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THE BUILDING TRADES IN THE MIDLANDS IN THE
SEVENTEENTH CENTURY.

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THE BUILDING TRADES IN THE MIDLANDS IN THE SEVENTEENTH
CENTURY.

INTRODUCTION.

A study of the building trades in the seventeenth century is of particular interest because of the advance made by the capitalist class during that period. Masons and builders were to be found among both the humble folk and the exalted classes. In the top¹ most niche of the building hierarchy were the master masons employed by Inigo Jones and later those who worked under Wren. The work, the responsibilities and the resources of these men show the master mason as no mean figure. A skilled craftman he ably undertook architectural work and as a capitalist he owned a stone yard or perhaps a quarry. He may have been a sculptor as well, in which case besides producing work of note, his workshop may have been a manufactory of more or less standardized heads, busts and other free stone ornaments which were distributed to many places within the kingdom.¹ Many details of the work of Wren's master masons are contained in the volumes published by the Wren Society,² and a full commentary on the lives

1. Knoop & Jones. 'The London Mason'

2. Wren Soc. Pub. Vols. x, xi

of several important master masons makes up the "The London Mason of the Seventeenth Century" of Knoop and Jones.

It is these two scholars who by their papers have done so much to make a place for the building trades in economic history. They have edited several important building accounts, among which is one belonging to this period and to the Midland area namely the building of Bolsover Castle in 1613.^{3.} Besides many pamphlets they have written two books on the mason's work, the one already referred to on the London Mason and the other "The Mediaeval Mason". The master mason of mediaeval days was a commanding personage. When he was in charge of a large building undertaking all were subject to his rule, and no architect or clerk of the works were there to curb his power. He did most of the work of these persons himself and where delegation was necessary he remained as a supervising authority. "The Decline of the Mason-Architect in England" is the subject of a paper by Knoop and Jones.^{4.} They make it clear that by the sixteenth and seventeenth centuries the chief master mason of a building had had his powers much whittled down when compared with that of his mediaeval prototype. But "The London Mason in the Seventeenth Century" does not portray the mason as a skilled

3. Bolsover Castle Building Account

4. Decline of the Mason Architect, pamphlet pub. 1937.

worker with only his labour to sell. He took his place along with the other new capitalists of that period.

A survey of the building accounts of several Midland towns does not of course include many masons of the same calibre as their London brethren. Two mason sculptors of the Midlands possessed large private fortunes at one time during their lives, even though both died penniless. They both were the architects of buildings and they were connected with Wren, one indeed having worked under Sir Christopher, Sir William Wilson of Leicester, mason, sculptor and architect acquired a large fortune through his marriage with *Madam*
^{5.}
 Pudsey of Sutton Coldfield. He was the architect of the Sir John Moore School at Appleby in Leicestershire and of the restored St. Mary's Church at Warwick.
^{6.}
 Thomas White a native of Worcester first a stone-cutter, then a pupil of Wren's, after working on St. Paul's retired to Worcester with a considerable fortune, and in his native town erected many buildings and was the architect of the Guildhall set up in 1721.
^{7.}

Though not the possessor of a great fortune Thomas Sargenson a mason of Coventry was a man of considerable

5. History of Sutton Coldfield. (1762).
 p.p. 4, 5, 11, 16, 17, 29.
 Wilson - Dict. of Architecture.
 by Wyatt Papworth. (1852-1892.)
 Wren Soc. Pub. Vol. XI p. 108 seq.

7. Worcestershire by Nash. Vol. II App. CXVI
 White - Dict. of Architecture. by Wyatt.
 Papworth. (1852-1892.)

6. Wren Soc. Pub. Vol. XI p.p.

means. He was a partner in the building of the Swanswell Waterworks at Coventry and the builder of several bridges for the county. He was a landowner and had held the office of Chamberlain for his own town.^{8.} Thomas Sabin of Ashby-de-la-Zouche the master-mason in charge of the building of Appleby School seems to have been in as comfortable a position as Sargenson.^{9.}

There was evidently a sprinkling of wealthy capitalist masons, and men of similar standing are found in the other building trades. Bewley a plumber of Coventry, the partner of Sargenson was a Chamberlain of that town, and his son Thomas who followed the same trade was made Mayor.^{10.} The Bewleys were important burgesses of a great city, and though plumbers must have been the peers of the mercers, clothiers and other merchants of the town. Mr. Izod of Stratford a glazier belonged to the same class of worthy citizens and in Warwick at the end of the century quite a coterie of rich men in the building trades existed. John Williams the carpenter and John Finley the mason who did much work for Warwick town after the great fire of 1694 both owned fine houses in the town.^{12.} And Mr. Nicholas^{11.} and Paris skilled workers in

8. See Chap on Sargenson.

9. Wren Soc. Pub. Vol. X p. 102.

He laid out £595 on Sir John's Moore's School at Appleby.

10. See Chap. on Sargenson.

11. " " on Contracts.

12. See Chap. on Contracts

wrought iron are usually named in the accounts as Mr. Nicholas and M^r. Matthews a title frequently kept for the members of the council. So it may be presumed that these craftsmen were influential citizens of Warwick.^{13.}

John and Francis Smith the heads of a Warwick building firm were well to do persons and architects, but it is uncertain whether they were actually masons.^{14.} They may have been nearer to the class of builders' merchants. In the building as in most other trades during the seventeenth century merchants no doubt found profitable advantages for their activities. The Woolmers and other ironmongers of Stratford seem to have been more or less general merchants and to have carried out a trade in building materials.^{15.} At Coventry and Warwick there were several merchants of bricks and tiles.

A detailed study of the building operations in a few towns makes it possible to gauge more accurately the importance of this section and to find its relationship with the other workers of the building trade.

The poorer artisans were slightly superior to the agricultural labourers. They were paid their wages by the day

13. Warwick Chamberlains' Accounts. 1701, 1724.

14. See Chap.

15. See Chap.

and probably did not own all the tools with which they worked. It is quite possible that they were coupled in popular estimation with the farm-worker, because most of the larger farms had need of smiths, carpenters, wheelwrights, and masons to cope with the constant repair work. At any rate in the eighteenth century as Marshall in his "^{Rural}~~Agriculture~~ Economy. ~~of the Counties~~" points out these workmen with their bags of tools wandered from farm to farm, and he is at pains to emphasize the advantages if more farms had their own smithies and workshops for the wheelwright and carpenter. Similar conditions probably prevailed in the preceding century.

The majority of these masons and carpenters were the class which suffered most severely in the Civil War. They formed a part of the industrious artizan class so much beloved by the recruiting officer. Those who worked in the towns, felt the full brunt of the troublesome times. The country gentry and the city fathers would try to fob off the great crowd of wasters and vagrants upon the military authorities, but the latter soon made inroads upon the true artizan class. The more wealthy clothiers could buy themselves out of their military service but the luckless workers among whom would be countless building operatives were pressed into service in

large numbers.

It seems that in the building trade fortunes were not made so speedily or so frequently as in the colth, leather ironmongery and wine businesses. In the seventeenth century builders hardly ever seem to be the possessors of a municipal office. Sargenson and the Bewleys are the great exceptions in the list of mayors and chamberlains for Coventry.^{16.} "The Sessment of the Companies of the Citie from the XIX of Maye 1604 unto XI of August 1604" gives a further indication that the builders were not as a rule in the highest social class of the city.^{17.}

The company of the drapers was assessed at 8/- per week, the mercers at 6/8, the dyers and the Corvicers at 2/- each. The

companies of the butchers and bakers were assessed at the same price. But the smiths were assessed at 1/6d., the "Paynters Glasiers and Carvers" all in one company at 1/- per week.

The carpenters in a separate company were assessed at the same price as was also the company of the "Cowpers and Tilers".

Capitalism and the building trade had not yet developed to such an extent that easy pprofit awaited the speculative builder.

In fact that species had not yet come into being.

16. List of Coventry Mayors

17. Coventry C.H. Accts. (A.22) pp. 109, 110.

since the term mason includes capitalist and workers who earn a daily wage, many questions naturally present themselves. Was there a very marked cleavage between the workers who had only their labour to sell and the capitalist masters? Did a mason easily rise from the worker to the capitalist class? Was the lone mason working on the village church much nearer to the general labouring class than the master mason in charge of a team of masons working on the walls of Coventry? Again in the building trade the purchase of raw materials and the transport charges bulk as very large items of expenditure. Were the masons on the buildings usually the same men who hewed the stone at the quarry? Did the capitalist who undertook the building generally purchase the raw materials and bear the transport charges? Were the capitalists in such a sound position that they were able to undertake comprehensive contracts which included the carpenter's, plumber's and glazier's work? Did the merchants play an important part in the transport and in the purchase of materials? Detailed building accounts provide an abundance of evidence on these points, and it is possible to give an adequate answer to most of these questions.

The material studied has been found in municipal archives. No special building activity has been included. The rebuilding of St. Mary's Church and the erection of the Court House at Warwick, the building of the new Guildhall at Worcester are the most important undertakings which have been considered. The accounts generally concern the normal building activities in the towns and villages.

The repair of the church ^{spires} and the city walls at Coventry, the erection of dwelling houses and alms-houses at Warwick, and at Stratford-on-Avon, the paving of Clopton Bridge and the repair of the Churchyard wall. Though the even tenor of events at Stratford was interrupted by the building of a market house in 1634 and the rebuilding of Clopton Bridge a few years after the end of the Civil War.

In the villages the only building of which a record may remain is the rebuilding and repairs to a church. Accounts of such repairs have been examined for Knowle, Northfield and Hartlebury. But at Hartlebury it was not repairs to the church which were recorded but the repairs to the Grammar School noted down in the Order Book of the Governors.

For evidence of the building in the towns, the chamberlains' Accounts and the Order Books of the Council have been the most important sources. Unfortunately the nature and quality of a chamberlains' account changes from town to town and from year to year. There is not a steady flow of evidence throughout the century from the accounts of Coventry, Warwick and Stratford which would lend itself to a comparison of conditions. The Chamberlains Accounts for Coventry give a detailed record for the years 1601-1640.^{18.} After that date there is not much connected evidence. At Warwick the bulk of the evidence appears for the last decade of the century. Before 1694 the Chamberlain's Accounts and the Order Book are singularly silent concerning building operations. But from that year onwards the Order Book contains much detail of the rebuilding of the town.^{19.} It is for this rebuilding at Warwick that so many contracts are extant. The Stratford-on-Avon Chamberlains' Accounts are not exceptionally full of building details at any period, but a moderate amount of evidence is available throughout the century, and this stream of evidence swells to more goodly proportions after 1660.^{20.}

18. Coventry C.H. Accts.

19. Warwick C.H. Accts. Order Book of Council.

20. Stratford C.H. Accts.

The most disappointing Chamberlains' Accounts are those for Worcester, they hardly yield any building evidence. But separate accounts are extant for the rebuilding of the Guildhall early in the eighteenth century.^{21.}

Of the smaller places, the Accounts of the Guild at Knowle are published and these contain details of repairs to the fabric of the church and their other buildings.^{22.} For Northfield the evidence is based upon the Churchwardens' Accounts and again church repairs have pride of place.^{23.} The Droitwich evidence is scanty and is from the Chamberlains' Accounts which record the rebuilding of the market house.^{24.} The details of building at Hartlebury are confined to three years at the beginning of the century and are collected from accounts and memoranda in the Order Book of the Governors of Hartlebury Grammar School.^{25.}

For building operations over a wide area the Order Book of the Warwickshire Quarter Sessions is most useful.^{26.} There is a considerable amount of evidence concerning the masons who built the county bridges. It is not so valuable for contracts and details of the construction of bridges as might

21. Orders of Contracts, and Disbursements in Guildhall. 2 Vols.

22. Records of Knowle. - Downing.

23. Northfield C.W. Accts.

24. Droitwich C.H. Accts. 1628.

25. Order Book Hartlebury Grammar School. - Robinson.

26. Warwickshire Quarter Sessions. Vols.

be expected, but it contains much information on arrangements to pay masons and of the financial burdens which these unfortunate individuals were at times called upon to bear.

Accounts for the building of private residences are extremely few. Fortunately a memoranda book extant for the building of a country house near to Lichfield.²⁷ It was for a member of a well known Lichfield family and the book is for the years 1733-44. More material is available for a survey of building conditions in the early eighteenth century in the accounts for Worcester Guildhall, and for the Court House at Warwick. This evidence provides a good opportunity to ascertain whether capitalism in the building trades had taken a great step forward in the first quarter of the eighteenth century.

Besides specific accounts two general works by contemporaries are helpful in completing the picture of working conditions in the building trades. The one is "The Counsel and Advice to all Builders"²⁸ by Sir Balthazar Gerbier. This was a handbook for lords and gentlemen who contemplated the erection of new residences. It informs the would be possessor of a new mansion of the problems incurred in the purchase of materials and in the erection of the building. It has a section devoted to architecture where the author

27. Memoranda Book of John Dyott. 1733-1744.

28. "The Counsel and Advice to all Builders." 1663.

pleads for the building of all houses after the classic fashion. The rest of the book is full of practical details, the prices of materials, the customary charges for workmanship and the division of duties between the ~~archi~~ architect, the master masons and the clerk of the works.

The book which seems to be the natural complement to "Gerbier's Counsel and Advice" is the "Mechanick Exercises" of Moxon.²⁹ Here the craftsmanship of many workers in the building trades is explained with great care. Moxon starts with the work of the smith, details the tools which are usually found in a smithy, and proceeds to a critical discussion on the manufacture of hinges of varying types and screws. The work of such craftsmen as the carpenter, the joiner, the turner and the mason is treated in the same detailed manner. For general building the descriptions of the work of the carpenter, joiner, mason, tiler and bricklayer are important. They provide hints as to the degree of specialism in such closely allied trades as those of mason tiler and bricklayer, and also information of the responsibilities which carpenters and masons were willing to take upon themselves when they took important building contracts.

²⁹"Mechanick Exercises." Moxon.

STONE.

Building Supplies.

The supply of building stone when transport methods were so slow and uncertain presented a difficult problem to the masons and builders. The ^{ces}plac~~es~~ studied are situated mainly in Warwickshire and Worcestershire, and neither of these districts were "stone" counties. They did not possess quarries from which stone was taken over a very wide area. Timber and plaster buildings were erected in there two counties till a late date. But as the supply of timber for building purposes would no doubt become more limited at least in the later part of the century, builders would have to seek out greater supplies of stone or possibly new brick supplies.

The high costs and poor means of transport coupled with decreased timber stocks caused towns and villages to put to good use all building materials within their borders, and to obtain stone from near-by workings. Accordingly all types of buildings in a state of decay, the walls of a city, monasteries and castles were continually used as sources of stone supply for new buildings.

The Corporation at Coventry felt building materials to be so scarce that they prohibited the removal of such material beyond the borders.

(April 1239.) "Taking downe of buildings".

"Item it is ordered and (nacted at this ^{leet} ~~bet~~, that if any person do. from henceforth take downe anie buildings within the cite or the suburbs of the same; they shall not sell anie tile Timber or stone of anie such building to anie person or persons that shall carry the same out of this cite but only to such citizens as shall build w^h the same in w^hin this cite and not eswhere in panie of v^h to be berried by distress".

Certainly at Coventry and Worcester old buildings were extensively ramsacked for building materials. Coventry kept its walls in good repair till quite a recent date and the depredations of stone from it were so great that the mayer and corporation was forced to put a stop to such action. 1673 "Whereas divers persons within this Citty have of late of their accord without any leave or lycence p^{er}sum^{ed} to take away the Stones of the late Towne wall It is now ordered and enacted at and by the Auchthority of this leet That noe p^{er}son

1. Coventry leet Book. (A.3) p.14.

whatsoever shall from henceforth pull or take downe any part of the saide Towne wall upon payne for everyone offending herein to forfeit 40.^{2.} The phrase without "any leave or lyeence" suggests that permission for obtaining stone from old buildings including the city wall was often given, but that masons were prone to adapt the habit of taking stone from any part of the wall without making any payment for the privilege. The masons in Worcester made too free a use of stone from the walls and the corporation here attempted to put a check to it.

In 1676 it was ordered that the loose stone taken from the city wall in many places should be seized for the city use. The surveyors were commanded to report on the quantity of stone which had been taken from the wall and discover in whose possession it now was.^{3.} At a much later date, 1723 the Worcester accounts have a curious payment made to the pavier "Paid for burying 400 and odd Bushells of Stones at St. Clement's Gate for fear of being Stolen £0-5-0."^{4.}

Loose stones from the walls still seem to have been an attraction to masons.

in the city of Coventry besides making use of the walls, the

3. Coventry Ket Book. (A.3) p. 268.

4. Worcester Order Book. Vol. IV p. 90.

5. Worcester Audit Accounts. Vol. VI 1724.

masons found the old monastic houses there ready sources of fresh stone supplies. The priory, and the houses of the Whitefriars and Greyfriars were all plundered. The masons were obtaining stone from the Whitefriars and Greyfriars throughout the century. The mason John Band in 1615 was engaged for about 3 weeks in digging stone of the Greyfriars Orchard, and in levelling up the ground afterwards.⁵ In 1633 another mason William Allen was paid for digging 30 load of stone out of the Greyfriar's Churchyard and he too had to level the ground.⁶ Probably the fear of stone being taken by masons who had not received permission of the corporation was the reason for the levelling up of the ground each time some of the old stonework had been dug up. The piece-meal destruction of these buildings is shown even better by the work of the mason John Higginson in 1627.⁷ He worked for 3 or 4 weeks in the demolition of a vault there. At the same time three labourers were employed to wheel the stone away in barrows to the Little Park wall, which was being repaired.

Many entries in the accounts give striking evidence of the great amount of material which was gained from these remains.

Although much stone was gained from such sources Coventry

5. Coventry Ch Accts.

6. " " "

7. " " "

was quite fortunate in having quarries very near to the city. Several quarries were situated on Whitley Common just beyond the city walls and the road from the common came in by the New Gate. On the opposite side of the city though much farther afield there were quarries at the village Allesley. The land on which the Whitley quarries were situated belonged to the corporation, but they let out many if not all the quarries to tenants. No great amount of details are forthcoming concerning the size and number of these quarries or their owners, but it is important to note that some owners were masons.

In 1624 Mr. W. Hancock was the tenant of Quarrey Close near St. Nicholas Church Yard and paid a rent of ten shillings per. annum.^{8.} The next possessor of this quarry was probably Mr. Thomas Basnet who held it in 1646.^{9.} He may have been a mason for a Thomas Basnet,^{10.} mason, was at work in Coventry in 1633. The "Quarry Close on this side Radforth and the dove house and loft" in 1646 was in the possession of "Mrs. Margaret Kervyn widow" who paid for it a rent of £1.^{11.} In the following year it passed into the hands of Mr. Henry Kervyn.^{12.} The trade of these Kervyn's is not certainly known, but

8. Coventry Acct. Book. (A.22.) p. 209.

9. " " " " " p. 356.

10. Coventry Ch. Accts.

11. Coventry Acct. Book. (A. 22) p. 356.

12. " " " " (A. 22) p. 374.

one **Kervyn** was paid for transferring sand and gravel, and it is just possible that they were connected with the building trades.

In ¹⁷⁰¹16 there is mention of another quarry, Slater's Quarry for which a rent of 35 shillings was paid.^{13.}

The few quarries that are named by them to rent point to the fact that the quarries or at least the separate stone pits around Coventry were of quite moderate dimensions. Most of them were probably small outcrop workings. The corporations at times enacted regulations to enforce the railing in of the stone pits and levelling up of those which had become derelict.

In March 170⁷6 it was "Ordered that such part of the Stone pitts on Whitley Commons next the park hedge be filled up as Mr Mayer shall think fit and order"^{14.} With small workings new areas were probably being constantly opened up and old pits as quickly falling into disuse. There was continued friction over the encroachment of the stone pits on to the common lands. A resolution of 1652 laid it down that "...if any person or persons shall at any

13. Coventry Leet Book. (A.3c.) 1701.

14. Coventry Leet Book (A.3c) 170⁶/₇.

time henceforth digg or get or caused to be digged or gotten in or out of any part of the Comon ground called Whitley comon or hearsall near to this Citie any Ston evrie such persen so offending shall forfeit for everie load so gotten five shillings of lawfull money of England to be levied by war of Distresse to the use of the Bailiffes and ^{15.} Com̃althe of the said Citie". In April 1661 a presentation to the Quarter Sessions named several masons for encroaching on the common land. "Also we present Richard Leay Simon Burne & William Sargerson for breaking the ground in digging there and Railing in the Stone pits upen Whitley Comons. Also we present Edward Lynes for the like"^{16.}

The masons who worked at these pits may sometimes have held leases for the ground they worked, but any mason working in Coventry seems to have had the privilege of hewing stone there. For in 1641 it is recorded that James Johnson was appointed Bailiff of the city's stone pits and according to the Order ~~in~~ the Book it was agreed "... that James Johnson one of the Headsmen shall be Bayliff of the Cities Ston pitts wthout Newgate during the pleasure of this house and he to receive for the Cities use six pence for each

15. Coventry - Leet Book. (A.3.) p.197.

16. Presentments. 1661.

load of the best stone of Strangers, and fower pence of them for the second ston, and fower pence for each load of the best Citizens All and twopence of them for the second sort, to w^{ch} end there shall be a warrant under the Cities scale made to him".^{17.}

The stone from these quarries around Coventry was sold by the load and by the foot. Dressed stone seems to have always been sold by measurement and paving stone was sold both by measurement and by the load. *Per point* stone, crest stone, step stone, ashlar and quoins were all sold by the foot.^{18.} The price of stone hardly varied at Coventry in the first half of the century. Ashlar was 1½d, per foot in 1604, 2d. a score and probably 1½d. a foot for odd amounts in 1619, and 18d. per score in 1633. Steps cost 2d. and 3d. in 1603 and were still the same price in 1640. Pepeynt stone was 4d. in 1603 and 3d. in 1607.

