them good and due information how their trade might be best ordered and ruled, for the profit of the common people.

"Whereupon, the good folks of the said trade chose from among themselves twelve of the most skilful men of their trade, to inform the Mayor, Aldermen, and Sheriffs, as to the acts and articles touching their said trade, that is to say:—Walter de Sallynge, Richard de Sallynge, Thomas de Bredone, John de Tryrngtone, Thomas de Gloucestre, and Henry de Yeevelee, on behalf of the mason hewers; Richard Joye, Simon de Bartone, John de Estone, John Wylot, Thomas Hardegray, and Richard de Cornewaylle, on behalf of the mason layers and setters (masouns legers et setters); the which folks were sworn before the aforesaid Mayor, Aldermen, and Sheriffs; in manner as follows.—

"In the first place,—that every man of the trade may work at any work touching the trade, if he be perfectly skilled and

knowing in the same.

"Also,—that good folks of the said trade shall be chosen and sworn every time that need shall be, to oversee that no one of the trade takes work to complete, if he does not well and perfectly know how to perform such work; on pain of losing, to the use of the Commonalty, the first time that he shall by the persons so sworn be convicted thereof, one mark; and the second time, two marks; and the third time, he shall for swear the trade, for ever.

"Also,-that no one shall take work in gross, if he be not " of ability in a proper manner to complete such work; and he "who wishes to undertake such work in gross, shall come to the good man of whom he has taken such work to do and complete. "and shall bring with him six or four ancient men of his trade, "sworn thereunto, if they are prepared to testify unto the good "man of whom he has taken such work to do, that he is skilful "and of ability to perform such work, and that if he shall fail "to complete such work in due manner, or not be of ability to "do the same, they themselves, who so testify that he is skilful "and of ability to finish the work, are bound to complete the "same work well and properly at their own charges, in such "manner as he undertook; in case the employer who owns the "work shall have fully paid the workman. And if the employer "shall then owe him anything, let him pay it to the persons who "have so undertaken for him to complete such work."

"Also,—that no one shall set an apprentice or journeyman "to work, except in presence of his master, before he has been perfectly instructed in his calling: and he who shall do the contrary, and by the persons so sworn be convicted thereof, let him pay, the first time, to the use of the Commonalty, half a mark, and the second time, one mark, and the third time, so shillings; and so let him pay 20 shillings every time that

"he shall be convicted thereof."

"Also,—that no one of the said trade shall take an apprentice for a less term than seven years, according to the usage of the City; and he who shall do to the contrary thereof, shall be punished in the same manner.

"Also,—that the said Masters, so chosen, shall oversee that "all those who work by the day shall take for their hire according "as they are skilled, and may deserve for their work, and not

"outrageously.

"Also,—if any one of the said trade will not be ruled or di"rected in due manner by the persons of his trade sworn there"unto, such sworn persons are to make known his name unto
"the Mayor; and the Mayor, by assent of the Aldermen and
"Sheriffs, shall cause him to be chastised by imprisonment and
"other punishment; that so, other rebels may take example by
him, to be ruled by the good folks of their trade.

"Also,—that no one of the said trade shall take the ap-"prentice or journeyman of another, to the prejudice or damage "of his master, until his term shall have fully expired; on pain "of paying, to the use of the Commonalty, half a mark, each

"time that he shall be convicted thereof."

7. LONDON MASONS' ORDINANCES, 1481.

(Letter-Book L., fols. 165 seq.)

Memorandum quod Quinto decimo die Octobris Anno regni Regis Edwardi quarti post conquestum vicesimo primo probi homines Artis sive mistere lathamorum Civitatis Iondoriarum venerunt hic in Curia dicti Domini Regis in Camera Guyhalde Civitatis predicte coram Johanne Broun maiore et Aldermannis eiusdem Ĉivitatis et porrexerunt eisdem maiori et Aldermannis quandam billam sive Supplicacionem Cuius tenor sequitur in hec verba To the full honourable lorde and discrete Soveraignes mair and Aldremen of the Citee of london Mekely besechen the goode Folke of the Craft mistere or science of masons enfraunchesed of the saide Citee That it pleas your grete wisdoms tenderly to understonde and considre how that for lak of due Correccion and punvsshment that owed to be doon uppon suche persones as beth Rebelles or Trespassours in Any Feolashippe of the said Citee. grevous and grete Inconvenienties perels and utragious dedes often tymes have falle within Feolashippes of this Citee And namely Amonges certein persones enfraunchesed of the said Craft mistere or science of masons of this Citee. By Consideracon whereof and for a due Reformacion to be had of the same. And also for the better Rule and guydyng to be had in the said Craft mistere or science Aswell to the pleasur of god As for the Comune Wele And Also for the savacion of the honeste of the honest persones of the said Craft mistere or science It pleas your goode lordshippe and maistershippes to graunte that tharticles following may by your Auctorite and grete wisdoms be Accepted Admitted and holde for ferme and stable to endure from this tyme forward for evermore And to be entred of Recorde and enrolled in the Chambre of the Yeldhall of this Citee. by vertue whereof And by thobservaunces of the saide Articles goode Rule and sadde guydyng the rather

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