With such easy access to large supplies of stone, the cartage charges at Coventry were quite low. Stone from Whitley Common or from the monastic houses within the city was brought at a cost of 4d. per load. The charge was commonly 2/6d. per day if one team was employed and 5-0d. for two.^{19.} The cartage

17. Coventry Council Book. (A. 14b.) p. 10.

18. See Table. II

19. Coventry Chs. Accts.

charges for Allesley stone were much higher and by 1650 a large amount of this stone was being used in the town, and the masons had to pay 1-0d. a load for it. The building requirements of the city were causing the masons to lose every advantage that they had derived from the low cartage charges.

The Warwick builders should have been as fortunate as the men at Coventry. At Warwick they had a number of local quarries to draw on for their supplies, but it appears from accounts that on many occasions they obtained stone from so distant a place as Wilmcote near to Stratford-on-Avon. The local stone was quarried at Emscote, Cubbington and Lillington. Much of the stone for the Warwick Court House built about 17 came from Lillington and Cubbington. The rebuilding of St. Mary's Church in 1698 caused stone to be brought from near and far. For a supply of the poorer sort of stone the builders decided to start outworkings on the spot. Stone pits were dug in the churchyard itself and the Vicar Mr. Ede, began a law-suit over the proceeding not because it savoured of the sacriligious, but because he was deprived of the churchyard rent as

long as the stone pits were there.²⁰ The pits provided the builders with some of the stone cheaply enough. But a great part of the stone must have proved a costly item in the expenditure, because in the contract John Smith of Warwick agreed to build many parts of the church with Wilmecote stone.²¹ This stone was used in several Warwick buildings. The Chamberlains' Accounts have a few scattered entries (concerning the purchase of stone from Wilmcote). The Wilmcote Quarries must have had more than local importance when stone was carted there to the county town. They certainly provided Stratford with the greater part of her stone supply. The nearest quarries to Stratford were those of Wilmecote and Binton. In addition stone was sometimes brought from Warwick and Cotswold stone from Chipping Camden. Stratford was notⁱⁿ so good a position for stone as Warwick or Coventry for Wilmcote was about four miles away. The cost of stone at the Wilmcote quarry was I-4d. to I-8d. a load and the cost of its carriage to Stratford was usually 2/6d.²² The name of the quarry is not given a great number of times in the accounts, but the same price for the stone and cartage constantly recur and mention of the pits seem to imply those at Wilmecote. Of the entries naming Wilmecote there were, ----

20. History of Warwick - Kemp. p.107.

21. p.107

22. Stratford Chs. Accts.

I611 Henry Burford a load of stone I-8d.

To Miles for fetching the same from Wilmecote 2/0d.

I692. pd. more for Caridge 3 Load Ston pro Wilmetr. 0-7-6,

I694. pd. Sam Smith for Carige of A Load of Ston from
Wimcoat.²⁴ 0-3-0.

At Stratford the poorer kind of stone "firestone" cost I-2d. to I-3d. a load exclusive of the cartage. It was a coarse stone and so-called because it was used in the building of chimneys. In I619 Ducker a mason of Stratford was engaged in chimney-work and loads of "fyrestone at these prices were included" in his charges.²⁴ The pebbles for pitching the roadways at Stratford were dug in several places and had particularly high cartage costs. Pebbles often cost I-0d., I-3d. and I-6d. per load At Clopton they were 6d. a load at the pit and the carriage was I-3d. When pebbles were brought from Hatton in I675 the cost per load including the carriage was 3-4d.²⁵

In the seventeenth century a few enteries show stone being brought from Binton and Warwick. The cost of carriage from Warwick was considerable and in I689 a load from thence cost 5/0d. for carriage.²⁶ This Warwick stone was to be used for the repair of

23. Stratford Ch. Accts.

24. Stratford Vestry Minute Book. p.16.

25. Stratford Ch. Accts.

26.

Clopton Bridge and was purchased at the quarry at 9d. a foot. No doubt it was good quality stone partly dressed at the quarry which was to be used at the bridge.

Cotswold stone has been used for a few of the important buildings of Stratford. Its use was probably forwarded both by the desire to excel the other stone buildings and by a small number of "foreign" masons and craftsmen who resided in the town.^{27.} The Market House which was in the building in 1634, and the Town Hall which was built just prior to the Garrick celebrations at Stratford were both built of stone from the Cotswolds. The facing stone for the Market House was brought from the Westington Quarry at Chipping Camden.^{p 28.} The Stratford Corporation had arranged to pay for the cartage costs and in a long lawsuit over the building contract, one of their complaints was that some stone had had to be brought from Campden during the winter when the carriage was most expensive and most difficult. The cost of the carriage had ranged from 6-3d. to 9-3d. the load. The other stone was to be fetched locally from the Wilmecote quarries.^{29.}

27. Halliwell's Calendar, Leases. No. 133, 161.

Misc. Doc. Vol. XIII No. 115.

28. Stratford Town Hall. - E.A.B. Barnard

In Evesham Journal. Feb. 5th 1928

29. Barnard. - Evesham Journal. Feb. 12th 1928.

A similar arrangement was made for the building of Alcester Town Hall. A Chipping Campden mason was employed for this work and Campden stone was to be used for all the important parts of the building. The rest of the stone required was to be quarried locally and to be brought from the pits at Alne.³⁰

Not much information is to be had from the Chamberlains' Accounts at Worcester of the stone supplied. The Guildhall put up about 1725 was built chiefly of brick. But some stone was used and some was brought from the Ombersley quarries.³¹ They appear to have been on the estates of the Sandys family. One of the Sandys early in the seventeenth century had a project for improving the navigation of the Avon.~~25~~ He probably had no determined ambition to make the use of Ombersley stone more popular, but improved river navigation was bound to make easier the transport of building material.

Two Worcester masons were engaged in 1728 to rebuild Eckington Bridge on the Avon.³³ And they agreed to build the stone part of the bridge with Ombersley stone. This stone would most certainly be sent down the Severn and up the Avon from Tewkesbury in order to bring it to Eckington. As Worcester masons

30. Alcester Market House Contract.

31. Worcester Council Book. 1725.

~~32.~~

33. Contract quoted in Eckington by A.W. Fletcher pp.45, 46. The masons were to be paid £190.

they no doubt were used to working in Ombersley stone, and it is possible that they owned quarries there. This makes it more understandable that the bridge should be made of Ombersley stone and not of Cotswold stone which could be quarried locally in many parts of Ashton Hill. In the eighteenth century when plans were being made for improving the Avon, and the building of canals in the Avon valley, one advantage praised by the promoters was the linking up of Warwick and Stratford with a number of stone quarries.

The method by which the masons of Coventry, Warwick and Stratford gained their stone supplies suggests that the quarries were in an intermediate position between full development and an organised working.

Many of the quarries were probably worked by anyone who lived in a neighbouring town or village. The inhabitants of Ashton Hill still have a quarry for most of the villages and all may draw stone from there. It was probably the same in the seventeenth century, only then the custom extended over most of the Midland area and no doubt throughout the country. The stone pits around Coventry were outworkings and masons paying toll for the stone

had the freedom to work there. Also the Stratford masons worked at Wilm^{34.}cote, the Alcester masons at Alne,^{35.} and the Worcester masons at Ombersley, all probably under similar conditions. This suggests that not many masons were working quarries as capitalist enterprises.

On the other hand evidence has been given that some of the Coventry Quarries were privately owned and it is not unlikely that some masons owned their own quarries.^{36.} John & Thomas Sargenson, Samuel Blisse,^{of Coventry} and ^{Robert} ~~George William~~ Taylor and Thomas Wilkinson of Worcester were all important masons, and though no direct evidence is available it seems likely that the Coventry masons owned quarries at Whitley Common and the Worcester masons quarries at Ombersley.^{37.}

The reliance for so great a part of the supply of stone on demolition work again indicates that no mason had an important organisation for supplying stone. Masons were content to take down old buildings bit by bit in order to provide themselves with ready stone for the building which they had in hand. Besides the lack of organised enterprise the cost and difficulty of transport caused masons to obtain their materials in this way,

34. See Chap. on Organisation

35. See Chap. " " .

36. See Chap. " " .

37. Payments were made to these masons for obtaining stone from these quarries.

and for distant transport of material they used the rivers whenever it was practicable.

In stone districts such as in the Cotswolds masons would probably be more wealthy and many more would own quarries. John Page of Chipping Campden, the builder of the Market House at Stratford owned Westington Quarry at Campden. ^{38.} Simon Holt who built Aleester Market House also came from Campden and was responsible for getting Campden stone for this work. He had to send men to work at the quarry but it is not clear whether he was the owner or not. ^{39.}

The importance that masons attached to quarries is seen more clearly when the work of the Coventry and Stratford masons is considered with that of the masons who came from the quarry towns and villages.

The building material which presented the ^{least} difficulties in its purchase and cartage was sand and clay. These commodities were usually obtained locally. In Coventry masons, [†] carpenters and builders seemed to dig anywhere if they felt disposed [^]

38. Townhall Arhele by Barnard.

39. Aleester Town Hall Contract.

to obtain their supplies.^{40.} But at Stratford the clay pits were situated close together at the back of Henley Street.^{41.} The Corporation in Coventry was forced to lay down regulations concerning the places ^ℓwhere pits might be dug and how they should be railed off for the better protection of ~~the~~ [?] ~~of~~ travellers and cattle. They were exceptionally dangerous for the pits were often dug at the side of the high-roads. The [?] Book contains the order in 1670 that " fforasmuch as Richard Rotten John Michell & others have been discharged from getting Clay or sand in the lanes & Clouses of this Citty in severall places where much damage is done and some places thereby made very dangerous both for men & Cattell yet notwithstanding they doe still [?] persist in getting Clay & sand to the great damage of this Citty & the inhabitants thereof; ffor [?] Bee it enacted at and by the auctoritie of this [?] That noe person whatsoever shall from henceforth fech get-or carry away any rierfe sand or Clay upon any Comon or West land or ground belonging to this Citty But only from these hills or Banks that are about the quarrey upon Whitley Comon or from some other convenient places about the Citty to be appointed by the Mayo & his brethren or some other [?] son or [!] sons but whom they shall refer^{eer}

40. Coventry Ch. Accts.

41. Halliwell Calendar . map of stratford.

the same upon payne that every ^fson offending against this act
 or any ^{pte} thereof shall ferfeit to the use of the Mayo^r Bayliffe
 of this Citty for every default tenn shillings".

In 1693 the Corporation included in a new order the names of
 the places where sand and clay might be dug. It is again noticeable
 that the pits would be placed against the highways. This time it
 was ordered "That noe ^fson whatsoever doe from henceforth ^f same
 to gett any sand in any other places than are hereafter mentioned
 (vizt) in Greene Lane without New Gate upon one ^{side} of the ^{sd} Lane
 at Whitwick Elme, in Bargate Lane without Spenn gate entering into
 Windmill Lane, and as they goe to Wyken knobb: And that noe ^fson
[¶] sune to gett any Clay elsewhere than in the places hereafter
 mentioned (vizt). against the Stone pitts without New Gate at
 Sumerlands Butts, On the Left Hand Spon Causey, beyond the Chappell,
 on the ^{right} hand Leicester Causey, And upon Godford as you goe to
 Clay gate by the side of ^{o?} Orlands Bridgemans grounds And the [?] sons
 getting such Sand and Clay on the places afered doe gett the same
 in as narrow a compasse as conveniently they can, and doe from
 time to time secure the same from ^danger by filling such places up
 with Rommell or by raileing in the same upon paine for every one

making default to forfeit for each default one shilling: And that noe ^f sons whatsoever doe lay any Romell elsewhere than in such places where such Sand or Clay shall be gott or in the Trench under my Lady Hales Orchard Or in the Roade without New Gate, Between the Causeway and Sallows Hill upon panie for every one makeing ^{43.} defaulte to forfeite for default one shilling".

The waste land on the sides of most of the main roads entering Coventry seem to have been used for the digging of sand and clay pits and to fill them up it was ordered that they should be used as rubbish tips. There were no large sand or clay pits but builders and masons could dig their own pits at random within certain fixed areas.

The provision of ^ltime for larger buildings operations may quite well have entailed the need to make ^ftime on the building site. In the accounts for the erecting of Bolsover Castle money was paid out to workmen who put up the kiln for the burning of ^{44.}lime and most of the lime used was supplied from this kiln. The

43. Coventry Leet Book (A.3.) p. 326.

44. Bolsover Castle Accounts . Knoop. & Jones.

quantity of lime which was produced for the normal needs in a locality is less easy to gauge. References to the lime man are few and often indirect . A large town such as Coventry would probably have local kilns big enough to cope with local needs. ^{But} ~~Then~~ there is a singular absence of entries concerning the lime man because the masons seem to have been paid for providing the lime. In 1621 search was made beyond Coventry for the supply, Thomas Sargeson was paid for travelling to Stretton under Fosse to purchase lime. ^{45.} And it may be that local product was not good enough or not procurable in sufficient quantities for the frequent work of repairing the town walls, and occasionally the accounts state that the masons were using Walsall lime (1602, 1611) ^{45.} . In work of 1611 lime came from these sources. ^{45.}

Lime from Walsall 12½ Qs.

" " Mr. Randells 11 Qs.

" 1 strike from Wilkinson.

It probably was unusual to have so many people supplying the lime, but the occasional reliance on places outside Coventry to provide lime for normal work shows that Coventry lacked any large lime-kilns.

^{45.} Coventry ch. Accts.

The prices of lime at Coventry rose slightly in the first half of the century, until about 1615 the charge was 6d. per strike and four shillings per quarter. It was sometimes brought in bags at 2-0d. per bag. After 1615 it was 7d. per strike, 2-4d. per bag and 4-8d. per Quarter. The entries for Walsall lime show it costing 4-0d. per Quarter.^{46.}

At Stratford the masons were as fortunate as those of Coventry. They obtained most of their lime locally. But payments for lime were not usually made through the mason but directly to the lime man. In the 1630's the lime at Stratford seems to have been brought from Heamings.^{47.} There is mention in the accounts of a lime house and John Heamings who provided the lime and probably had a kiln was no doubt related to the mason John Heaming mason who did much work at Stratford in the later years of the century. At the end of the century from 1678 onwards Richard Hohns appears as the lime burner at Stratford and when an entry denotes a supplier of lime it is his name which is always set down. The local supply seems to have been supplemented here and there by an occasional reference to "Bristol" lime.

^{46.} See Table III

^{47.} Stratford. Ch. Accts.

The price of lime was rather dearer in the first half of the century at Stratford than at Coventry. At Stratford it cost 7d. per strike and 4-3d. per Quarter. The price remained at that level until about 1675. After that date it falls until at the end of the century the charge is 6d. per strike and four shillings ^{48.} per quarter.

The Warwick accounts throw little light on the supply of lime although the numerous contracts in the ~~1490's~~ ^{1690's} and a few entries show that by that date the masons were generally responsible for supplying lime. ^{49.}

The cost of obtaining lime in a Worcestershire village early in the century is illustrated by the accounts from the Order Book of Hartlebury School. ^{50.} From 1600-1620 lime was costing 1-4d. to 1-11 per barrel and 6d. and 7d. per strike. This was without the cartage charges and the prices are about the same as those for Coventry and Stratford. The lime was fetched from Worcester, and in 1601 the clerk who wrote the order book had to journey to Worcester to arrange for the supply "my charges at Worcester wh' I bought the lime 4d. "

48. See table. III

49. Warwick Ch. Accts.

Warwick Order Book.

50.

In that year the cost of bringing the lime from Worcester to Hartlebury was 7½d. per barrel. It was about the same cost to bring 100 of Worcester tile to Hartlebury and both commodity would come by the same route. The cartage cost would include loading lime into boats at Worcester, cartage by a water carrier from thence to Redstone ferry and from the ferry to Hartlebury by the village carrier^{51.} Almost 47% of the cost of lime at Hartlebury was used up in cartage charges. The price of lime does not vary much from place to place. The general trend is for a slight decrease in price as the century progresses. Before 1650 lime commonly cost 4-0d. and 4-8d. per quarter, and after 1680 2-10d. and 3-4d. The other general tendering^{ney} is that towns as well as villages had to seek for lime from distant places. It is probable as Marshal remarks of a later period that important lime kilns^{52.} were to be found near to important rivers such as the Severn.

In preparing mortar the builder used methods which still hold to-day. The sand was passed through riddles and sieves.

51. Hartlebury Grammar School Order Book pp. 15, 43.

52. 'Rural Economy in Gloucestershire'.

It is probable that they often made use of one large sieve or screen such as is used at the present time. Gerbier and Moxon gave instructions about mixing the mortar well. Sometimes the masons made themselves special mortar. This particularly applied to masons who worked on steeples. This special mortar included a number of commodities including wort and the white of eggs. It was used on some of the steeples at Coventry. Poole in his history of the town wrote many will be puzzled at such ingredients as "four strike of malt" besides "six gallons of ^{wort} more" together with eight shillings and fourpence worth of eggs and a lot of oyster shells, for the repairing of the steeple. These requirements however, afford a singular proof of the care, and the great regard for the durability of material and workmanship in this undertaking. Lime of the best quality was used for the making of the mortar, which was tempered with sweet-wort, whites of eggs, and size, instead of water. Whether the oyster shells were calcined or were inserted in the joints of the stonework, where it was open, it is difficult to decide; but the slates were undoubtedly used for that purpose of which sufficient widence still appears on examination.

^{53.}
of the steeple. Tempering of mortar in this way seems to have been a common practice and not one only known to the skilled mason of the town. The entries in the churchwardens accounts for the village of Northfield show similar preparations being made.

1622, Roger Best for wort to mortar 0-9.

Item for Eggs to temp mortar I-8.

Item laid out for Eggs to temp. mortar^{54.}0-4.

Moxon when writing his pamphlets on the different crafts has instructions for making hot and cold cement, and the ingredients of his cold cement include the whites of eggs.

"To make the cold cement! "

"Take $\frac{1}{2}$ a pound of old Cheshire-Cheese, pair of the Rine, and throw it away, cut or grate the cheese very small, and put it into a Pot, put it about a Pint of cows-milk, let it stand all night, the next morning get the whites of 12 or 14 eggs, then take $\frac{1}{2}$ a pound of the best Unslaked or Quick lime that you can get, and beat it to Powder in a Morter, then sift it through a fine hair Sieve into a Tray or Bole of Wood, or into an Earthern Dish, to which put the cheese and milk and stir them well together with a Trowel, or such like thing, breaking the knobs of Cheese, if

53. History & Antiquities of Coventry. Poole (1870 edit.) p.106.

54. Northfield. C.W. Accts.

there be any, then add the Whites of the Eggs and Temper all well together, and so use it; this Cement will be a White Colour, but if you would have it the Colour of Brick, put into it either some very fine Brick Dust or Almigam, not too much, but only ^{55.} just to colour it".

Even if its strangeness is overlooked such a way of making mortar shows that for special work the mason still thought of himself as a skilled craftsman and took great pains to find the best mortar or cement.

Moxon makes mention as well of the use of sea shells for lime. "But the shells of Fish, as of Cockles, Oysters & ^{56.} are good to burn for lime". So it is probable that the shells used in the steeple at Coventry were calcined and used as lime.

~~55. Mechanick Exercises. Moxon. (1703 Edit.) p.286.~~

~~56. " " " " " " " p.287.~~

Bricks and tile were commonly used at all places studied. Stratford was a centre of timber framed buildings, but even there bricks were used for part of the buildings, and in the latter part of the century entire buildings were constructed of brick. In the wood and plastic houses the chimneys and kilns - many houses had malt kilns - were made of stone or brick. The carpenter corporation passed bye-laws to ensure that these safety precautions should be taken. Accordingly the Stratford entries detail the purchases

55. Mechanick Exercises Moxon (1703 Edit) p.286.

56. " " " " " " p.287.

of small quantities of bricks. The Stratford prices were considerably higher than those of Hartlebury. Bricks were about 3^s-0^d per hundred at Stratford and at Hartlebury 1^s-6^d. For tiles the Stratford builders again paid higher price. The Stratford prices ranged around 2^s..4^d per hundred and £1-1^s-0 per thousand, while the prices at Hartlebury were 1^s-4^d and 16^s..8^d per thousand.⁵⁷ The differences in price may be partly due to cartage, but it was not wholly due to that cause. For the price of bricks did not vary whether they came from Clopton or Warwick, or the price of Warwick tiles from those at Lapworth. In one bill the price of bricks at the kiln was definitely stated. Though Hartlebury builders had to pay for cartage of bricks by water from Worcester they had cheaper supplies than those available for the Stratford area. It is possible that larger brickworks were situated in the Severn and Stratford had to draw on smaller works.

57 See Table IX

The elucidation of the actual wages paid to all artizans and labourers during the seventeenth century is complicated by the control exercised by the state and the fact that few employers and work people were linked solely by a cash-nexus bond.

The state control of wages depended for its effectiveness upon the action taken by the Quarter Sessions of the County. But the effect of this control can in part be determined by evidence showing the actual wages paid and the measures taken by the Quarter Sessions. Indeed the whole import of the legislation has been questioned-- was the object of the assessments to fix a bottom to wages or a ceiling above which they should not use. During the seventeenth century, at least, the intention was to fix a level beyond which prices should not rise. The ^{local} ~~weal~~ justices would certainly be more than willing to take this view when they met to formulate the assessment. An exception to this general intention seems to have been made under the Commonwealth for during that period the workers received the benefit of more generous wage scales.

Fortunately two assessments for Derbyshire and two for Warwickshire between them cover a great part of the century. The two earlier ones are for Derbyshire being for the years 1634 and 1648 and the Warwickshire assessments are for 1657 and 1684.¹ The assessments for 1634, 1648 and 1684, are very detailed. The first Derbyshire assessment of Easter 1634 mentions as artizans, master carpenters, free masons, plumbers, glaziers, joiners--all these apparently being master workmen of their respective trades. These were to receive 1-0d. per day as also were bricklayers, tilers, slaters, free-masons and plasterers who were not master-workmen. In the Derbyshire assessment for Easter 1648 the same classes of workmen are mentioned and all are still receiving equal pay though by this time it has risen to 1-4d. This helps to substantiate the view that higher wages were projected in the assessment under the Commonwealth. But there is a decrease in wages according to the Warwickshire assessment of 1657. Here not much detail is given but it is laid down that carpenters, masons and tilers --not to exceed at any time of the year 1-0d. During the last years of the Commonwealth wages were receding towards the old levels. This time it definitely states that

1. See App.I

wages were not to exceed the rate of pay laid down in the assessment . This assessment differs again from the others three in that no differentiation is made between winter and summer rates of pay. It maintains that at no time of the year were these workmen to receive more than I-0d. a day.

In the other assessments summer pay was earned from Lady Day(Lent) until Michaelmas day. From Michaelmas until next March artizans only received winter pay which was usually Id. per day less. In actual fact their wages would be even more reduced owing to the decreased number of working hours in the winter months. This Id. decrease in the state controlled wage is made in the assessments of I634, I648 and I684.^{2.}

The remaining Warwickshire assessment follows those of Derbyshire not only in giving these different rates of pay but in detailing the work of many craftsmen.^{3.} This I684 scale allows I-4d. per day to be paid to the free mason and I-0d. to the master brick-mason, the master bricklayer, and the tiler, plasterer and shingler. The master carpenter and the master thatcher are only allowed I-0d. and the master plasterer, although one plasterer already

2. See App.I

3. See App.I

named was to receive 1-0d. - was to have 8d. Money wages rose gradually during the seventeenth century. Yet this 1684 scale does not allow wages as high as those sanctioned for Derbyshire in 1648. In 1648 all the artificers named were entitled to 1-4d. per day and now it is only given as the wage of the free-mason, all the others receiving less.

But before comparing the assessed wages with the wages actually obtained in different towns and villages, two details of the wages scales may be noted. In three of the assessments alternative wages are given,---a full wage in money or a smaller remuneration coupled with the meat and drink. This seems to indicate that many artificers fell into the same category as farm labourers and received part of their wages in board if not in lodging as well. But this method of payment does not seem to have been very prevalent in the midland area. No case examined shows a workman being paid in this way. Although in the building of a private residence Hanley ^{Court} ~~Castle~~ in the eighteenth century, workmen are frequently receiving veal in place of money payments⁴. During the seventeenth century in the more inaccessible part of England workmen were receiving meat and drink and small remunerations. Many of the workmen

4. Hagley Collection. - Newport Ledger B. pp. 73, 79.

engaged in the building of a house for the Shuttleworht's at Clitheroe in Lancashire were thus paid.^{5.} Accordingly it seems that this method of payment was not unknown for building artizans.

A further indication of the status of members of the building trades is given in the 1684 assessment.^{6.} The bricklayer and brick-mason have found a place alongside the free-mason, and the mention of a brick mason and a master brick-layer suggests that there were craftsmen for brickwork as there were for stone work. Again it may be no mere accident that plumbers and glaziers were omitted from this detailed list. Plumbers and glaziers in several towns are found making cantracts and supplying material for the work. Perhaps they were not so clearly included in the class of mere wage-earners as the tilers and plasterers.

The wages of masons are frequently cited in the building accounts which have been examined, and form a good basis for comparing actual with assessed wages. A good series is available for the masons who were at work on the walls of Coventry between the years 1600 and 1640.^{7.} A short table of some of the wages paid shows clearly that they were well above the

7. Stewards Accounts. Gawthorpe VolIV p.127. VolV p.160.

A great number of workmen and masons were receiving meals as part of their wages, while those having a higher wage are usually entered as being 'upon their own table' or 'upon their own charges'.

6. See App.II

7. Derived from Coventry C.H. Accts.

Derbyshire assessment of 1634 and approaching the level of the 1648 scale.

<u>COVENTRY.</u>	I602	I603	I611	I621	I625	I640.
	s-d.	s-d.	s-d.	s-d.	s-d.	s-d.
	I-0.	I-0.	1-2.	I-4.	I-4.	I-3.
		I-3.	I-0.	I-2.	I-2.	I-0.
				I-0.	I-0.	

the shilling a day level was already being exceeded in 1603 and in 1621 and 1625 several masons were being paid at the rate of I-4d. per day. These high wages at Coventry were probably due to Coventry being such an important town. At other places the mason's wage seems to have approximated more nearly to the I-0d. level. Scattered entries exist for Stratford, Hartlebury, Northfield and Droitwich.⁸ At the first three places there are only records of I-0d. a day wages being paid. But at Droitwich wages of I-0d., I-2d. and I-4d. were paid to masons. In these early years of the century wages were sometimes exceeding the state controlled rate of pay.

From 1640 to 1680 the evidence of the wages paid to masons comes chiefly from the Stratford entries with an

8. Derived from Hartlebury Sch. Governors Order Bk.
 Northfield C.W. Accts.
 Droitwich C.H. Accts.

additional five entires from Hartlebury. At Hartlebury wages of I-0d. were being paid in I649 and of I-3d. in I650. The Stratford series stretches from I666 to I680.

<u>STRATFORD.</u>	I666.	I667.	I668.	I669.	I670.	I673.	I676.
	s-d.	s-d.	s-d.	s-d.	s-d.	s-d.	s-d.
	I-4.	I-4.	I-4(4)	I-4.	I-6(2)	I-2.	I-2(2).
					I-7.	I-4(2)	
					I-4.		

I-4d. day was the predominant wage at Stratford and a wage of a much as I-3d. had been paid at Hartlebury in I650. The level of wages during this period being close to the Derbyshire assessment of I648. The predominant wage at Stratford was identical with the wage laid down in this I648 scale. The attempt of the Warwickshire Quarter Sessions in I657 to fix the wage at I-0d.a day does not seem to have had much effect on actual wages. At Stratford the masons continued to receive I-4d. per day and in I670 payments of I-6d. and I-7d. were made.

For the last period I680 to I700 a few entries are available from both Stratford and Northfield.

<u>STRATFORD.</u>	I680.	I685.	I687.
	s-d.	s-d.	s-d.
	I-4.	I-4.	I-4(3)
<u>NORTHFIELD.</u>	I681.	I687.	I695.
	s-d.	s-d.	s-d.
	I-6.	I-4.	2-0.
		I-0.	

If the mason who received these wages all came within the class of free-masons as envisaged by the I684 assessment, then the scale given for that year corresponded with the payments which were made. Since all Masons with the exception of brick masons seem to have been included in the term free-masons, this would be correct. But again wages tended to rise above the state controlled rate at least if the Worcestershire and Warwickshire rates were the same, for in I681 I-6d. and in I695 2-0d. a day was being paid at Northfield.

The mason's wage seems to have risen slightly during this century. Excluding Coventry the predominant wage of the mason I600 to I625 was I-0d. a day $\frac{1}{2}$. During the next twenty years it was somewhat near the I-2d. level. From about I660 I-4d. was a common rate of pay and by the end of the century I-6d, I-7d. and occasionally 2-0d. were being paid. In Coventry

figures are only available for the first forty years and they appear to be rather higher than the wages paid at the other places studied and were in fact almost on a level with the pay of the Stratford masons from 1666-1687.

The four assessments do not appear to have been effectively enforced. The 1648 scale above seems to correspond with the actual condition in the labour market, and wages were sometimes paid higher than those fixed in that scale. The assessments of 1634 and 1657 seem to have marked out the lowest wages which were being paid even although the justices may have wished to see their schedule used for fixing the maximum wage. And the 1657 scale was an attempt to fix wages at a ridiculously low level. The scale for 1684 looks more in keeping with the normal conditions which prevailed at least for free masons. Fortunately a series of payments to carpenters at Stratford enable a new test to be applied to this scale.

The Stratford carpenters appear to be paid at the same rate as the masons of that town. It seems probable

that masons and carpenters both being general builders would receive equal wages. In addition there is a record of a tiler at Stratford receiving I-6d. per day in I675. The I684 scale in which most of the building workers other than the free-mason are credited with I-0d. a day wage seems as far removed from reality as the scale for I657.

This varying divergence between assessed and actual wages makes it look as though the Quarter Sessions ^{was} as content with good intentions. This is hardly correct, for belated attempts were made to enforce the assessed wages. At Stratford in I608 a carpenter was brought before the court of Quarter Sessions because he had repeatedly refused to work for the legal wage of I-0d. per day. ^{10.} Another carpenter working at Hatton had been unable to obtain his wages for the work on a house. He brought his case before the Warwickshire Quarter Sessions and the Court ordered full payment to be made to him, and it was pleased to add ^{u.} that he had been working for his legal wage. The justices must have moved in an atmosphere in which the assessed wage was treated as normal, and in some cases they enforced recalcitrant workmen to receive this assessed wage. .

10. 'to wit he doth take 10^d by the day and will not work for less

Stratford - Misc. Doc. Vol XII No. 98.

11. W. Q. S Order Bk. Vol IV pp. 4, 5.

At Coventry wage series exist for the bands of masons who were employed on work for the town council.^{12.} It is possible to gauge whether masons were placed in distinct classes by graded wages. At Coventry many examples occur of one or two masons working with a few labourers and of teams of 2 to 9 masons working together. It may be taken for granted that all these masons were master masons, but it is important to discover if a master mason in charge of operations regularly received higher rates of pay.

Groups ranging from 2 to 9 masons with a number of workmen were employed for about 40 weeks on the Coventry walls. Yet during 22 of these weeks two or more masons were earning the highest rates of pay. In these weeks no chief mason was receiving pay superior to that of his fellows. Control over the work was exercised by a chief mason, for week after week the names appear in the same order, and some general bills for a complete repair were made out in the name of such an individual. At times the mason in charge has assumed the role of a mason contractor

^{12.} From Coventry C.H. Accts.

13.

for it appears that he provided some of the material. But such few variations in the wage scale suggest that all master masons expected and did obtain the same wages. When a man was in charge of the work he does not necessarily seem to have gained a higher wage for his responsibilities, not even when he was a contractor as well. Though no graduation in wages between master masons was generally apparent, slight changes of pay do sometimes appear. In 1625 for a repair lasting 5 weeks where 3 masons and 3 labourers were employed, John Sargerson the chief mason was receiving the highest rate of pay. John Sargerson was receiving 1-4d. a day, William Ward 1-2d. and Richard Lewis 1-0d. Here there seems to be a marked variation for the same payments were made each week. But ^{these} ~~here~~ the high wages may have been due to bargaining power and not extra skill or additional responsibilities. For in 1621 Ward and Sargerson had been engaged together on a repair and had received equal wages. Perhaps Sargerson acting at times as a contractor and being more frequently in charge of groups of masons, was able

13. See Chap on Organisation

to hold out for a higher wage when his fellow worker had to be content with less.

Another change in the wages paid to a mason which was probably due to the extra responsibilities attached to work of the chief mason occurred in 1615 . The mason John Bend had been paid at the rate of 1-0d. a day and when for one week he was in charge of a group of masons he was paid 1-2d. But later working at another repair at which he was the sole mason his pay was 1-0d. a day.

The chief mason by virtue of his position occasionally gained a higher wage, but bargaining power was the strongest force making for variations in rates of pay. Variations due either to the possession of the office of chief mason or to joining a band of masons after working alone do not seem general. Of nine Coventry masons, for whom there are several entries, five at various times suffered decreases of payments. These decreases (a matter of 2d. or 3d.) did not depend on any difference in working conditions. They occurred when masons continued to work with their own repair groups. They occurred when a mason had been

employed over a long period to do work single handed with the help of one or two labourers.

At Stratford in the ^{second} 2nd. half of the century bargaining power again seems to be the chief force making for variations in wages.^{14.} From 1668 to 1687 the wages of nine masons form the basis of the Stratford scale. 1-4d. per day is the normal wage and there does not appear to be a constant higher rate of pay fixed for any individual. The highest wages recorded were 1-6d. a day to the two Richard Darkes elder and junior in 1670, and it is the younger Darkes' wages which fluctuate most. Working on Clopton Bridge at Stratford in 1675 he was paid wages of 1-2d. 11d. and 1-2d. These changes may have been due to the different types of work done, ~~or the~~ or the number of hours worked, but it was more probably due to the money that he was unable to command. Or even allowing different grades of work to account for the changes of 1675, the drop from 1-6d. in 1660 to 1-2d. in 1675 seems certainly to have been caused by bargaining over the wage. Other masons were receiving 1-4d. and Richard Darke who had earned 1-6d. would have no other reason for working for a sub-normal wage.

^{14.} Stratford C.H. Accts.

It is not surprising that bargaining should have played an important part in deciding the mason's wage. The stated controlled wage was not effective and so each mason was left to his own devices to secure as good a wage as possible. The employer would wish to make the best bargain with each mason because of the conditions under which they worked. The disciplined labour of modern times was then unknown. The masons worked very long hours and would no doubt be as unused and as willing to adopt intensive working conditions as the agricultural worker. Masons doing the same work on a repair would be engaged at different rates of pay, and by objecting to their lot as the work progressed they probably would be able to increase their wage. It was a wasteful system but both masons and employers would no doubt hope to profit from it.

The responsibility of extra payments due to additional hours worked is almost fantastic in days when the hours of work were so phenomenally long. ~~(Assessment & comments)~~ Yet a Coventry mason in 1637 was earning 1-4 or 5 days, and a note in the account states that he earned this wage by working till 8 o'clock each night

~~15. See App.~~

In 1640 he was probably working the normal day and was only receiving 1-3d.

Increasing rates of pay made to men who started as labourers and became masons are also seen in the Coventry accounts. The increase in the wages of these masons is noticeable, and ~~two~~^{one} of them rose from the ranks of the general labourers.

<u>COVENTRY.</u>	July 1621.	Aug. 1621.	1633.	1637.
John Eburne,	9d.	7d.	s 1-0d.	1-2d.

In 1621 Eburne was a member of a band of six masons and eight labourers engaged in repainting the city walls. The labourers were employed at different rates of pay. Five were labourers receiving 9d. & 8d. and one 10d., and Eburne was one of the more fortunate receiving 9d. In August the working party consisted of two masons and three labourers. The three labourers this time were all being paid 7d. Eburne's name does not appear till 1633. On this occasion 7 masons were employed on the wall. Six of them were earning 1/2d. a day, but Eburne only 1-0d. In 1637 Eburne was again working with a group of masons, but was still denied the highest rate of pay. Three masons and one

labourer were working on the repair, and the two masons had 1-4d. a day and Eburne 1-2d. But he had successfully emerged from the labouring class and was now among the masons.

The third was Thomas Sargerson, later an important mason -contractor of Coventry. His first recorded wage was 1-0d. in 1619 but by 1622 he was earning 1-2d. along with the majority of his fellow masons.

It was Thomas Sargerson ~~who~~ was one of the masons who had a special high wage for work on a spire^s. ^{16. In 1694 the} He and Cottons contracted to do the repair at 5-0d. a day. ^{17.} This was an extraordinary high wage. Another high wage ⁴5-4d. a day was paid to the mason Samuel Blisse for work to a spire in 1652. 1652 "To Sam Blisse Steeple pointing^{er} for 69 days at ^{iii s} ^{iv d} p^o diem xij xs" and 69 days for his son at ^{xii d} p^o diem ^{iiij s} ix s ". The masons who worked on the spiers at Coventry seemed to belong to a most favoured class.

The wages of the masons were calculated on a daily basis but the frequency with which payments were made to them is a different matter. For some repairs masons were fortunate and for a repair of 3 or 4 days they received immediate payment when it was completed.

16. History & Antiquities of Coventry. - Sharp. p.63.

17. History & Antiquities of Coventry. - Poole (1870 editⁿ) "each to receive five shillings per day, and undertaking to doe the saide worke well, and to make honest tolerable dayes worke for the saide worke."

18. Op. cit. Sharp. p.110.

For work on the larger repairs at Coventry payments were made at varying intervals. Payments were made at the fortnight and at the end of the month. There was perhaps a slight tending at Coventry for fortnightly payments to be the most common. Certainly on the larger building operations such as the rebuilding of Bolso~~m~~^{ver} Castle payments by the fortnight were the general rules.^{19.} At Stratford payments were made weekly and fortnightly. In Droitwich at the building of the market house payments were made by the week. At smaller places, Hartlebury, Northfield and Knowle the payments were made usually weekly or fortnightly.

In the towns one exception to this rule was the payments made to Francis pavers. perhaps because of the constant need of their work they often received their money at the quarter day. Further both in towns and villages there are quite a number of occasions when masons receive payment for work covering 60, 90, or 150 days. Some may be discounted as mere conveniency on the part of the writer of the account. The masons would then have received their money in smaller amounts. But there seems to be quite a tendency to delay payments to masons. This perhaps was another ? on the part of

19. Bolsover Accounts. Knoop & Jones.

employers who could **not have** strict control over their workmen to keep them working at a steady rate with less wastage of time. The mason tended to have performed part of a task on credit and to be without means of securing payment until he had done more work, and even then he may not have been paid for all that he had done before the time of payment.

The pavers instead of being paid by the quarter were sometimes paid by a piece-rate. They were paid by this method in the early part of the century at Coventry. At Worcester and Stratford throughout the century the pavers were frequently paid by a piece rate. In 1638 at Stratford the wage of the paver was 1d. per foot and in 1686 John Cowper was doing paving work at 2¹/₂d. per foot.^{20.} This paving work was a class apart, and piece-rate wages were paid to masons working at other jobs.

Highly skilled masons were always paid by piece-rate, but the work and pay which they received^{are} closely related to the contracts undertaken by masons and may be more conveniently left to that section. But one type of work for which masons were habitually receiving piece rate wages was that of hewing stone in the quarries. At Coventry and Stratford masons were paid for having loads of stone at the quarries. The other method at Coventry was

20. Stratford C.H. Accts.

to be paid for getting stone at so much a foot. Droitwich and at the smaller places the practice seems to have still held good. Even in the large building operations as at Bolsover, it is noticeable that masons were frequently paid for having stone according to a foot measurement or by loads.

ORGANISATION.

The masons of the thriving seventeenth century town of Coventry who had many types of work to perform should well illustrate the conditions under which many provincial masons worked. Since masons are found working in teams and working alone, an opportunity is given to discover whether the leaders of these teams were normally in a superior position to their fellow workmen and whether these masons who worked together were better paid and of a better standing than those who worked alone. The materials were supplied partly by merchants and other dealers and partly by the workmen. The transport may have been performed by independent carriers, merchants or masons. In all these matters the Chamberlains' Accounts provide many clues. The Coventry accounts reveal many details and the conditions existed there may be easily tested by the lot of masons at Stratford and Warwick, and in the villages of Knowle, Northfield and Hartlebury.

The work and responsibilities which mason and carpenter were willing to undertake is revealed even more by a perusal of building contracts, but the contents of such contracts

will be deferred to the next section.

On the walls of Coventry masons are found working alone and in teams. For most of the repairs the labour force consisted of two or three masons along with five or six labourers. At less frequent intervals larger bands still were employed and the numbers ranged from six to nine masons and from nine to eleven labourers. These larger bands of men were at work on the walls in 1611, 1621, 1625, and 1633.

The Coventry mason John Band did a large amount of work helped only by one or two labourers. In 1615 he laboured at the wall for about fifteen weeks. During ten of those weeks he assistants were two labourers and his wife, for one week two labourers, and for one week his wife and three labourers. Band seems to belong to the poorer artisan class. It was not uncommon for the wives of poorer workmen to work with them. They did not work of servers, mixed mortar and unloaded material from carts. Instances at Stratford include a mason and his wife at work, a thatcher at work in the wife and several women labourers, and a tiler who ^{was} assisted by his wife, his mother and his son. At Coventry itself at one

1. Coventry Ch. Accts.

2. Stratford Ch. Accts. 1611.

repair fourteen women were employed at once in carrying
 gravel to a causeway.^{3.}

John Band in the same year is seen continuing his work as a lone mason, but in these other repairs he was not assisted by his wife. He repaired two sluices at Coventry, the one at Bastill the other at Whitefriar Mill and he still had only a meagre labour force. But the Band did not always work alone and a few years previously he had been in charge of a band of masons when six and eight masons had been working together.^{4.}

As already noticed in this^e section on wages Band received I-2d. when in charge of the masons and I-0d. when he was a member of the group. And when he was working alone in 1615 his wage did not decrease he still received I-0d. a day. Band's experience suggests that in all three types of work as a leader of masons, as a mason in a large group and as a single worker there was little to pick and choose and the status of a mason was little affected by the type of work on which he was engaged.

^{Since}
~~Then~~ there is evidence that Thomas Sargenson and William Briscoe, important Coventry masons who undertook considerable contract work also worked at times unaided by fellow masons on repairs it is even more certain that a mason did not belong to

3. Coventry Ch. Accts. 1615.

4. " " " " 1611.

an inferior class of workman when he worked alone.

If masons were as free and as willing to work alone as they were to work in groups it is not surprising that they should work in loose association when they were banded together. The Coventry masons as workmen in a large town, were no doubt more used to working in groups than the workmen of smaller towns such as Stratford. The accounts of the two towns seem to suggest that the Coventry masons were more accustomed to work in groups. In the accounts at Coventry for the larger repairs the list of masons' names appear over and over again in the same order, and the list of labourers' names follow. While at Stratford the masons' names are not put down regularly in the same order and the name of each mason is followed by an entry of work done by his labourer or by his two labourers. Since at Coventry work done by groups of masons seems more common it is worth while to see if any special mark or dignity was attached to the work of the chief mason who was made responsible for the whole undertaking. That such a position of importance was recognised is made clear by the names of masons appearing in a definite order and by the bill for the

S. Coventry Ch. Accts.

repair sometimes being made out in the name of the chief mason. Band had had an increase in wages when he held that position, but it was by no means an invariable rule for a chief mason to be paid a higher wage than his fellow-workmen. As noticed in the section on wages in **almost** half of the recorded weeks worked by masons in teams the chief mason did not receive a higher wage.^{b.} The changes in personnel suggest little differences between the chief mason and his fellows. Of the twenty eight masons named in the Coventry accounts for the first half of the century ten of them were at various times the heads of the repair forces.

The difference in status between the lone worker at Coventry and a chief mason seems very slight. But among these men were to be found such poor artizans as John Band who had his wife working with him and Thomas Sargenson a wealthy mason contractor. As skilled masons each would obtain approximately the same wage. The difference between them would come in the varying success of the small businesses which they were able to build up.

The size of their businesses and the responsibilities which a mason was able to undertake are sometimes indicated by

b. See Chapoy pages.

the bills forming part of the Coventry Chamberlains' Accounts.

"The charges about the towne wall in the well streete the

13 of June 1602 for 60 fote of creste for the *f* poynt wall

at 6d. a fote 0- 30- 0.

ti
for 27 fote of Ashlar stone at 0- 6,-8.

for a mantletree stone to set at the upper stepp in

hill street 0- 2- 0.

"paid to John *S*ergenson for 7 dayes 0-7-6

paid to goodman Redwood for 5 dayes 0-5-6

paid to Thomas Nynd for 7 dayes 0-6-3

paid to Thomas hudson for 9 dayes 0-5-6

paid to John Elliot for 6 dayes 0-3-6

paid to Thomas Tell for a daye 0-0-5

paid to Thamas Marshall for 3 dayes 0-0-2I

paid for 3 dayes carriage 0-7-6

for 2 lode of Sand 0-0-8

fer 2 quarter of walsall lyme 0-8-0

for a lode of fylling stone 0-0-3.

li
for 2 Cramps of Iron & 2 of leade 0-0-7

67

Sum 4 6^t Agreed w^t h Sergenson

to abate 6 so rest paid is iii ti "

This repair bill of £4 was settled between John Sergenson (his name is usually given as Sargenson) and the Chamberlains

If it was not for the concluding statement, there would be no evidence that all the charges formed the bill of the chief mason. It was an important repair and three masons and three labourers had been employed. Sargenson may have paid the other two masons and the three labourers before being paid himself or all may have had to wait for the corporation to pay the bill before they received their wages. But the number of items on the bill seem to show that Sargenson must have had to lay out some money on the repair work before he was paid by the corporation. The stone cost him £1-16-8 and would have to be shared between Sargenson and the masons and labourers named in the bill, who probably had quarried it at Whitley Common. He had to pay 2-6d. a day for the cartage of the stone. This was the usual for the use

of one team for a day. In addition Sargenson supplied the sand, Walsall lime, iron cramps and lead. It seems likely that Sargenson had to engage a carrier and his team to work for him, and make payments to a lime man and smith for supplies needed for the repair.

A similar bill was paid by Sargenson in 1603.

ffirst for 3 lode & ten foote of ashler stonne	0-6-4.
For 30 foote of paving ston:	0-2-9.
for foote of Steppe at 2d the foote	0-16-8
for 67 foote of poynt ston for the wall	0-22-4
for 30 strike of lyme	0-15-0
to <u>killing boy</u> for Carriage 4 dayes	0-10-0
paid to John Dargenson for 4 dayes worke	0- 4-0
paid to Thomas Todd for 4 days	0-3-4
paid to Thomas Nynd for 4 dayes	0-3-4
paid to Thomas hudson for 4 dayes	0-0-18
paid to John Higginson for 6 dayes	0-3-0
paid to Richard Collyns for 6 dayes	0-3-0
paid to John Sergenson for 2 dayes	0-2-6

paid to Thomas Todd for 2 dayes	0-0-20
paid to Thomas higginson more	0-0-12
paid to hudson for 2 dayes	0-12
paid to John higginson for 2 dayes	0-0-12
paid to Richard Collyns for 2 dayes di	0-0-15
paid for 30 ^{ti} foote of paving ston more	0-4-6
paid for 12 foote of poynt stone	0-4-0
paid for 12 foote Steppe more of Joshua	
tatum from the free scole	0-3-0
for other worke	0-5-0

Sum is 5^{ti} 12s 2d abated 2s 2d

So the Sum is 5^{ti} 10^{ti}

Sargenson's name is not given at the end of the bill, but it would undoubtedly be paid by him for his name appears twice at the head of the lists of masons. At first he was earning 1-0d. a day and later for two days 1-3d. The other two masons had 10d. a day and the four labourers 6d. The stone would again be quarried by Sargenson and the other masons, though this time additional supplies were obtained from other sources.

"paid for 12 foote Steppe more of Joshua tatum from the free scole 0-3-0.

The cost of all the stone supplied amounted to about £3.

Sargenson arranged for the carriage and it kept one team at work for four days. The entry "to Killing **boy** for Carriage 4 dayes 0-10-0" shows that the team must have belonged to Killingley the carter who is frequently mentioned in the accounts. Killingley must have been used to working for Sargenson and other Coventry masons, for the same masons who hewed and dressed the stone at the quarry were the workmen who built with it. It is probable that on some occasions as here Killingley was paid by Sargenson, who was reimbursed later by the corporation. But Killingley would be in a scarcely inferior position to Sargenson and the other masons and would no doubt have occasion to send in his own bills for cartage charges to the corporation.

Several times in Sargenson's bills other material besides stone were supplied. In the I602 and I603 bills lime was supplied and in the I602 bill and also one for I604 lead and iron.^q He does not appear to have had stocks of these commodities but he bought in supplies from the lime man and smith just as the corporation might have done for themselves.'

q. Ch. Accts.

Indeed once he was paid for journeying to Stretton under Fosse to fetch the lime.^{10.}

William Allen a mason submitted several bills to the Chamberlains^{11.} and his charges included workmanship and materials.

In 1623 he was paid £4-2-II for workmanship done by himself and others and for stone and lime. He did much paving work and was paid 56s-4d in 1623 for repaving Gosford Green Causeway with pebbles. And in 1625 there were several bills for paving. Allen was not the only mason who did paving work and supplied the materials, for most of the masons seem to have done so. Of course it is not surprising they bought the stone for they would probably hew it at the quarry. But it is more surprising that they provided lime for most masons would have to secure their supplies for the repair which they had in hand from outside sources.

by others

The provision of lime, lead and iron,¹² and the need to arrange for the cartage of his stone from the quarry to the site showed that he was not usually in a position to supply all his material and equipment. The mason's business concern

10. Coventry Ch. Accts. 1621.

11. .. Acct. Bk. (A.22.) 1623, 24, 25.

was in most cases of small proportions. Bills show carpenters supplying scaffolding and barrows for masons and the carpenters at times appear to have been paid by the corporation and not by the builder.

*In I6II 30s-8d. was paid to masons and I6s to labourers for a repair upon the walls. Later entries contain payments to Packwood for work done for the masons.

"paid Thomas Packwood and his man for makinge

X Barrowes and hods and boxes for merter and Carrioles

one I2d. a peec^e 2 - 0.

paid to Bradshaw for one day w^th them 0 - 10.

paid for nayles to them 0 - 16.

paid for herringe barrells to make 2 boriolcs

0 - 20.

in this repair Packwood was paid separately by the corporation, at least it appears to be a separate bill in the accounts. A carpenter was working at times with the mason John Band in I6I5 when he was engaged on a thirteen week repair job with one or two labourers and his wife. The payments to John Blunt the carpenter appeared in the last week of this repair.

12. Coventry Ch. Accts, 1611.

13. " " " 1615.

"It. paid for a dayes worke to John Blunt, for makinge the
Masons Scaffold and helpinge to draw upp greate stones to
the wall I2d

It paid to John Blunt for a peece of Tymber, that was
stolne from the wall I6d

It. paid for usinge his Tymber and breakingetwo plank 2-0.

Blunt erected the scaffolding and provided all
the timber for it, but the position of these entries in the
accounts does not make it clear whether the corporation or
Band payed Blunt. At all events he had to wait till the
repair was finished before any payments were made to him.
In 1625 when three masons were at work on a repair to the wall
for three weeks there is just one entry for scaffolding.

"paid for hireing of poles & planckes to make a
scaffold 3s".

It seems that this was a charge paid by the masons
themselves.

The carpenters seem to work along with the masons
rather than for them. When carpenters, plumbers, smiths and
masons were engeged on repairing the gates of Coventry it seems

likely that each craftsman was paid by the corporation^{14.}
 though their expences may appear on a single bill.

^{some}
 In ~~most of the~~ bills all the craftsmens' charges are
 in a general account in the Chamberlains' Books if not in a
 general bill. For the repair of the Newgate Tower in 1611,
 and of Bablack Tower in 1627, the plumbers' charges were placed
 with the others.^{14.} But Bartholomew Bewley at work on the Town Walls
 in 1652 and on the Newgate and Gosford Towers sent in separate
 bills on both occasions.^{14.} The plumbers, carpenters and possibly
 the tilers were heads of small businesses, and like the masons
 provided their own materials. The instances in which a mason
 carpenter or plumber had men of other trades working in his
 pay are much fewer. They are limited to the more wealthy
 craftsmen who were able to undertake large building contracts.

The evidence of the Coventry accounts on these points,

^{14.} See ~~Tables~~ App. II

is not as clear as it might be because the manner of compilation of bills in the final accounts for the year is not known. Some bills are definitely those of a single workman as are some which are attributed to John Sargenson. Other bills for large repairs which contain work done by several craftsmen may be general bills or the full accounts of an overseer. If they are general bills it points to small masters working in loose association and submitting a general bill to the corporation in the hope that its more substantial nature will cause its more immediate payment.

But there seems a tendency for these general or composite bills to be the compilations of an overseer. The corporation would appoint an overseer to look over the repair work and he and a colleague would also act as a treasurer. This general bill of an overseer might be composed of the separate bills handed in by the workmen. Both possibilities show the men of the building trades loosely banded together. Further the accounts made up by the overseer and the fact that a mason was at times employed in such an office show one device which enabled a mason and a member of another trade to assume leadership over men who occupied the position of small masters rather than wage dependent workmen.

The Coventry masons were their own hewers of stone at the quarry. The stone was squared and dressed at the quarries,

before it was transported to the site. The price of stone given in the bills of John Sargenson is the price at the quarry and the carriage of it comes as a later entry in the account. The bills of John and Thomas Sargenson and of William Briscoe show these masons responsible for supplies of stone.

I627 To Thomas Sargenson for 112 foote of ston
and crest at 2d. the foote 18 - 8 .

I627 To William Briscoe for 40 foote of
15.
Coping ston at 3d. the foote

Coventry masons are seen working at the Whitley quarries and their work at the monastic houses of the town has been noted earlier.

I613 "It to Higginson for 6^{x x} foote of ston
at 2d. the foote 12 - 0d.
Killingley day and half carriag at 2 : 6d. "

When two of them worked at the quarry and at building operations the bill usually starts with the amount of stone dressed, the cost of cartage, and the names of the masons follow when they are engaged on building.

15. Coventry Ch. Accts.

I6I0 (Oct). I8 foot Step at 4d. 7 - 0.
 Carriage of the stones 0 - I5.
 help to load the stones and
 drawing them out of the 0 - 8 "

I6I0. "8 foot gutter 3d, 9 foot Step 3d, and 35 foot thick ^{16.}
 paving stone 2s the score and Carriage of the stone I4d."

The masons of Stratford on Avon show themselves to have been independent masters of moderate means after the fashion of their Coventry counter-parts. They provided lime and stone and were frequently their own quarrymen. The evidence that the building masons hewed their own stone is more striking at Stratford for the quarries were at Wilmecote a few miles from the town.

I6II Henry Burford a load of stone sI - 8d.
 To Mills for fetching the same from
 Wilmecot s2 7 0.
 I6I9 Ducker 5 lode of stone s5 - IO
 hym for I lode of ston more sI - 2.

16. Coventry Ch. Accts.

I672 Rich Johnson a load of stone at ye pitt I : 4

I675 pd George Tasker for 2 lode of Stone used at the
furtherance of the bridge at 20d.^{17.}

Burford Ducker and Tasker were masons. Johnson^{18.} was a lime-man and possibly a mason as well. The stone at the quarry cost I-8, I-4 and "Fierstone" I-2d. per load. They were the common prices for stone at Stratford. The payments to Burford and Johnson clearly did not include carriage. Ducker who agreed to provide firestone in I6I9 did not charge for carriage for the corporation had undertaken to arrange for that.^{19.} The Stratford masons evidently worked at Wilmcote quarries and agreed to provide stone for buildings even though independent carriers had to cart it to Stratford.^{20.}

As at Coventry they worked hand in glove with these carriers. W. Emottes, Thomas Pallmer, George Perks and others whose names are continually appearing in the accounts were carriers of stone, sand, clay and bricks, and were of the same standing as the masons.

A few such as Thomas Pallmer sent in bills of

- 17. Stratford Ch. Accts. except entry from Vestry Minute Book L19.
- 18. Stratford Ch. Accts.
- 19. Stratford Vestry Minute Book, p.19.
- 20. " Ch. Accts,

moderate amounts to the corporation.^{21.}

A few Stratford bills show the masons providing materials. In 1619 Ducker made a small contract to build a chimney^{22.} and in 1667 John Coupper pavier and mason contracted^{23.} to build an orchard wall. The bills of these and other masons reveal them supplying stone and lime for the repairs.

At the village of Northfield the masons supplied stone and lime and the mason employed on the building worked at the quarry to obtain the stone.

1625	We payed to Thomas Forrest for lime	I2d.
	We payed to Thomas Forrest for heuinge	
	of Stone	I2d
	We payed Thomas Forrest for tuoo lode	
	of Stone	2s.
	We payed for mending the stonne wall	20d
	We payed Thomas Forrest for the porche	I2d
	We payed Thomas Forrest for mending the steapoll	
	top	I2d
	To Forrest for scabbling Stonne and helpinge to	
	lode	I0d

Stratford

21. Receipts & Vouchers. Vol. I 1689.

22. Vestry Minute Book. p.19.

23. Ch. Accts.

I684. "Pd Thomas Narecon for Stone & mending the wall 8 - 9.
 pd Thomas Harrison for one Loade & a halfe of Stone 2 - 0.
 I687 "pd John Stone for 16 daies and a half 1 - 2 - 0.
 I689 pd to John Stone for Stone 2 - 8.
 I695 It. paid John Stone for 3 loade of Stone 8 - 0.

The masons frequently brought some if not all the materials for the repair. Yet this was not an invariable rule for the clerk of the village church had at times to make journeys to arrange for supplies of lime and brick and to buy them for the mason's use.
 24.

Merchants do not appear to have had a part in the trade of stone and lime, but they traded in other building materials, brick, tiles and ironware. The merchants most clearly played a part at Stratford. At Coventry there is no mention of their trade in brick or tiles, the trade was probably solely

24. Northfield c.w. Accts.

in the hands of masons and brickmakers. The Stratford merchants particularly the ironmongers dealt in many building materials.

- I611. "W. Shaw for 5 dozen crests 12 - 6.
 Julyne Shaw for 12 hundred & 20 of tiles, 1 dozen
 crests I - 10 - 6.
 W Shaw 100 sap lath for an end of the seeling
 and wind walls with 6.
 Julyne Shawe for 240 tiles and 5 crests 7 - 0.
 W. Shaw 2 bunches of lath I - 0.
- I611 J. Wilmere for nails and cords
 To him for 6 lbs of redpocker for the chimneys 0-8.
- I615 Mr. Wolmore 45 lbs of iron for the bell 7-6.
- I617: Item pade Mr Wolmore for Iorne, Lead, Nayles and hinges
 for the seates 8-4
 Item payd.....and Mr Wolmore for Iron, Lead, Hoockes,
 Hinges and Nayles
- I619 A lock to Mr. Wilmer
- I676. Paid to Mr Woolmer for 3000 of tiles & lath nails &
 a doz. nailles & lockes 2 - 18 - 7
- 25.
- I68I Woolmer a pair of hinges.

The Woolmers enjoyed the title of gentlemen in the Stratford accounts, and held various municipal offices including that of

mayor. They were wealthy ironmongers in the town. The two Shaws, William and Julius were members of the Council at Stratford and Julius was referred to as "Julius Shaw" gentleman. These Woolmers and Shaws did provide tiles for builders and probably bricks as well. The masons at Stratford did not often provide bricks. ^{26.} Though in 1674 a bill of the mason George Tasker shows him supplying bricks.

"William Hiccox Chamberline his Bill from George Tasker	
for work done.....	0 - 6 - 0.
for half a hundred of Bricks	0 - 1 - 3.
paid for 4 Carriages of Clay	0 - 2 - 0.

At Northfield John Stone a mason provided bricks and at ^{27.} Coventry a tiler supplied bricks for a repair to a city gate. But at Stratford and Warwick bricks are usually bought from individuals who are not paid for any workmanship at the repairs. ^{28.} They must have been brickmakers or merchants.

At Stratford they were often members of the corporation and at Warwick a Mr. Rothwell who was mayor supplied large quantities ^{29.} of bricks. The good position of these suppliers of bricks suggest

26. Stratford R & Y Vol. I p. Nov. 1674

27. Northfield c.w. Accts.
Coventry c.H. Accts.

28.

29.

that a proportion at least were merchants. James Walker at Stratford supplied much more than just bricks.

"James Walker his Bill to Mr John Hunt for the use of the Chamber of Stratford.

Imp	for 4000 of Tyles fetched at ye thousand	Kilne at 18 ye 7 - 12 - 0
It	Nine dozen of Guttes	0 - 9 - 0
It	two dozen of Creasts	0 - 4 - 0
It	ffer 18 load of Stone fetched for the Bridge att 20d ye load	1 - 10 - 0
It	ffer my bringing one loade & fer ye stone	0 - 4 - 2
It	ffer two load of paving stone fetched for ye Mill Bridge	0 - 11 - 0
It	ffer one load of sand	<u>0 - 2 - 6</u>
		6 - 12 - 0
	20 foot of Warwick stone to mend old ston of ye Brig at 9d a ffoot	<u>0 - 15 - 0</u>
	8 Jan 89	7 - 7 - 0

Recd of John Hunt Chamber the Contents of this
Bill

me the mark

W_o

of James Wooker.³⁰

30. Stratford R. & V. Vol. I p. 1689

Walker may have been a merchant or a carrier.

At Stratford the masons provided part of the materials and the merchants part. At the same time the Chamberlains had to make purchases from lime men and from smiths for the repairs. Accordingly the masons worked under both the direct labour system, when they provided only their labour and under a system where they provided materials.

If men of different crafts worked together they sent in different bills to the Chamberlains.

I68I "Paid William Samon for boards, posts & nails & other timber,

nailes & workmanship done at Mr. Simcox's	0 - 8 - 3
---	-----------

It pd John Coocke for 5 days work & a half himself & his man & 200 of Bricke	0 - 12 - 8
--	------------

45½ foot of boards used at Mr Simcoxes	0 - 6 - 2
--	-----------

Paid John Morris for 2 days work himself & a man & a bande of rods for the same	0 - 3 - 10
---	------------

It pd John Ward for irenwork used at Mr Simcox's	0 - 3 - 3
--	-----------

It pd Mr Philips for 208 bricks used at Mr Simcox's	0 - 3 - 11
---	------------

It pd Mr. Woolmer for a pair of hinges for the same	0 - 0 - 8 "	31.
---	-------------	-----

31. Stratford ch. Accts.

At this repair Sammon a carpenter, John Coocke a tiler who also did brickwork, John Ward a smith and John Morris a dauber and winder, were all employed. The carpenter, tiler, smith and dauber each provided some material, the tiler actually supplying a quantity of brick.

But Woolmer the ironmonger and Mr Philips probably a merchant were called upon to find other items needful for the work.

C O N T R A C T S.

It was a common practice during the seventeenth century for builders to undertake work by contract. The use of contracts was not reserved for the more important work of erecting new buildings, the repair work done by Coventry and Stratford masons was done on a contract basis. The masons working on the Coventry walls were paid sometimes on a daily wage basis, and sometimes by instalments as they completed each stage of the contract work. Thomas Sargenson, William Briscoe, and other leading masons used to contract to rebuild the wall at a fixed rate.

1624. "Reparacons made this yeare upon the little parke wall."

"Paid to William Briscoe Mason for 4 pearch at 16s.

the pearch £3.4.0d."

"paid to Thomas Sargentson for making two pearch and a half of the little parke wall as appeareth by a bill under Mr. Maior's hand."

1636. "Paid to Thomas Sargenson Mason for building up of that part of the Towne wall neere Whitefrier Mill that fallne downe being 80 foot long he by compisicon was to have 50^l for doing thereof whereof theise Accomptants paid 13^l and the Treasuary paid out 37^l to the said Thomas Sargenson in full discharg thereof and 5s.4d. was given

to the Workemen at severall times by the Chamberlaines
13 ^{2.} 5s.4d.

1642. "Pd. to Willm Briscow Mason for mending divers places
of the Towne wall and in making Twentie pearches of
perpine sloping stone worke to the Towers on the wall
for safe guard at 3s.4d. the pearche for mending of
some staires as appeareth by a bill 3 ^{3.} 6s.8d.

Contracts were made for the most humble kind of repair
work at Stratford, for the bu~~k~~lding of a chimney, and the
repair of churchyard wall. The entries in the Stratford
vestry book show the type of agreement th~~at~~ mason Ducker made
for building the chimney and the payments that the church-
wardens made to him.

	£	s	d
1619. "Pd. Ducker for 5 load of stone	0	5	10
"P'd him for one lode of fyre stone more	0	1	2
P'd him in earnest for his work for the building of the two duple chimneys in the church house flore highe and is to fynde all the stone that is for the 1 duple Chimney only we are to find barrig for them 40s.	0	0	6
P'd for 4 stryke ^{me} line and sand	0	2	8
P'd Duker for stone more for the first chimney	0	4	6
P'd him for workmanship in parte	0	16	0 ^{4.}

2. Coventry CH. Accts. 1636.

3. 1642.

4. Stratford Vestry Minute Book. p.19.

The mason John Coupper made an agreement for mending
a wall.

1667. "12 loads of stone carriage for Chappell orchard wall	1	10	0
12 load of stone	0	11	6
For carrying in the stones	0	1	0
4 load of clay	0	2	0
John Coupper by agreement for his work	1	1	0 ^{5.}

Contracts do not appear to have been exceptional for this ordinary work. The growth of the contract system does not of necessity imply a capitalist class of masons and carpenters. Those who employed them may have adopted the system of contracts to ensure that the master workman engaged will continue at the work till it is completed. But the contract system is quite consonant with capitalist builders, and is an indication of the growth of capitalism among them when it is coupled with evidence that a large number of masons provided building materials.

Contracts for more important work are found in the Order Book of the Warwickshire Quarter Sessions. They are generally made for the repair of the county bridges. The ordinary procedure of Quarter Sessions was the appointment of two or three local justices to view the decayed bridge in

5. Stratford Ch. Accts. 1667.

company with fit and able workmen. A contract would be proposed but not made binding till it had been confirmed by the next meeting of the Quarter Sessions. At the Michaelmas Session in 1651 a contract which had been made with "Thomas Orton, Richard Orton, and other masons was confirmed and the repair was to cost £40.^{6.} Another contract confirmed at the same sessions was that made with "Thomas Band, John Band, Richard Weale and other masons," and it must have been for a complete re-erection of Deritend bridge, for the cost was to be £363.6.8d.^{7.} The masons who worked on these bridges came from the large towns, Warwick and Coventry, and from small quarry villages such as Ilmington and Rowington.^{8.} The sums for the repairs were considerable, and the county authorities were such slow payers that these masons must have had considerable financial resources.^{9.} None of these contracts are set out in detail, but the price suggests that the masons provided most, if not all, the materials.

For Coventry itself two important contracts are extant, one for the building of the town cross in 1542, and one for the making of Swanswell waterworks in 1632. The erection of the town cross was undertaken by Thomas Phillips and John Pettit, two masons of Wellingborough.¹⁰ They agreed to build the Coventry cross as a model of the stone cross at Abingdon in Berkshire.

6. Warwick Q.S. Order Book Vol.III p.73.

7. " Q.S. " " Vol.III p.80.

8. " Q.S. " " Vol.II. p.83.

"John Tompkins of Binton, Joseph Quyny of Raxley, William Rydle of Bytford, Richard Salmon of Ilmington.

W.Q.S. Order Book Vol.II. p.238.

Robert Morell & Richard Dunckley of Warwick.

10. See. App.

9. W. Q.S. Order Book, Barford Bridge contract with group of masons confirmed at Trinity Sessions 1649. Masons complain continually of debts incurred on this bridge and are still complaining at Epiphany 1653: Contract for Edmonscote Bridge dated Easter 1650 & Elizabeth widow of Robert Morrell mason has not received full payment at Michaelmas. 1652.

Northampton and its neighbourhood was a centre of skilled stone workers, and no doubt this was the reason for the Mayor and his brethren at Coventry choosing these men for the important work of erecting a large town cross. They were to be paid £187.6.8d., and the work which they took upon themselves not only in the actual erection of the cross but also in the provision of materials is indeed startling. The stone was to come not from their own quarries at Wellingborough, but from the Warwickshire quarries of Attleborough and Rowington. Unfortunately, there is no indication whether the stone had to be quarried by their own masons or by the masons of those two Warwickshire villages, but it is probable that several of their own men would be employed. They were to bear the expense of the carriage of this stone and of the hewing from the Priory in Coventry the hard stone which was to be used for the steps of the cross. The iron and lead fittings of the cross were to be supplied by the masons though the images and fans and their fittings were to be supplied by the Corporation. These skilled masons of Wellingborough would need a good business organisation and financial resources to complete such a work as this. They were to be paid by instalments according to the stage which they had reached in the erection of the cross. The building of the cross would take about two years of working

time and by the money provisions of the contract they were to receive about £6 per month. 91

The Swanswell waterworks contract was dated 1632 and made between Bartholomew Bewley plumber and the Corporation of Coventry.^{11.} Bewley worked in conjunction with Sargenson and several details of the contract are noted in the section on Sargenson's work. The chief points illustrating the business standing of the plumber are the provisions by which he is to supply all materials for both plumber's and mason's work and make the pipe line according to the specification of the section exhibited before the Council. Bewley was to receive £40 for the new work and £10 per annum for the maintenance of the water system. A similar maintenance contract by which the plumber was to provide all the materials needed was made with his son Thomas in 1697.^{12.} The pay was still to be £10 per annum.

The bulk of the remaining contracts examined come from Warwick, but there are two important ones for Alcester and Stratford. They concern the building of the town halls or market houses as they were called at these places. Both were erected by Chipping Campden masons. John White was to be paid £52 for the erection of Alcester Town Hall.

"An agreement between Simon Whyte of Camden in the

11. See App. III

12. Coventry CH. Accts. 1697.

County of Gloste free mason and Roberte Wilcox and other inhabitants of Alcester about the buildinge of a Markett house ther if Sir Fulke Grevyell shall like thereof.

Imprimis the saide Simon doth agree to finde stone at Camden to make 18 pillars the base in the bottom 2 foot square and the rest accordinge to the proporcon the hight of the pillars to be 10 foote all which stone to be wrought at Camdene.

Item the saide Simon doth agree at his charges ge willbe or finde one allwayes at the quarry to give directions howe all the rest of the stone about the same markett house shallbe broken out and to scabell the same stone at the quarryes.

Item the saide Simon doth agree to builde the said house high to the topp of the cornish from the base of the pillars of the same house to be 66 foot in length and 26 foote in bredth and to builde the starecase of stone as high as the cornish.

Item the said inhabitants doe agree to digge and fetch the rest of the stone from Awlne or wheere it may be had and to find lyme and sand for the layinge of the saide stone.

Given in earnest XXs which is to be in parte of payment^{13.} of 52 Li which the said Simon is to have for the premisses."

White was to provide the stone, arrange for the hewing and scapling of the stone at the quarry, and apparently pay for its carriage from Campden to Alcester. It is probable

he owned a quarry, at all events this was an important contract for any mason. But it was not a comprehensive contract. White was not to find all the stone, or lime and sand which were to be brought by the inhabitants.

It was according to a similar contract that John Page of Chipping Campden began the work of building Stratford Market House in 1634. This Market House took two years to build and the wrangling between the Council and Page led to a lawsuit. Much trouble was caused by the original articles of agreement having been made void by the members of the Council suddenly changing their minds and demanding a much bigger building. The agreement had been signed on April 17, 1634, and Page was to receive £100 for his work, and any further sums necessary to make his profit up to £10 on the whole work. Page agreed to obtain stone from his Westington Quarry at Campden and the corporation were to provide for the carriage of all the stone.^{14.} Much of the material was to be provided and a good part of the work done by the corporation. This body was to find all filling stone, lime, sand, scaffolding, and ladders, and to arrange for all foundations to be well and conveniently dug and that all carpenter's work was done in due time. In the lawsuit that ensued it appears that the Corporation refused to make any payment to Page for some time and eventually paid

14. Stratford Town Hall in Evesham Journal, Feb. 12. 1928. by E.A.B. Barnard.

him an installment of £98. Meanwhile Page complained that the stone was not brought to time, nor the lime, sand and other commodities, with the result that he had to lay out larger sums than were necessary, having to pay his men when they had hardly any work. John Page had undertaken a large contract and had had to expend large sums of money, but again the mason had not undertaken to provide all the materials.^{15.}

The Market House took about two years in the building and repairs and alterations to it were frequent. In 1657 part at least was re-roofed and a small contract was arranged with a mason. William Padwick of Exhall was to provide the "slattes," for which he was to be paid £12, and for this contract he was to add as a bonus a given quantity of free "slattes", and for making the roof he was to receive £5.10.0d.


"Stratford Burrh At a Hall holden the 17 of Julye 1657.

It was then agreed upon Betweene the Bayliffe and Burgesses of the on pte & William Padwick of Exhall in ye Countie of Warr laborer on the other pte concerning slattes and slatting of the markitt house in many and forme following y^t is to say it is agreed upon y^t the said Wil~~l~~m Padwick Shall have and recei^ve for 60 Thousand of good Slatted 400 to ye Thousand; the full some of four shillings a thousand and the said Wil~~l~~m into the said bargaine doth p^rmise to p^rvide two thousand at his owne charge and it is

^{15.} See previous note.

alsoe agreed upon yt the said Willm shall have and receive for the Covering and Slatting of the said Markitt house and for the workemanship of the Same the full some of five pounds & ten shillings.

In Witness whereof hee the said Willm hath putt to this honn ye daie and yeare above written.

. the marke  of ^{16.}
Willm Padwick."

These two market houses of Alcester and Stratford show a mason undertaking repair work by contract, and the two Campden masons taking large contract orders, but not providing all materials or having to build entirely the buildings on which they were engaged. But comprehensive contracts, where a mason or carpenter undertook to complete a building and arrange for the work of various crafts to be done were made. Several such contracts were undertaken by Warwick builders. Both masons and carpenters remained throughout the century general builders. No doubt the overlapping of their work caused much friction between the carpenters' and masons' companies. A minute of the Coventry Carpenters' Company shows an attempt being made to stop tilers and masons from undertaking the construction of timber-framed buildings.

"Whereas Tylers and others being not of the Company of Carpenters have undertaken and do undertake to take down and build and set up building and frames and other worke belonging to Carpenters to the great prejudice of and hindrance of the said Company of Carpenters. That if any Tyler or other of any other Trade being not Carpenters which now doth or hereafter shall undertake to take down build or set any building frame or other Timber-work belonging to Carpenters; if then any of the said Company of Carpenters shall work under any Tyler or other which undertake any such work as aforesaid; He which so worketh with any such Tyler or other in any such work aforesaid shall forfeit for every default 40/- that is to be paid to the Master for the time being 10/- and to the Company 30/-." The London Carpenters' Company in 1604 had passed a bye-law to prevent members from working for men of another trade who had contracted to do carpenter's work.¹⁷ It may be assumed that comprehensive contracts were becoming more common.

Several comprehensive contracts were made by Warwick carpenters. But the most outstanding instance of the carpenter's and mason's work overlapping was the erection of the ^{fine} ~~fire~~ stone market house at Warwick. No comprehensive contract was made but William Hurlbutt, the carpenter,

17. History of Carpenter's Company. Jupp & Pocock. (1887 edit.) p.148.

undertook the mason's work of the market house.

"May 1669.

"The Articles of Agreement for buildinge the Stone worke of A Markett House in the Borough of Warwick on the one ~~part~~ te and Willm Hurlbutt of Starton in the County of Warr Carpenter on the other ~~part~~ te were att this court agreed upon and the same ordered to be ingrossed accordingly by

Hickes Major.^{18.}"

Other Warwick carpenters made contracts for the erection of houses. In July 1696 the Major Mr. Devereux Whadcock was ordered to pay £25.6.6d. to Mr. Joseph Hen~~ne~~ carpenter for building one of Mr. Oken's houses.^{19.} In the same year another Almshouse of Mr. Oken's Trust was set up by John Williams, carpenter.

Oct. 1696. "It is alsoe ordered that whereas John Williams Carpenter is now building an Almshouse on the Back Hills for 12 poore persons by the charity of Mr. Thomas Oken Deceased That the said John Williams shall pave the Ground floores with brick belonging to the said house and be allowed out of the Mr. Oken's revenue for soe doeing."²⁰

This suggests that Williams was responsible for the erection of the whole building in every detail as does another order concerning him made in September 1697.

18. Warwick Minute Book. 1669.

19. July 1696

20. Oct. 1696.

"Then agreed with John Williams to build with Bricks a house according to a Draught now made a building Eighteen foot square one piесе of ground adjoining to Mr. Edd Titton his house The same to be 45^k the work to be finished before Lady Day next and then to receive his money.^{21.}"

John Williams was to build a house and perhaps provide the materials. As he was not to be paid till he had completed his work, he would have to lay out considerable sums of money on the work. The same John Williams built the vicarage house to St. Mary's Church, and received his money by instalments.^{22.} The work of erecting the vicarage would again entail the expending of large sums by Williams before he was reimbursed by the corporation.

The carpenter, Richard King, in 1709 contracted to erect a framed barn for £12. But he was not to complete the building but leave it fit for tiling and the corporation was to provide all materials.)

King seems to have been keeping more nearly to the carpenter's work, and the corporation apparently decided to supply the materials, not so much because King was not able to do so, but because they had purchased an old barn frame which was to be taken down and re-erected.

21. Warwick Minute Book. Sept. 1697.

22. .. Cn. Accts. 1696.

June ~~1907~~¹⁷⁰⁹. "Memd. It is agreed y^t Richard King Carpenter shall take down a barn bought of Mr. Tomkys a building near Mr. Tomkys garden containing 3 bays of building and to frame and sett up the same att the place set upon att Budbrooke to make end bays to contain 20 foot wide and 15 ft. long - and also to frame and sett up two more Bays of Barning the same length and breadth of ye 3 bays aforesaid with a cuttend for a stable 12 foot long and 20 ft. broad with rack and Manger The said Richd King to finish all ye sd work in workmanlike manner by ye 8th day of Augt next fitt for tyleing the Corperacion finding all Timber and other Materialls to be used in and about ye building wth sufficient Scantlings The sd Corporacion Doe agree to pay unto ye sd Richd King the Sum of Twelve pounds for the work due to be done as aforesaid.^{23.}"

A more detailed contract is given in the Minute Book in the year 1698. It was made by two masons and they certainly undertook to finish the building in every respect. Carpenter's glazier's and smith's work was included in this contract. They probably had to sub-contract for this work. But their sound financial position is shown by their ability to embark on such a large building order, for they would

^{23.} Warwick Minute Book. sept. 1709.

have to expend even greater sums to meet the immediate ~~needs~~ ^{needs} ~~payment~~ of the other workmen ~~as well as their own.~~

The specification of the building is detailed and it seems to imply that the masons should provide the materials both stone and timber. There is no indication of the Corporation providing part of the material, and since the masons are to build with "brick or Ston" it looks as if they chose their own material and provided it.

February 1697/8. "It is further agreed with Tho Right and Seymll Right of the said Burough of Warwick Masons and the ffeofees of the Lands & tenem^{ts} of Mr. Thomas Oken Deceased - given to Charitable uses That their shall be a lease of Ninty-Nine yeares of the peice of Ground one which stood a house Called ~~Penier~~ ^{ye Bouroy} latly in ye possession of Nathan Pufly & burnt down by ye late Dreadfull fier in Warwick at ye rent of six p an from St. Michell last past & one Cupp Rd. Mr. Okens feast yeerly. And the said Tho Right & Samell Right doe promise and adjure that they will and shall Build the wholl front of the said Ground to ye Street with brick or Ston Sixteen foot from the levell of the Ground to ye wallplate wth hansom substan- shall windows and doors - also that all the Tumber shall be of good harte of oak and of good Scantlyns

all the boards of oak wth Good substanshall Rough soe
 that all the said buildings shall be finished into a
 good substanshall house or houses within the time of
 Three Weekes from St. Michell last past. Also that
 the said Tho Right and Samell Right shall have allowed
 them the eighteen pence in ye pound allowed for builders
 by The Comisoners.^{24.}"

In 1708 the mason John Pinley made a contract to erect a
 building in its entity and he too appears to be the supplier
 of all building materials. Pinley often worked in conjunc-
 tion with Richard Williams the carpenter, but here Pinley
 alone seems to have undertaken the work.

Dec. 13. 1708. "Ordered that John Pinley had a lease of
 all those buildings and premises w are now in ye
 posseon of him late in ye lease of Thomas Marriot for
 Seventy years from Lady day next. The same belonging to ye
 Charity of Mr. Owen Deceased paying y^e yearly rent of three pounds
 and to ye ffeast as usual in ye old Lease and building the front
 of 28 foot according to ye Draughte of the Ground plot and
 Upright of ye said building now delivered annexed unto the sd Lease
 with Good brick stone + Lime, Timber of Oak wth Sufficient
 Scantlings and to be done in workmanlike manner on or before
 y^e 25th of December which shall be in the year of our Lord 1709²⁵

24. Warwick. Minute Book. Feb. 1698.

25. " " " Dec. 13. 1708.

For the next year two contracts are extant showing Pinley and Richard Williams working together. The one was for roofing work and they were to receive £4.2.0d.

July 4. 1709. "Item the said John Pinley and Richard Williams doe alsoe agree that for the consideracion of the Sum of ffour pounds ten shillings they willmake good the roofe of the house w^{ch} Bromage now lives in and to tyle the same as far as the dwelling part of the sd house goes." ²⁶

The other contract was for the erection of the "Bridge House" at Warwick.

July 4, 1709. "Memd. John Pinley Mason and Richard Williams Carpent^{er}ing have this day agreed with the Corporation to take down the Bridge house between the Cottonend Tythe *Barn* and the house now inhabited by Isaac *Morrage* being Forty foot long 16 ft & $\frac{1}{2}$ wide and be the same more or less and to re-build up and furnish the same According to a draught thereof made & ^{now hand (?)} *now hand* before the Corporation and as is hereafter sett forth by Viz They agree to build all the front of the said house with Stone 18 inches high above ground and then to finish the s^d front wall with Brick a bricks length the third to the high of the wall plate of *Morrage* his house and to frame the ends and bottoms of the said house with good Timber and alsoe brick pav'd the same — The partitions

of ye said house to be built likewise with Timber and pavyd
with brick or else filled up with lath and plaister work
Item thy agree to build a stake of Chimneys as the draught
drives by the parlour the kitchen and the parlour Chamber
And to build a good Substantial Roofe with oak Timber for the
said house and to cover the same wth old Tyle Item they agree
to frame a floor throughout the whole building with oak
Timber and to lay the same with good dry Elm boards and
divide the same by partitions into three rooms. - To pave
the ground floor with good paving brick and to putt in head
Windows into the whole building each window to be three foot
four inches high in the Gleer and two Eighteen inch lights
in each window to putt an Iron Cassm^t in each roome of the
s^d house and to Glase the same at their own charge Item
they are to make and putt up two outside doors in the s^d
building made of good oak boards and Timber with good strong
battens & the entry door to be new framed and the old door
to be mended and put up in the place it is now in - to make
Seven Inner doors with good Elm boards to make a Staircase
in the said house up into the building with good Elm Timber
and bords. Item they are to make good the end of the old
Barn so as to joyne the same to the new building Item the
Corporation doe agree that the said John Pinley and Richard

Williams shall have the old Timber and materialls belonging to the s^d bridge house and liberty to make of such part thereof as shall prove good in building the same they finding all other Timber and materialls that shall be wanting to finish the said house at their own costs and charges Item the s^d John Pinley and Richard Williams doe agree and promise that they will rebuild and finish all the building before mentioned with good sufficient Scantlings and in good substantiall workmanlike manner and find one good door locke to the outside door and that in all things before Mic^ham^{is} day next ^{Yeare} the sd Corporation doe agree to pay unto them the sd John Pinley and Richard Williams for building and finishing the sd work as aforesd the Sum of ffifty pound provided the same be done and finished in such workmanlike manner as shall be approved of by Mr. ffrancis Smith." 27

For this £50 contract Pinley and Masons were to complete the building in every detail, do all mason's and carpenter's work and arrange for the work of the smith and glazier. They were to provide all materials, and the material of the old "Bridge House" which was to be demolished was to be used in the building of the new.

These masons and carpenters of Warwick must have been in a sound financial position because they undertook such comprehensive contracts and frequently agreed to obtain and

transport all the material required. It is remarkable that the Corporation did not provide timber for building from their own estates or bargain for it with other landowners. It augurs well for the building and timber trades that the Corporation took no part in the timber supply. It indicates that capitalists had developed both these trades.

The incomes of a few fortunate builders were growing. The Corporation for whom they worked had difficulty in financing the rebuilding of Warwick. The complaint was not uncommon in the seventeenth century. Corporations often had to be helped in their building operations by the generous donations of the landed gentry. The county authority suffered from the same shortcoming. The masons who built the county bridges had to wait patiently for the completion of their payments.²⁸ No glaring examples exist of masons forced to wait long periods for the payment of money from Warwick Corporation. But the Corporation did not always pay for repairs immediately. When tenants repaired corporation property they were not repaid quickly, but a sum was deducted from their rents over a long period, or they might even be allowed to live rent free for several years.²⁹ It is probable that the Corporation was willing to sell leases to builders after the fire as an inducement to hasten on the rebuilding of the town. The Wrights,

²⁸ See note 9.

²⁹ WARWICK Minute Book Sept. 1707. Mr. Edward Norton had expended £40 odd on rebuilding the Longbridge Tith Barn. Now ordered that £5 shall be deducted from his rent on the Tith barn for the next ten years.

Sept. 1697. A Mr. Biddle owing to sums expended on the repairs of his property is to live rent free for next seven years.

Richard King and John Pinley all acquired new leases during these years. In 1698 Thomas and Samuel Wright obtained a 99 year lease of a piece of land belonging to the Oken Trust. They contracted to build premises on the land, and for building they were to be paid at the Commissioners' rate of eighteen pence in the pound.³⁰ Richard King the carpenter acquired a lease in perpetuity of the Crabb Mill Ground near the High Street. The Commissioners were to sanction this act of the Council, but no mention was made of building.³¹ A lease was sold to John Pinley of some premises held by the Oken Trust and he was to rebuild them according to conditions laid down in a contract. But here there is no indication of any payments for the rebuilding.³²

Repairs to property kept many members of the Corporation busy. From time to time they were requested to view buildings in decay and to consult with workmen for their repair. But in this work the responsibility of the builders was increasing. John Williams, Thomas Masters, and John Pinley were able to take orders directly from the council, to arrange for estimates and carry out the repairs, with no intermediary between the council and themselves.

2nd November 1710. "Ordered that John Williams be sent downe to view all the premises att Chaddesley and make

30. WARWICK minute Book Feb. 1697/8.
 31. " " " Feb. 1701/2.
 32. " " " Dec. 1708.

a report thereof in what condition the same is as to repair."

20 Dec. 1706. "Ordered that Thomas Masters and John Pinley be spoke to view the Messuage or Tenement next unto the Tentleys nere the great bridge in the holding of John Birch and make a report att the next meeting what the charge will amount unto to putt the said messuage into good Tenantable repair. It is alsoe Ordered that the persons aforesaid doe likewise view the house belonging to Mr. Okens Charity in possion of William Tomes and the Barn belonging to the said Charity in possion of Thomas Roberts and also to make report qhat the charge will be to putt the same in Tenantable repair."³⁴

John and Francis Smith who had a building firm at Warwick undertook the most important building work in the town. Both Smiths were architects but it is not clear whether either had actually been a mason. This firm contracted for the rebuilding of St. Mary's Church. Kemp the historian of Warwick, gives £4874.9.5d. as the sum expended on the rebuilding, which was finished in 1704. Of this sum £2,350 was accounted for by a contract made between Mr. Smith and Mr. Duckley, and the Commissioners appointed for the rebuilding of Warwick after the fire of 1694.

"1697-8 Feb. 23rd. Agreed betwixt ye Comm^{rs} and

33. WARWICK. Minute Book, Nov. 2. 1702/1710.

34 . . . Dec. 20 1706.

Mr. Smith and Mr. Dunckley y^e they should take down the Chancell wall and build all ye Church Tower and Pinnacles with all other Pinacles and Cornish mouldings.... Buttresses and face ye staircase with Wilmcote stone they to find all stone lyme scaffolding and materialls for finishing ye works the workmen to have all ye old stone but pay for ye new stone y^e was then getting so much as ye s^d stone has cost in getting and carriage, for all which they are to have £2.300 and £50 more if ye Com^{rs} please." ³⁵

Smith and Dunckley were to provide the stone, some of which came from Wilmcote and also the expense of its transport. It seems strange that Smith worked in conjunction with Dunckley for the contract. Dunckley was a skilled mason and a Baptist Minister at Warwick. It appears to be an indication that the Smiths themselves may have been masons. But the Smiths were more wealthy than Dunckley and one of their most important contracts was for the erection of the Warwick Court House early in the eighteenth century.

These Warwick contracts certainly show the masons and carpenters as members of a capitalist class. The size of any one contract may belie the extent of any individual mason's concern. They would undoubtedly have to sub-contract a great part of the work. But the undertaking of such large commitments and the ability to expend large sums on a building leaves no doubt as to these general builders being capitalists.

THOMAS SARGENSON OF COVENTRY.

Thomas Sargenson of Coventry was a successful business man. He became important in Coventry through his work in making the new Swanswell water-works in 1632, and by 1651 he was a popular contractor with the county authorities who frequently engaged him to repair the county bridges, About 1638 he held the office of a Chamberlain at Coventry, as did also his partner, Bartholomew Bewley, another wealthy Coventry citizen and a plumber by trade. These two between them acquired fair-sized estates in Coventry. At the same time they both continued to be operative workmen of their trades. Mason Sargenson was not by any means unlearned, for an extant letter of his shows that he possessed a fair-skill in writing.

In the Coventry Records, Thomas Sargenson first appears^{1.} in 1619 as a mason earning twelvepence a day. He was not the only Sargenson engaged as a mason. From 1600 to 1625 John Sargenson was busily occupied with mason's work at Coventry. He frequently received better pay than most^{2.} of the masons, and in 1621 was earning sixteen pence a day. The same John Sargenson was the chief mason in the weekly^{3.} accounts which record the repairs to the city walls in 1625.

1. Coventry Ch. Accts. Oct. 1619.

2. " " " 1603, 04, 06,
21, 24, 25.

He seems to have been in a position to do more than merely undertake the daily work of a mason. In 1624 there was "Paid to John Sargenson Mason for carriage Workmansh^hipp and hewing of 78 foote of paving Ston, and Lyme to lay round about Bishopp street gate to carry away the Water w^{ch} Before rotted down the Tower in October 1623 as appeareth by a Bill under Mr. Maior's Hand 26s.8d.^{3.}" Evidently John Sargenson leased or enjoyed the privilege of obtaining stone from a quarry, probably one of those at Whiteley Common, and was also able to provide for the cartage of the stone to Coventry. Another Sargenson, William Sargenson, had a quarry at Whitley Common in 1661.^{4.} This perhaps did not put John Sargenson in a different category from his fellows more than did his high rate of pay. For throughout the century at Coventry those masons who are the highest paid are frequently associated with quarries at Whitley or Alledsley'. John Sargenson certainly seems to have been the father of Thomas, and William may have been a grandson, but evidence from church registers is necessary to make this definite.

Thomas in 1619 was obtaining wages of twelve pence a day, when the usual rate of pay of the skilled masons was fourteen pence.^{5.} The entry of 1619 is the first mention of Thomas Sargenson in the Chamberlain's Accounts

3. Coventry Ch. Accts. Oct. 1624.

4. A Presentment of 1661.

5. Coventry Ch. Accts. 1619.

and may easily have been one of his early jobs, for in a Council Book an order concerning him is dated as late as 1654. He was working on St. Michael's steeple in 1622³⁶. On this occasion he undertook to do the repair along with Hugh Lassel.

By 1623 Thomas appears to be a mason-contractor, as was John Sargenson before him. In 1623 the Chamberlain "Paid to Thomas Sargentson Mason for amendinge of the Town Wall at Bishopgate the 13th of January 1622 as appeareth by a bill under Mr. Maior's hand 13s.4d.⁷" More contract work came to him in 1626. He was now working for the county authorities and undertook the repair of Emscote Bridge near Leamington⁸. The following year at Coventry he did work according to a piece-rate, but it was probably according to a contract. The Chamberlain "Paid to Thomas Sargentson for making two pearch and an half of the Little parke wall appereth by a bill under Mr. Maior's hand, as followeth, to hym for 112 foote of ston and ^{cr}dust at 2d. the foote 18s.8d.⁹" In the same account other masons were recorded as working for a piece rate¹⁰. It is probable that most of the contract work was undertaken upon a piece-work basis. It was a good guide for the contracting mason, and the individual or authority which was engaged in building felt that its money was being put to the best use. Neither the rich city magnate who endowed and built a school at his birthplace

6. Coventry . Sharp . p.110.

7. .. CH. Accts. Oct. 1623.

8. Warwick Q.S. Order Book . Vol.1
Easter 1626 Epiphany . 1629.

3.

9. Coventry CH. Accts Oct. 1627.

10. CH. Accts. Oct. 1627 includes William Briscoe, mason.

11. Wren Soc. Pub. Vol. XI Building of Appleby School.

or the Quarter Sessions faced with the continual stream of bridge repairs, cared to pay masons on a time basis, when so much time might be lost through a bad transport system causing lack of supplies. Thomas Sargenson belonged to this rising class of mason-contractors who became increasingly important in the seventeenth century. Many bills refer to his work in repair of the town wall of Coventry. In 1636 there was "Paid to Thomas Sargenson Mason for building up of that part of the Towne wall neere Whitefrier Mill that fallne downe being 80 foot long he by compson was to have 50 for doing thereof whereof there are Accomptants paid 13 and the Treasuery paid out 37 to the said Thomas Sargenson in full discharg thereof and 5s.4d. was given to the Workemen at Severall times by the Chamberlaines 13⁶ 5s.4d.^{12.}" This bill was not composed of a number of small payments, but was clearly a contract charge for Sargenson was to have £50 "by compson."

He undertook all types of work, the relatively unskilled work of paving and repairing breaches in the walls, to the making and repairing of the towers, arches and gateways of Coventry, and bridges for the county. In 1642 he was paid "For paving before the West orchard Bablack & Spon street Conduits 2⁶ 13s.3d., and for making up the wall at Smithfield bridge 8 January 1646 by a bill under Mr.

12. CH. Accts. 1636.

Maior's hand 8 3s.0d." More important work came to him after the Civil War. This troublous period cannot have had an adverse effect on Sargenson's building activities. During the early years he was ordered to pull down property and part of the walls of the town and to strengthen other parts. After the war years he enjoyed a period of great prosperity. The Town Wall needed major repairs, new gates, houses had to be erected, and a new portcullis provided. Bewley, the plumber who had helped in the construction of the waterworks, also helped in providing the new iron work which was needed. The Newgate of Coventry required repairs in 1648, and £14.3.2d. was "Paid to Mr. Thomas Sargenson for the repairing of the Newgate Tower and mending the Towne Wall as appeth by 2 bills hereof under Mr. Maior's hand the 6 of May 1648 and the 12th of May 1648 wherein the particulars are set down." In the same October account there was "paid to Mr. Sargenson for making of 3 arches and to walls at Cook street which were formerly arched and walled and pulled downe for saftie of this Citie the 25th of May 1648 as appeareth.... 7 13s.4d."

The repairs to the town wall were part of the normal routine in Sargenson's work, but the making of the Swanswell Waterworks was an important event. The indenture concerning the Waterworks, was made between the Mayor and Council and

13. CH. Accts. Oct. 1642.

14. CH. Accts. Oct. 1648.

Bartholomew Bewley the plumber. But Bewley and Sargenson were partners for at least twenty years, and other entries show that they were partners as early as 1632, which was a year before the making of the Indenture.^{15.} For the work which he contracted to perform Bewley was to receive £40, and strangely enough the extant indenture was drawn up at the conclusion of the greater part of work.^{16.}

The work on the relaying of the pipe lines and at Swanswell Pool started in 1632. According to the Indenture dated August 20th, 1633, Bewley agreed to lay a certain length of pipe "In August last past." He must have started work soon after that date, for in August, 1633 it is stated that he had finished the work for which he was to receive the sum of £40. Entries in an account book show that he was performing this contract work along with Thomas Sargenson in 1632. That they might set up a new tank they were granted a lease of a tenement in Cuckow Lane.^{17.} (April 7, 1632).

"Whereas Mr. Thomas Sargenson and Thomas Bewley propose to plant a new Cisterne in a tenement in Cuckow lane in this Citie late in Willm Swaynes occupation w^{ch} Cisterne shall containe so much springe water as that if any sudden accident of fier in anye street of this Citie should happen that there shall be sufficient store of water in the Cisterne by cutting a pipe to quench that fier Therefore upon theire motion

15. Coventry Leet Book .p.104 . April 7. 1632.
The Indenture is dated 20 August 1633.

16. See App. for Indenture.

17. Coventry Leet Book . p.104.

this daie it is agreed that they shall have a lease of that tenement for ~~wuch~~ and so long time as they enjoy the water work brought to this Citie which at first was graunted for two hundred years paying the yerely rent of Thirtie shillings as formerly and keeping the tenement in repaire, and before the lease be sealed they to surrender the lease they now have in being, and they to graunt to Mr. Cleater the same provided.. it is expressly agreed upon and they to Covenant at the end of that terme they to lease all the Cisterne & the materialla and pipes thereof that shall happen to be planted and set in the premisses to the proper use and benefit of the Citie." Accordingly they were to have the lease of the water-works in addition to that of the tenement in which they were to place an extra tank. The tank, which seems to have been designed as a measure of protection against fire as well as to improve the normal water supply, was allowed of in a bill from Bewley and Sargenson dated November 1632. They must have been partners then and not merely working together on the same building, for Sargenson the mason to be mentioned in connection with the supply of a lead cistern.

The contract, as it was envisaged in 1633, indicated that Bewley - and seemingly Sargenson must be included - was able to undertake important work and also work of high quality.

18. Coventry Charity Funds. Book. (A.22) p.272.

The supply of all materials for the new lengths of pipes and for all the plumber's and mason's work was to be supplied by Bewley. The pipes were to be all according to one specification and a sample section was lodged at the Council House. The main constructional work was the laying of a length of pipe and the amending of "The said Croscheaping Conduit, the Bull Conduit with good substanciall ston worke leade and all other materialls whatsoever and to take up the old Cesterne at the said Bull Conduit and make contrive and place there a good substanciall and sufficient new Cesterne of lead to be of like proporcon and quantitie for weight breadth and goodness in every respect as the said old Cesterne so to be taken up at any time ever was."^{19.} "All the other Conduits of the said Citie and pumps and all the other Conduit heads pipes Cocks Cesternes and works whatsoever" were to be put in good repair. When this Indenture was signed in August 1633 the last payment was made to Bewley of the £40 due to him for the new Waterworks. This did not finish his contract, which was to extend over a period of thirty-one years. The Mayor and Council were desirous that for a yearly payment of £10 he should keep the water system in repair, and they hedged this contract with many provisos. He was to keep the waterworks and pipes in repair "with plumber's worke as Mason's worke. The inhabitants were to

19. See App III B.

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be provided with as plentiful a supply of water as they had enjoyed formerly. An attempt was made to ensure the continuity of the supply. Bewley was to be subject to a fine of £5 if the supply failed for three days, and the Council was empowered to withhold one half-yearly fee for that purpose. But certain concessions were allowed to Bewley. He was allowed six days' grace when a stoppage of the supply was caused by a breach in one of the pipes or by the laying of a new section. At the same time the Council jealously guarded their water supply, and Bewley was not to attach any private pipe line to the municipal system without the express consent of the Mayor and his brethren.

Bewley and Sargenson had to maintain a constant water supply to the town and provide their own materials for the task. They had civic duties thrust upon them in 1638. In the October account Sargenson appeared as a Chamberlain of the City, and Bewley held the same office when the December account was signed. They naturally still continued at their trades, and Bewley at least at times, still worked for daily wages. Much smith's work was required for the portcullisses for the Spon End and the New Gate gates in 1640. Of course, the Bewleys provided their own metal and a greater part of their work such as the casting of lead was paid for on a weight basis

20. Coventry CH. Accts. 1638.

21. .. . 1640.

They improved their position when they erected the Waterworks, for they acquired a considerable amount of estate in Coventry. They leased the Swanswell Pool, which was the source of the water supply, Swanswell Mill and land and meadows bordering on the pool. They paid ~~£80~~³⁰ in rent for the lands, pool and the mill in 1632.^{22.} And in 1646 and 1647 they were paying £35 in rent for the land called Priors Orchard, and Swanswell Pool with its mill.^{23.} They held this land jointly, but in disputed with the Council, Sargenson is more frequently mentioned, possibly because he did the correspondence for himself and Bewley.

The Council did not take kindly to the granting away of all the fishing rights in Swanswell pool. In 1634 £5 was paid to Thomas Sargenson and Bartholomew Bewley for "all their interest of & in the fish in Swanswell poole accordinge to the Citie's agreem^t with them the xliith of October last v^u 24.". Sargenson and Bewley may still have retained private right of fishing there, but in April 1650 a new agreement was made. "This daie Mr. Thomas Sargenson came to the House and then agreed and promised that in consideracon that this Citie would ~~f~~ mit & suffer him to have the benefit of the fish in Swanswell poole during the continuance of his term of that poole and the Mill there, that he the said Thomas will yerely and everie yeare during that terme truly satisfie

22. Coventry Leet Book. p.104. April 1632.

23. " Charity Funds Bk. (A.22) 1646, 1647, pp. 354, 371.

24. " " " " " 1634, p.272.

and paie unto the Maior of this Citie for the time being Twentie six shillings and eight pence every lent from hence-forthe. Nevertheless it is agreed that if the Maior or any gentlemen of this House have a minde to prevent him or themselves in fishinge in the said poole by angling ther it may be lawful for him or them so to do any thing therein to the contrary notwithstanding.^{25.} Though Sargenson was to pay 26s.8d. for the right, the Council still did not wish to preclude their own members from the right of fishing at Swanswell. Since they had fishing rights and kept cattle on the land called Prior's Orchard, Sargenson and Bewley seem to have been well-to-do tradesmen. Their place of residence is not actually named, but their houses probably stood on Prior's ^o Prchard.^{26.} At one time Sargenson lived at a house on Well Street, for which he paid a rent of seven shillings, and he bought the property in 1639.^{27.} This may have been his house before he had met with success in trade; he would have occupied a larger house in later times.

It was in connection with Prior's Orchard land that Thomas Sargenson wrote a lett~~er~~ to the Council in October 1648.

"Gentlemen,

Whereas my selfe with Bartholomew Bewley are your Tenants for the grounds Called Pryors Orchard; May you please to be informed that in the time of theise warrs the

25. Coventry Council Book. April 1650 p.90 (back.)

26. See Sargenson's letter of 1648 - below.

27. CH. Accts. Nov 1639.

Comittee of Safety did appoynt the said grounds for the
 grasseing of the Troope horses; and other Cattell; by
 reason whereof I was enforced to sell up my Cattell for want
 of grounde to mayntayne them, to my losse of xx^{xi} at leaste;
 (the Comittee researving the proffite of the said pryors
 Orchard for about three yeares) By rason whereof I did for-
 beare to pay your rent for that yme. Now those three yeares
 rent being in areare, is required; and I heare since that
 the Comittee have Ordered that they will pay one third parte,
 that the Citty should abate one other third parte. Gentlemen,
 my humble defse is; that Considering my losses by sale of my
 Cattell, and that I had dwelling there three yeares no benefit
 at all by the land; that you will be pleased so to narrate
 the business betweene you and the Comittee that neither my
 selfe nor my partner may be putt to pay any parte y^t those
 three yeares rent; And that out of the halfe yeares rent
 now due to you wee may have allowance y^t fifteene poundes
 which was paid by mee towarde one halfe yeares rent y^t
 those three yeares; All which I doubt not but you will be
 please to take with due Consideracon and determine as is
 defined;

And I shall soe remayne

October 4th Your most humble servant,
 1648.

28.
 Thomas Sargenson.

28. From Ancient Documents of Corentry.
 Collected by Sharp & Eld. No^{xx} 218.

The aftermath of the war brought much work to Sargenson, but the war also had its disadvantages for him. His grounds at Priors Orchard were damaged, they were partially put under the control of a Committee of Safety, and by 1648 a complicated problem of compensation and arrears of rent had arisen. Sargenson was still in arrears in 1650, and the Council abated him £30 and required that he should pay £40.^{29.} Let's hope that the difficulties of Priors Orchard were then settled for some time.

~~The letter points to Sargenson and Bewley having their houses in the plot called Priors Orchard, for it includes the statement that Sargenson had "dwelling there three years."~~

But Sargenson did have some fortune during these years. He rebuilt some of the Warwickshire bridges, Stratford, Fazeley, Halford, and Salford.^{30.} Many of the bridges had been knocked down during the Civil War and in 1651 and 1652 the county made a determined effort to put in hand a large number of major repairs. Sargenson had been known outside Coventry before 1651.^{31.} The first bridge that he is recorded by the Quarter Sessions as repairing is Emscote or Edmonds-cote Bridge in 1626. On this bridge he worked with three other masons, Robert Morrell, Henry Bellamy, and John Keene. Morrell was a Warwick mason,³² but the towns from which the other masons came are not indicated in the Sessions Order

29. Coventry Council Book, 1650, p.95(back)

30. Stratford Bridge 1651.

Fazeley .. 1653.

Halford .. 1657.

Salford .. 1652.

13.

31. Warwick Q.S. Order Book.

Easter 1626. Epiphany 1629.

Book. It may be assumed that Sargenson was the chief mason on this work for his name comes first.

The first time that Sargenson was called in to help at Stratford was about 1639.^{33.} John Page mason of Chipping Camden had just finished building a town hall there. But a long dispute was being waged between the Council and Page over the cost of the building, and so many alterations had been made to the original design that the articles which had been drawn up at the commencement of the work were of little use.

Thomas Sargenson of Coventry was one of two impartial and skilled masons who were called in to assess the value of the building that Page had erected. In 1651 the county was willing to expend money on Stratford Bridge, the centre arch of which had been destroyed during the Civil War. Robert Saunders, Robert Ridell, Richard Cooke, Thomas Cooke, and Robert Samond were the first masons consulted.^{34.} But at Easter 1651 the contract with these masons was cancelled and the work was given to Sargenson, "whom this court thinks the fittest person to undertake the work."^{35.} In his contract it was agreed that Sargenson was to effect an immediate repair and also to keep the bridge in repair for twelve years. In 1651 Sargenson also viewed Deritend and Fazeley bridges.^{36.} Again the course expressed a high opinion of him.

"..But this court for special reasons do recommend Mr.

33. Stratford Town Hall in Evesham Journal. Feb. 12. 1928. E.A.B. Barnard.

34. Warwick G.S. Order Book. Vol. III p.45. Epiphany 1651.

35. " " " " Vol. III p.63. Easter. 1651.

36. " " " " Vol. III p.64. Trinity. 1651.

Thomas Sargenson to do the work at the charge of the whole county.^{37.}" The court may have recommended Sargenson simply because he estimated cheaper charges for the repairs. But the mention of him by court suggests that he was an important Warwickshire mason-contractor.

It is unfortunate that no definite indication is given that Sargenson was also an architect. He undertook the repair of Stratford and Salford and Fazeley Bridges unaided by other master masons. Fazeley at least entailed the construction of an almost entirely new bridge. It is unlikely that he did all this work without the use of plans, particularly as plans were used in the building of houses shortly after this date. His skill at writing gives further indication that Sargenson was his own draughtsman.

37. See previous note.

The Mason Architect.



In the middle Ages the chief mason or the master mason of a large undertaking such as a monastic house or a royal residence performed the duties of the architect. The master-mason was accustomed to take precedence of all the members of the staff directing the operations including the clerical workers and the clerk of the works. By the sixteenth century the mason was loosing his position of pre-eminence, and the leading figures in the important building operations were the architect commonly called the surveyor and the clerk of the works. A paper by Knoop and Jones "The Recline of the Master Mason" is most informative on this change in status of the master mason.

During the seventeenth century the decline continued. The problem which presented itself was how far does the mason perform the work of an architect and co-operate with the surveyor in important operations, and when does the mason drop all pretensions to architectural work and sink to the subsidiary position of a mere manual worker. Two contemporary writes afford interesting evidence on the work of

architect and master mason and builders. In the mid-seventeenth century Sir Balthazar Gerbier wrote to the "Counsel and Advice to All Builders"¹ and Joseph Moxon a fellow of the Royal Society compiled a series of pamphlets on "Smithing, Joinery, House Carpentry, Turning and Bricklayery" which started appearing in 16 and which ran through several editions into the early years of the eighteenth century.

Gerbier a gentleman architect himself would not be inclined to treat the master mason with extended generosity. His ideas would reflect the most popular practice of the day, for his book is dedicated to ^{many} a nobleman ² _____, and he himself was connected with the building of several famous country and town houses for the nobility and gentry." Whoever is disposed to Build," says Gerbier, "Ought in the first place to make choice of a skilful Surveyor, from whose directions the several Master work-men may receive Instructions by way of Draughts, Models, Frames, etc."³ The surveyor should have supreme authority and "the Clarke of the works, ought to be subject to the censure of the Surveyor on the point of all the materialls which are brought in"⁴. The modern idea of-a

1. 1604.

2.

3. Gerbier. p.4.

4. - p.48.

professional architect who need not be in continued attendance at a building was prevailing. But Gerbier points out the need that he should frequently "visit the worke, to see whether the Building be performed according unto his direction and moulds"^{5.} Moulds usually meant plans, but it also was the name given to the patterns for the cornices, archives, window-frames and other details of the masonry. A surveyor and especially one who travelled round to the various buildings on which he was engaged might easily allow these patterns to be designed by the master-workmen as long as they abided by his general plan. Gerbier thinks otherwise and lays down that "As for the workmen, they must observe exactly their Surveyors Molds and work close and neat joynts"^{6.} The surveyor is to look after these details so carefully that he "Ought to cause the wooden Moulds(on which Masons must work), to be tryed by lifting them as high as the Stone or wooden Figure is to be placed; to see how it may please the Judicious Eye; which is the best Jury and compasse"^{7.} Little scope is left for the creative work of the mason as he does not seem to be responsible

5. Gerbier . p. 24.

6. .. p. 28.

7. .. p. 17.

for designing any part or any ornamentation of the building. Master masons there must be, as well as journeymen, so writes Gerbier himself.⁸ But he adds "This doth not entrench on those who are undertakers of Buildings, but insisteth onely on the necessity of sufficient Master Workmen, actually employed in every work."⁹ These master workmen were "to observe exactly the Model and Moulds held forth to them by the chosen Surveyour"¹⁰. The trend to make the mason a simple manual worker was evidently strong by 1663 when this "Counsel and Advice to All Builders" was published.

Even so, the mason was not yet completely cut off from the architectural work. Gerbier does not appear to be expressing a long sanctioned custom when he takes all the work of designing away from the master workmen. The mere mention of the fact that the duties of the master workman did not encroach upon that of the surveyor, suggests that no great chasm divided the one from the other. The chief masons still had to be skilled craftsmen, and it may be that the high degree of skill required of them, kept them conversant with the work of the architect, though they were not always called

8. Gerbier. p. 59.

9. " p. 59.

10. .. p. 60.

upon to exercise this one part of their art.

The pamphlets by Moxon help to fill up the gaps left by Gerbier's picture of building operations, and throughout the series the stress is laid upon the skill of the craftsman. It is particularly helpful for an understanding of the mason's and bricklayer's work which is all included in the section of for bricklayers. Moxon speaks of the "White Mason" and the "Red Mason". The strangeness of the bricklayer or red mason being classed with the craftsman who shapes the free-stone becomes less when the nature of the bricklayer's work is revealed. The bricklayer had to fashion cornices, fascias and architraves in brick-work. For these purposes he made use of the best material called dressed or rubbed brick. He had to shape the bricks to fit the templates which had been drawn up for the brick ornamentation before hand. The tool he used was the brick axe. Some worked to such a degree of precision with the axe that they made no use of any other tool in making the exact shape of a moulding. Of the axe Moxon says "A Brick axe, with which they cut Bricks to what shape they please, as some for Arches, both Straight and Circular,

ii. *Mechanick Exercises.* Moxon (1703 Edir) p.237.

12.

others for the mouldings of Architrave, Frieze and Cornice".
 Those not so expert with the axe used a "float stone" with
 which they ground off the brick to the exact shape after
 they had hewed it roughly with the axe. ^{13.}

Moxon gives many details for this work on architraves,
 arches and other mouldings, and it is pleasing to find that he
 expects the workmen to fashion the templates for such mouldings
 themselves. ^{14.} He gives instructions for making them and they are
 evidently for craftsmen rather than draughtsmen and architects
 for though he gives the theoretical manner of making eclipses and
 other constructions he adds many practical variations to the
 academic method. ^{15.} The evidence from Moxon suggests that the
 tradition of craftsmanship did not die out with the introduction
 of brickwork. That these craftsmen as part of their work were
 ready to fashion and design the "molds" or patterns for the
 various architectural features of the building.

Moxon allows to them even more scope in the sphere
 of designing. "The drawing of Draughts is most commonly the
 work of a Surveyor, although there be many Master Workmen that

12. Moxon. p.245.

13. .. p.246.

14. .. p.p.267 seq.

Will contrive a Building and draw the Designs thereof, as well, and as curiously, as most Surveyors; Yea some of them will doe it better than some Surveyors; especially those Workmen who understand the Theorick part of Building as well as the Practick^{15.}. The master workman was capable of the surveyor's work even though he was being ousted more and more from the work of designing. The master carpenter was still a general builder who could draw the plan of a building. Moxon starts his pamphlet on House Carpentry with "Being now come to exercise upon the Carpenter's Trade, it may be expected by some, that I should insist upon Architecture, it being so absolutely necessary for Builders to be acquainted with; But my answer to them is there are so many Books of Architecture extant,... Besides Architecture is a mathematical Science, and therefore different from my present Undertakings,... yet because books of Architecture are as necessary for a Builder to understand, as the use of Tools,... I shall at the latter end of Carpentry give you the names of some Authors, especially such as are printed in the English tongue." Section 13 is so

15. Moxon. p.253.

16. Moxon. p.117.

headed "Of the Ten-foot Rod, and thereby to measure and describe the Ground-plot". Moxon shows how the carpenter draws a ground plot to scale. "And thus you are also to describe by your Scale your Front, and several sides of the Carcase; allowing the Principal Posts, Posts, Entercluces, Quarterings, Braces, Gables, Doors, Winddws, and Ornaments, their several sizes, and true positions by the scale: Each side upon a Paper by itself: Unless we shall euppouse our Master Workman to understand Perspective; for then he may on a single piece of Paper describe the whole Building as it shall appear to the Eye at any assigned station". Then "Having drawn the Draft" the master workman is to procede with the actual operations,^{17.}

The master workman is lettle inferior to the surveyor and able to draw up plans for buildings. The design of large buildings was falling more and more to the surveyor and this trend seems to find a place in Moxon's pamphlets. He obviously does not expect that any great building will be put up without the aid of the surveyor. Yet the master mason and master Carpenter are still craftsmen, they still include the compass among their tools, and

17. Moxon. pp. 117 seq.

they can cope not only with the designs of mouldings, but the designs for complete buildings.

The division of work between masons and architects of the seventeenth century buildings in the Midlands is rather involved, as doubtless it was throughout the countryside. The mason was only gradually retreating before the architect with his mathematical and scientific knowledge. Two buildings are of particular interest because they belong to that large group of buildings in which Sir Christopher Wren is reputed to have been the architect, the School at Appleby in Leicestershire built for Sir John Moore and the restored part of St. Mary's Church at Warwick. Both associated with Wren and designs for both are contained in the "All Souls" collection of Wren's work. But his design does not correspond with the building in either case.

The accounts of the building of Appleby School and the correspondence of Sir John Moore with his two nephews, are published by the Wren Society.^{18.} They give considerable insight into the manner in which architects and masons co-operate to give the building its final shape. Sir John Moore wanted Wren to be

18. Wren Soc. Pub. Vol. XI

the architect and Wren apparently drew some plans. But as it was work in the country he could not have the careful oversight of it and when another architect, Sir William Wilson, through one of the nephews besought Sir John to make use of his services Wren was willing to forego the work. At least Wilson was introduced to Wren by Moore and Wren was willing to acquiesce in the changes of the plan that Wilson introduced. It would seem that Wilson was given a free-hand and the school at the finish bore little resemblance to the plans drawn by Wren. But though Sir William Wilson was responsible for the final design of the school, he may not have carefully designed all the details.^{19.}

The master mason was Mr. Thomas Sabin of Ashby-de-la-Zouche in Leicestershire. He was responsible for the mason's work including all the brick-work and it was principally a brick structure. When the building was finishing and the wrangling concerning the payments was growing fierce Sabin was asked to furnish particulars of the quantity of cornice, window, "facio" and pediment moulding work which was included,

19. Sir William Wilson was Mason, sculptor & architect.

He gave the particulars in a letter dated October 17th, 1697 and added " I did not know but that Sir John had the Moulds, for I cut them all out in paper, and Sir William Wilson carried them to London and said ^{20.} he would leave with Sir John Moore". Since he cut out the moulds in paper to have them sent to Sir John to approve of, it appears likely that Sabin the ~~master~~ mason had with the consent of Wilson designed them himself. Mr. Thomas Sabin was an important individual he had "layd out £595 and upward" ^{21.} on this school. He would have no reason to feel in any way inferior to Sir William Wilson.

Wilson was again connected with Wren in the restoration of St. Mary's Church Warwick. After the Church and other buildings burnt down in 1694 the Parliamentary Commission appointed to look to the work of restoration in the town chose Sir William Wilson as the architect for St. Mary's. ^{22.} Wren actually drew up some plans for the Church and must again have accepted Wilson's suggestions and have allowed him to take charge of the work. The builders were Messrs. Smith of Warwick. ^{23.} The two heads of the firm

20. Wren Soc. Pub Vol. XI pp. 101, 102.

21. Vol. XI p. 102.

22. History of Warwick. Kemp. p. 101.

23. p. 102.

were Mr. John and Mr. Francis Smith. Both were local architects of some note and Francis Smith designed the well-proportioned Court House at Warwick. It is not clear whether John and Francis Smith were even master masons. But it is striking that the consulting architect, the architect in charge of the work and the builders had so much in common between them that all could have competently designed St. Mary's Church. Besides the Smiths a Mr. Dunckley appears as one of the builders contracting for the work. ^{24.} Samuel Dunckley was a master mason and the minister in charge of a Baptist Chapel at Warwick. ^{25.} He was mentioned several times in the account books of Warwick and once undertook the repair of the great bridge. ^{26.} He built the doorway into the Beauchamp Chapel after the fire at Warwick and payments were made to him at this time for work done in St. Mary's. ^{27.} It is rather surprising that he should be mentioned in the contract. It may be that he undertook to provide the stone and build certain parts of the building. At least it looks as though a master workman was allowed considerable freedom and may even have been allowed to design certain details of the building.

Sir William Wilson himself the real architect of these

24. History of Warwick, Kemp. p.103.

25. " " " " p.104

26. Warwick Ch. Accts.

27.

two buildings personifies the close connection between architectural practice and craftsmanship.^{28.} Though his craft was not that of the free-mason but of the sculptor. A Leicester man, he probably started life as a free-mason but became a sculptor. Fortune had great riches in store for him when he was working on a memorial tablet to Henry Pudsey in the Warwickshire town of Sutton Coldfield. The widow watching the mason at work, fell in love, married him and with her fortune procured for him a knighthood. At a meeting of the London masons he was declared a Fellow of the Masonic Brotherhood. From now on he continued his work as a sculptor and added to it the duties of an architect. He built several houses at Sutton Coldfield including his own called the Moat House, the Vicarage, and for Lord Folliot His father-in-law Langley Hall. These buildings were erected before he started work on the Appleby School in 16 which was followed by his appointment to rebuild St. Mary's. His work as a sculptor included a statue of Charles II, placed on the topmost niche of the west front of put in Lichfield Cathedral, and of the First Duke of Newcastle which was set up in front of the rebuilt Nottingham

28. For details of his life which follow see authorities quoted under note 5. of Introduction. Most details are included in Biographical Note in Vol. xi of the Wren Society Publications. But the new view of his life given in this article seems far from satisfactory.

Castle. He was working as a sculptor while engaged on the school at Appleby and finished a statue of the founder, Sir John Moore, the merchant of London. Later he made a statue of another founder of a school, though he was not a contemporary, and this statue of Edward VI graced the front facade of the new eighteenth century building of King Edward's School, Birmingham.

Sir William Wilson was not just a gentleman architect, but was an active craftsman at the same time. No very wide gap separated him from Thomas Sabin the master mason at Appleby School, Dunckley, a master mason at Warwick and the two Smiths heads of the Warwick building firm, who if they were not actually masons were directing a firm whose leaders had only just emerged from the master mason status. These Mr. Smiths had buildings in Warwick to their credit, and a Mr. Smith either John or Francis described as a "M^r Smith of Warwick" was called in to give his expert opinion on a repair which had been executed in ^{Tet} ~~Led~~bury Parish Church.^{29.} More distant from their own town, a Mr. Smith of Warwick acted as the architect and builder of the new body of Monmouth Church,[?] the old building having been destroyed by fire.^{30.} This country

29. History of the Town of & Parish of Tetbury. - A.T Lee p.103.

30. See Guide to Monmouth Church. Smith.

building firm, started perhaps by master workmen was blossoming forth into a building business whose heads had an architectural practice over a wide area.

At Worcester the duties of an architect were carried out by individuals who were of a standing comparable to Sir William Wilson the sculptor architect and to John and Francis Smith of the building firm. Wilson's counterpart at Worcester was Mr. Thomas White, who had been a pupil of Wren's, and was both an architect and sculptor. He had journeyed with Wren to Rome, returned to England to help in the work of St. Paul's and later came back to his native town of Worcester. He lived to grace his native place with several statues and buildings. The bust of George II on the Edgar Tower, the memorial effigy of Bishop Hough in the Cathedral, the statue of Queen Anne and the effigies placed on the front facade of the Guildhall are all his work. He commonly designed the statue and carried out the work himself, but one exception may be the figures on the Guildhall where written evidence suggests that he left the execution to another hand. The Guildhall itself was one of his

31. For details see authorities under Note b in Introduction.

buildings, and before that was put up he had erected several churches in the town, St. Nicholas ~~was started in 17~~, All Saints ~~in 17~~ and St. Swithin's, ~~in 17~~. There is no detailed indication of the work and responsibilities which rested with the master workman. One of the chief masons engaged on the Guildhall was Mr. Robert Taylor, "Stone Cutter and Mason" of Worcester who had undertaken with another townsman of that trade, the rebuilding of Eckington Bridge in 1728. He probably would need to be his own architect for this work and the contract suggests that he was a mason with good financial resources.

On All Saints Church the master workmen left evidence of themselves by placing a small tablet on the top of the Church Tower. The tablet indicates that they were deemed sufficiently worthy to memorialise themselves and coupled with the several undertakings and statues made by Thomas White about that time it is highly probable that a large degree of freedom was allowed to the workmen who were carrying out White's designs.

At the beginning of the eighteenth century at Worcester it still seems probable that master masons were capable of acting

32. James Squire

and William Davis

Master builders of

This Church and Tower.

An. Dom 1741.

from Antiquities of Worcester. Green, Vol. II Mss Notes, p. 56 in copy in B'ham Reference Library.

spire and practically a new tower for Monmouth Parish Church. He would need some kind of design to build these spiers which he carried out and he was undoubtedly his own architect for this work.

Wyatt Papworth, a well known architect of the nineteenth century who was apt to glorify himself and the profession of the architect too frequently and too ardently speaks of Nathaniel Wilkinson as "an ^{uneducated} ~~ignorant~~ ^{39.} working mason". He rather disliked the idea of a master mason being able to perform the work of an architect.

Since master workmen were able to draw draughts of buildings, it is of some importance to probe the question as to whether the drawing of finished designs was customary when they were erecting the more humble buildings. Again the evidence provided by Moxon and the details of local building operations point to the same answer. The example given by Moxon of a plan which a carpenter may easily draw is that of a simple house or shop with a single bay front of 25ft. and a depth from the frontage of 50ft. ^{40.} As has already been noted the crude methods at times which Moxon relates for the drawing

39. Papworth's Dict. of Architecture under Wilkinson.

40. Carpentry Pamphlet. Moxon.

of plans suggests the tradition of a line of workmen drawing their own plans. This rule of thumb method appears once more in the fact that figures were not always placed on these plans and workmen when in doubt about the thickness of a wall might have to gauge it by guessing its relative size from the plan. Moxon depreciates these shortcomings and urges the master workmen surveyors to inscribe on the plan the exact measurements.⁴¹ Plans seem to have been put to extensive use and to have been drawn no matter on what type of work the mason or carpenter was engaged.

Local contracts indicating that plans were drawn for small private houses and shops are among those made for rebuilding premises after the fire at Warwick in 1694. John Williams the carpenter and John Pinley the mason each made contracts containing provisions that the premises be erected⁴² "according to a Draught now made"..., and "according to ye⁴³ Draught of the Ground plott and Upright of ye said building". In a joint contract made by Pinley and Williams in 1709 to build the Bridge House next to the bottom end by the Barn the proviso is again made that the building be put up "According to draught⁴⁴ thereof made and set before the Corporation". The placing of the plan before the Corporation is mentioned in two contracts.

41. Carpentry Moxon.

42. Warwick. Order Book of Corporation, 1697.

43. " " " " " 1708.

44. " " " " " 1709.

It is clear that these plans were much more than rough sketches made primarily for the builders own use, and consequently half finished and leaving much to be worked out as the building progressed.

Unfortunately it is only for Warwick that there is actual written evidence of the use of plans by local master masons and carpenters. These workmen at Warwick were not outstanding men in their trades so it may easily be assumed that the practice was a widespread one among local builders. Thomas Sargenson of Coventry was a notable mason in the county and it is unlikely that he did not make plans. In fact most of the masons engaged in repairing and rebuilding the county bridges were probably their own architects. The masons who did work for the county would generally be the more important of the local workmen and more able to cope with the duties of an architect.

Building in the Early Eighteenth Century.

The work of masons and architects has been examined into the eighteenth century particularly for those who were employed at Worcester. As their work did not vary much from the traditions of the previous century neither did the manner of undertaking the rest of the operations in a large building undertaking.

The Guildhall at Worcester for which Thomas White was responsible was started about 1721. A minutes of the Corporation in April of that year " Ordered that Mr. Mayor Weston, Mr. Alderman Attwood, Mr. Sherriff M. Wyer, Mr. Town-clerke, Mr. Alderman Hughes, Mr. Alderman Cookesey, Mr. William Ballard, Mr. Moses Lilley and Mr. Joseph Weston Jnr. or the major part of them have full power and authority to agree with good able Skilfull workmen for the pulling down and rebuilding of the townhall as they shall think Fitt and to appoint one or more Inspector or inspectors, and one or more person or persons to receive the subscriptions and pay the workmen and

1. Worcester . Order Book off the Corporation, 1721.

call to their assistance such Gents of the County or of the Chamber as they shall think proper and that the said persons shall have Full power to purchase and agree with the ^A Cooksey's or any other persons houses about the premises they hold of they city or are adjoyning the Townhall.... The Chamber doth hereby agree to ratifie and confirm the same". Several orders relating to the rebuilding had been made before, and at last the Corporation appear to be acting in the matter. The "Inspector or Inspecters" whom they were bidden to appoint would be the paymasters and the clerk of the works . Mr. Ben Lyon was appointed to perform both duties. In January 1744 an entry in the accounts " pd B. Lyon the Accot for his Sallary in full as Clerk to the work ^{2,} £80-0-0"

It is also a useful indication that the building was almost if not completely finished in 1724.

The supply of building materials would appear to be the work of the Corporation and of Mr. Ben Lyon. No large firms undertook the supply of large quantities of stone, brick-lime or timber. The supplies of each commodity made up quite a

2. Order Contracts & Disbursements on Guildhall. 2 vols.

list of names. The Guildhall was built of brick with stone dressings, this would make a heavy call upon the brick-makers of Worcester and the surrounding neighbourhood. Seven people at least contributed stocks of bricks for the Guildhall. Bricks from other towns no doubt usually come by river. An entry of 1721 is "pd for Landing (9500) Brick 0-1-6". Nine individuals supplied stone for the work.^{3.} The accounts do not show the status or trade of those who supplied the stones. But the names of the two chief masons are not among those suppliers. There was a good quarry for stone not too far away at Ombersley, but a wide search was started for stone for the Guildhall.

In "Sept. 1721 pd Jones for Going to Glouct about Stone 0-2-6.

pd " him for going to " Cheltenham for
D^o 0-2-0.

Perhaps they were intent on getting Cotswold stones.

The names of the eight suppliers of lime are given, besides which there is an entry of "Sept 1724 Paid for 200 Double Bushells of Countrey Lime 5-0-0." So even for lime for the

3. Details from Orders etc. Guildhall.

Guildhall the suppliers of Worcester town itself were not able to meet the requirements. The extra supply drawn upon would probably come from other Severn-side towns. Marshall in his "Rural Economy" noted that the lime-burners had set up their kilns at towns and villages near the Severn in order to facilitate the carriage of lime over a wide area. But the number of suppliers of lime coupled with the entry for the purchase of country lime suggests that the output from individual lime works or kilns was rather small in 1724.

Fourteen timber suppliers are given in the accounts as well as the timber which was provided by the carpenters engaged on the work.^{h.} The supplies were labelled timber poles and cords. The supply would include wood for constructional purposes, scaffolding, and cords which simply meant a measured amount of stacked wood might mean wood for general purposes, but it probably signified the wood to be used for planking. In the later entries for timber there is a hint of merchants who would arrange for large supplies ---

h. Orders etc. Guildhall. 2 vols. Look under year.

"Dec. 1723 pd Mr. Green & Co for Timber 3-0-0
 X Dec 26 1723 " John Jones & Co for Boards 14-10-0
 X Jan 23 1724 " Tho Green & Comp for Boards 4-0-0^{5.}

The amounts appended to these three entries are not greater than most of the others recorded. The same men are mentioned earlier in the accounts, but only in these last few entries are they designated with the title " & Co". It may well be a sign that these country firms were getting larger.

The chief mason seems to have been Robert Taylor "Stone-Cutter and Mason" of Worcester. For few of the weeks that he and his men worked there he was receiving about £6-0-0 per week.⁶ Other master masons were Charles Green and S. Robinson, and once a payment of 10/6d. was made to the Oxford Masons.⁷ Neither Taylor or the others appear to have supplied stone for the Guildhall. Though Taylor was in a position to do so, for he found stone for rebuilding Eckington Bridge and for repairs which he made in Worcester itself. The absence of stone supplied by masons at the Guildhall shows that they were not yet wealthy capitalists or important merchants of quarried stone.

5. Orders etc. Guildhall.

6. " " " 1721.

7. " " " Nov. 1721.

8. Eckington. Fletcher. p.45.

Four master carpenters seem to have been employed on the work.

As has been noted previously many individuals supplied timber, and it seems right to assume that the majority of these were timber merchants. The four others, whose names were given were landowners from whom timber was procured.

One of the carpenters, Thomas Salmon, certainly supplied wood as well as his services and those of his men. "Oct. 12 1723 By Do. (cash) pd. Mr Salmon for Boards and day-work £8-1-8". The sawyers worked at the yards of the carpenters. In November 1721 payments were made to "Sawyers at Mr. Wildes" and "Sawyers at Mr Lintons"^{q.}.

The other chief workmen engaged were the plasterers the plumbers and the smiths

"Sept 1724 By Do. (cash) pd. Needham the Plasterer at Severall times as Receipts £77-2-0."

"1724 By Do pd. the Plasterers for the ~~Flowers~~
£5-5-0.

Mr. Needham the plasterer was paid a substantial bill and he may have provided some materials but he did not

q. Orders etc Guildhall.

provide the hair for the plaster.

"July 1723 By Do. (Cash) pd. Thomas Morton in full for hair 1-6-8".

The plumbers were paid large sums and the absence of separate entries for lead and solder makes it look as though they provided all their own material.

"Dec. 18¹⁰ 1722 By Do. (Cash) pd. the Plummers in part £100-0-0."

The smith would probably be in the same category as the plumbers. "July 22 1721 By Do. (Cash) pd. Avery Hunt for Smith's work £2-1-4½" Mr. Avery Hunt the Smith did other work at Worcester including the making of fire-engines. His position is of interest because he was doubtless an earlier fore-runner of Avery-Smith's, an engineering firm of present-day Worcester. The smith did not make all the ironmongery, the nails came either from nailers or from the merchants who retailed their goods.

"July 1721 By Do. (Cash) pd. J. Hodgetts for

Nails £0-15-0."

" " 1721 By Do. pd. Thos. Tolley for Nails

£1-1-10."

For the building of the Guildhall the Corporation used direct labour and had to obtain the material in small quantities from a large number of sources. The master workmen had more than just their labour to sell but they were only capitalists on a small scale. The masons and carpenters could and did supply some of their material. The plumbers and the smith provided all their material. The workmen had not changed from the position of the small master workmen-contractors of the seventeenth century.

The building of a private residence is illustrated by a "Memoranda Book" of John Dyott of Lichfield covering the years 1733-1744. The Dyotts were an important Staffordshire family and they several times provided Lichfield with a Member of Parliament. John Dyott in 1736 decided to have his burnt out house at Choarley rebuilt.

The book contains many jottings made by John Dyott on agreements with brickmaker, plasterer and others in addition to remarks on the progress of the work and the supply of materials.

Dyott seems to have employed Mr. Clarke as surveyor or architect. (A note 24th Dec. 1736 begins "Then advised with

||. All following details are from this book.

Clarke he says gives $1\frac{1}{2}$ d. for for plastering...") In July 1736 an agreement had been made with the architect. "July ye 14th Recd of Mr. Dyott Ten pounds and ten shillings in part of what is to be ye House at Charley[?] according to ye Articles in Mr. Lovits Keeping Reced by me

John Clarke."

Mr. William Marklew was the brickmaker. The output of his kiln seems to have kept the masons busy and bricks were not purchased from any other brickmaker.

The first consignment of bricks from Marklew was probably received in December 1735. Dyott would make an agreement William Marklew before the first deliveries began. The only agreement with the brickmaker contained in the "Memoranda Book" is dated "10th ffebrury 1737-8" and must have been for bricks during the last year of the building,

"10th ffebrury 1737-8

Memd of Agreemt made and Centred Between Jno Dyott and Wm Marklow he the sd Wm Marklew is to make 21000 of Bricks well Burnt and workemanlike and the sd Wm Marklew to Dig the Clay and sett the Bricks out for tails he the sd Jno Dyott

to pay 5 ye 1000 and further the said Wm Marklew to sell the
Clap and clear the ground.

Witness my hand

Wm W Marklew

Wissed his marke

Robt Wright.

Marklew had not developed his brick works on one
site sufficiently to cope with all orders. The Marklews
probably made bricks near Lichfield for one of them is seen
obtaining a license to dig clay near there.

"28 Jan 1741

Ordered also that Dennis Marklew be allowed to get
Brick at Fernly pitts for the next Summer he having now asked
leave for it, and upon his promising to the Chamberlain of
this City 5 within a month after Date & having now submitted^{12.}
and asked pardon for breaking the Soil there without Leave".

The clay to be used for the bricks of Dyott's house
was to be obtained at the brickmaker's charge, and he may have
dug it from pits owned by the corporation or from land owned
by Dyott. At least he set up the kiln on the estate, for which

12. Lichfield . Copies of Orders copied from Corporation Books . 1733- 1755.
(in Birmingham Reference Library) p.19.

he was to be paid 12 shillings and after the bricks had been made he was engaged to remove all traces of the brickworks from the estate. This kiln was a "clap or clamp", that is a kiln where the bricks were fired by a coal fire. Wood was used sometimes in brick kilns and the disadvantage of coal fired bricks was that of the twenty thousand usually fired at one time about five thousand were practically unfit for use. At this or another kiln Marklew made tiles for Dyott. Under 30th July 1736 is a note "Then Recd of Jn Dyott foure pounds nineteen Shills for makeing Brick & Tiles gutters & Cresses & hips, with what money reced before is in full of all working & accounts to this day I say reced by me

(Wimm. Marklew
 (
 (
 (

"

Marklew according to his agreement was to "sett the Bricks out for tails" and this was important for it meant that he had to remove the useless or small bricks. But though he was to obtain the clay, Marklew did not provide any carry the coal and straw to the kiln neither did he carry the bricks from the kiln to the house. The cartage of these and of a goodly proportion

of the building materials for this house was undertaken by Mr. Cooke in close co-operation with Thomas James the mason. They had worked together before on a building which had been put up by Clarke. Cooke with his team was now employed in carrying coal and straw to the brick-kiln, and to the house the bricks, lime and sand.

Thomas James the chief mason undertook a considerable amount of work. He contracted to do bricklaying and plasterwork. A payment was made to him for brickwork in June 1736. "These paid to Thomas James 12 June for 1600 of Brick Laying at 2^y - 8d. ye 1000 wich amounts to 2^x - 2^r - 8^d which is the 3 Clop Brought from ye Kill delivered by Marklew- I say reced the same by me

Thomas James".

It was followed a fortnight later by another payment for brick-work. He and his men had laid another clamp of bricks 15900 bricks.

26 June 1736.

Then recd of Jno Dyott two pounds 2^r - 6d for Laying 15900 of Bricks which is the 4th Clamp I say reced by me, Thomas James.

It is quite probable that 16000 bricks per fortnight was the usual rate of bricklaying in the busy building seasons at this undertaking. In the note on this second payment

is added further details of the Mason's work.

"on the day above said paid Tho. James 3 according to the Articles for the Scafelin Rope & all soe gave him 2 for the Cornish of Windous & allowed him all soe allowed him a day's worke which

He seems to have had a large contract for building the greater part of the house. A further payment is recorded in August "4th August 1736 Reced then Jno Dyott Three pounds & five Shills for Laying Brick & Tiles & Gutters Which is in full to the day above said for all the Maysons worke dun att the newe house now rebuilt wich is in full of all payment to this day I say reced by me

Wittness Thomas James
John Cooke."

✓ Again on "25th Sept⁶⁴ 1736 Then Reced of Jno Dyott one pound eighteen shillin & 10d in full of all works dun by me and my servants to the day above said I say Recd. by mee
Thomas James".

The mention of a cornice in the payments made on 26 June 1736 suggest that James was engaged on plasterer's work as well as bricklaying. By Dec. 1736 the important plaster work of the

house was being taken in hand.

"24th Decembr I736

Then advised with Clarke he says gives $1\frac{1}{2}d$ fa
 plasetering ye walles & 2 a yard for lathing (plasetering-the
 two floors .Parlour is worth laying with Brick @ 5d
 Cooke and the Mas ns has done the same at Brownfield for Clarke."

In the following June a payment was made to James for
 plaster-work.

"⁹th June I737 Recd then of Jno Dyott three pounds
 two shillings and 8d for Pargin and all other worke paid for to this
 day and in full of all accounts I say received[?] of me
 Thomas James".

Thomas' James contract or contracts must have included
 bricklaying, plasterwork, and general mason's work including the
 equipment needful for the workmen such as scaffolding . In
 addition the money for Wm. Marklew the brickmaker generally passed
 through his hands. To eight payments made to Marklew is appended
 the note " this is Wm Marklews money he has had by Mr. James I736".
 James was the chief mason and probably was second in importance
 only to Clarke the surveyor. And as chief mason he had worked with
 Clarke before.

In 1738 another mason was contracting to do the work at Chorley. This may have been new work occasioned by a recent fire or just a continuation of the work already started. It was in February of this year that another contract had been made with Marklew the brickmaker. The mason's contract was dated March. 3rd March 1737-38

"Then agreed with Nathell the Mayson to dew all the worke at Chorley as was Burnt the Stables the Cow House to bring it up for the full at the Bays to Lay the Beams to bring a piller out in ye Barn for to ly on to dew all Stone to lay grounsill ye Stone next the orchard and that Stone as is burnt to part the Bays from the whim floor and the Gamble end to be made good & bolt House to compleat all in every point except paveing paying when dun ^t 3 - 2 - 6 ^s 6 ^d gave him in earnest ,

In the rough notes of the "Memoranda Book" there is no mention of Thomas James being connected with the work in 1738.

The transport of building materials was neither in the hands of the mason and brickmaker. Much of the material was transported by Mr. Cooke and his work has already been referred to. Two other carriers were Thomas Henry Senior and Junior. In

February 1738 there was an entry "Memd were Thomas Henry Jnr & Tho Henry promised that they would dew all ye Team worke belonging to the building except what Timber is not on the ground & to carting it & pay worke men Dyott paying for the Straw."

The transport of material falling to independent carriers suggests that though brickmaker and mason were capitalists, they had very moderate resources to fall back upon. The emergence of a larger concern based possibly on a business partnership may have been developing between Cooke and Thomas James the mason.

The names of the carpenters and not given. But it is clear that the wood came from the estate. Sawyers were paid for their labours and the amount of timber felled was reckoned in cords. Thus in one entry "12 Cord & 2 foot, 6 Cord & a halfe, 9 Cord and halfe, 14 Cord, 10 Cord, total 752 Cord 2 foot. The cord was a rough measurement of wood, the size of the stack into which it was usually filed.

It seems that carpenters and sawyers here were employed under a direct labour system and worked on the material provided by their employers.

For the erection of the Court House at Warwick Francis Smith was the architect. The Smiths' building firm was to undertake the work, but the accounts fail to make clear how much of the work this ~~work~~^{firm} actually performed. The Smiths may have subcontracted the work to mason carpenters and others or the corporation may have engaged them. Since the Smiths were responsible for so much of the work in the rebuilding of S^r Mary's Church it seems more probable that the masons and carpenters were working for the Smiths and not for the Corporation. The Chamberlains accounts show payments to masons, who supplied stone, and sometimes lime.

	£-s..d
1725 paid William Smith for lime	55-0-0
1726 paid William Smith for paving Court House	15-0-0
1726 paid William Smith for lime and stone	20-0-0.
1726 paid William Smith for lime	14-3-4
1728 paid Smith the lime man	2-0-8
1725 paid Henry Mellows	128-9-4.
1726 paid Henry Mellows for stone	20-0-0

1725	paid	Richard Williams in full for stone	52-5-0
1726	paid	Richard Williams for stone	6-12-8. ¹²

The only places named for the supply of stone were Cullington and Lillington and it is quite likely that these two local places supplied most of the stone. The masons did not transport the stone, it was as usual left to the local carriers and about a dozen men employed for carting wood, stone, and timber. The brick and tiles were provided by four suppliers the most important being M^r Rothwell who was once Mayor of Warwick. Plumbers, glaziers and smiths were paid considerable sums but no details of their works are given. Part of the iron-work was done by Thomas and Nicholas Paris, smiths of Warwick.

In the early eighteenth century buildings the workmen in all the trades were still small independent masters. Conditions were not greatly dissimilar from those which held in the previous century. The Smiths of Warwick and perhaps the Wilkinsons of Worcester seem to belong to the category of the larger building firms which were becoming more common about 1750.

12. Accts of Court House.

CARPENTERS, PLUMBERS AND GLAZIERS.

The masons must need take pride of place in a description of the building trades. But as can be seen from references to carpenters in other sections both carpenters and masons remained general builders throughout the century.¹ They took comprehensive contracts for buildings and they also at times acted as architects. The contract system was as general with the carpenters as with the masons. Warwick carpenters who contracted for work have already been mentioned, and at Stratford carpenters are also found making contracts. The contract for the rebuilding of the Mill Bridge in 1674 was given to William Bradford a carpenter of Stratford.

The bridge was to be reconstructed at a cost of £40. Bradford received his money in instalments and at the outset of his work he was given £26²"13"0d. The rebuilding of this bridge gave more work to another Stratford carpenter William Samon. He had a contract for making a small temporary bridge.³

Carpenters had not been simply workmen employed by the masons when they had taken minor parts in the building activities

1. See Chap. on Organisation. p.

2. Stratford CH. Accts. 1674.

3. 1674.

of Coventry. Masons had hired their scaffolding from carpenters and had called them in to make new hods and barrows.^{4.}

When important repairs were made to the city gates at Coventry, Packwood the master carpenter was as an important figure as the master mason and master plumber and he probably sent in a separate bill to the Corporation. Besides he supplied great quantities of timber for these repairs.^{5.} Cranes, ropes and scaffolding were supplied by Packwood, and he was not the only Coventry carpenter who supplied timber for the repair in which they were engaged. In 1640 Thomas Bennett took down and set up the New Gate.^{6.} At the same time he provided all the timber. Other payments for workmanship and timber appear in the Chamberlains' Accounts for the carpenters John Benyon and Thomas Bennett in 1640 and 1641.

In Stratford carpenters usually supplied the timber for the repairs.

1681 William Sammon for boards, posts, rails, etc.
& workmanship at Mr Simcox's s8 " 3d.

1682 William Sammon work, boards, planks
as per bill for writing schole I " 8 " 8

4. See Chap on Organisation. #.

5. See table.

6. " " " "

1682	William Samon Timber & workmanship at schol	2 " 12 " 1
1684	Mends great Bell, little Bell & for timber & iron-work	15 " 9 ⁷

The carpenter William Rutter sent in several bills to the Council for timber and workmanship. In a bill of 1680 Rutter was selling his timber by measurement.

"Mr. William Baker Chamberlin his bill from William Rutter for worke done in the Chapell in May 1680.

Imp. 84 foote of Inch Boards	0 " 10 " 0
more 16 foote of Inch Boards	0 " 2 " 0
34 foote halfe inch boards	0 " 2 " 10
for nayles	0 " 2 " 5 $\frac{1}{2}$
for 7 dayes and a halfes worke at 16d diem	0 " 10 " 0
	<hr/>
	j " 7 " 9 $\frac{1}{2}$ ^{8.}

The timber trade was well developed and the Council did not have recourse to making direct purchases of trees for the ordinary repair work.

The carpenters were independent masters developing business

7. Stratford Ch. Accts.

8. R9 V Vol I 1680.

concerns of their own. But unlike masons in ordinary repairs carpenters did not work in teams. They were helped by two or three labourers.

The smiths who did repair work were paid by the day and also often provided materials for the work. At a Coventry repair in 1627 a smith supplied a considerable amount of iron-ware.

"paid to William Larke Smyth for 2 hookes, and hinges, 26 barrs, 60 nayles, I Clipp, I hooke, and I staple weighing 151 at 4d the pound 40s-4d; paid for cutting the Rivitts out of the sides of the gates, and fitting the barr, and helping to hang up the gates and cutting a hinge 2s-6d; paid for 4 short barrs and 12 Rivitts for the neather sill of the Spon gate weighing 32 at 4d the pound 10s-8d.^{9.}" The smith provided worked metal fittings at 4d. per lb. This was the prevailing price at most of the places studied. The smiths at Stratford frequently supplied ironware for the repairs though the amount of it provided by the ironmongers

9. See *Table App II*

is most noticeable here.

I6I7 "Item payed Thomas Hornby for workmanshipe for makinge hoockes and hinges for the pulpitt	0 - 2 - 0 ^{10.}
I6I9. "P'd for joynts for the benches and for Iron for the feete and for Iron for the Pulpit and for worke to Watton	0 - 6 - II ^{11.}
P'd Watton more for worke and for clips for the bells and for the prop	0 - 4 - 0 ^{11.}
P'd for Iron and to Watton for worke mere	0 - 2 - 0 ^{11.}
I68I John Ward for ironwork used at Mr Simcock's	0 - 3 - 3 ^{12.}
I693 Geo. Sowthern for casement	0 - 6 - 8 ^{12.}
I693 Geo Sowthern for window barrs at Mr. Crofts	0 - 2 - 0 ^{12.}

These smiths were all providing a part at least of the metal upon which they worked. They received daily wages, made metal fitments and charged for them at a rate of about 4d. per lb. & they also took contracts. Public clocks were a source of much work for the smiths, and they often contracted to keep them in repair for a number of years. A contract to keep the Stratford town clocks in repair was made with Henry Broome in I6I7.^{13.} He was to keep two clocks in good repair, find "all the iron works" and his annual fee for this task

10. Stratford Vestry Minute Book. p.6.

11. p.15.

12. .. CH. Accts.

13. Halliwell p.83. & W. Bells' contract for a clock £14 & a 20 years maintenance agreement.

was 26s-8d. In 1685 George Sowthern received £10 for making a new clock at Stratford. The more highly skilled smiths such as Nicholas and Matthew Paris of Warwick undertook contracts for the repair of clocks. The Parises did work of high quality. Examples of their ironwork are in St. Mary's Church at Warwick. A Mr. Paris made the ironwork for holding the corporation insignia in the church. 1707 "paid Mr Paris for the Two Iron Columns for holdeing up the Mace and the White Stafs in the Church and for Stares to fasten the Arms and for a joynt to the pew door and other worke £8 - 10 - 0." ^{15.}

In 1705 Nicholas paris had set up an ornamental lampstand outside the mayor's house.

1705 "paid Nicholas Paris for setting up the lamp at Mr Whadcocks 1 - 5 - 0." ^{16.}

The plumbers and glaziers seem to belong less to the daily wage earning class than any of the other craftsmen of the building trades. The costliness of the material on which they worked may have partly caused them to be superior to other workmen. For they often provided the lead solder and glass and were accustomed to do most of their work by contracts. The

14. Stratford CH. Accts.

15. Warwick CH. Accts. 1707.

16. 1705.

The undertakings at Coventry of Bartholemew Bewley and his son Thomas will illustrate the amount of work which a wealthy plumber could handle with his own business. Besides the Bewleys other plumbers are found who had the work of looking after the Coventry Conduits for an annual fee of £10.¹⁷ At Coventry the plumbers usually contracted to cast lead at so much a cwt., and supplied lead at 1d. and solder at 8d. or 9d. a pound. Lead roofs were expensive and plumbers would re-cast old lead at a low price or allow a certain sum for all the old lead when they used new cast lead for any repair. The plumbers at Warwick and Stratford were paid in the same manner and are again found recasting old lead or giving an allowance for it when any repair was executed.

An indication that plumbers as a class were fewer and more important than masons is seen from the need of the churchwardens at the villages of Knowle and Northfield to send into Birmingham for these workmen. In 1694 the Birmingham plumber Mr. Downes was paid £24-11-9 for mending the leads at Knowle.

17. Coventry C.H. Accs.

"Paid the Plumer in pt for repairing ye Leads	14 - 0 - 0.
Pd. to Mr Downes in part for Laying ye Ledds	7 - 0 - 0.
pd to Mr Downes in pt for repairing ye Leads	2 - 0 - 0.
pd Mr. Downes in full for Repairing the Leads	1 - 11 - 9".

A sheet of lead found on Knowle Church roof was found inscribed with

"Thees IO Sheets were
Cast Anno Domini 1696
Cooper Chappel Warde
Samuel Downes ^{18.}
Plumbar Birmigham".

The clerk of Northfield Church travelled to Birmingham in 1682 to arrange for repair work with a plumber.

1682 "the 6 (of April) Spent at Birmingham with ye plimer 0 - 0 - 6
pd to William Brigman for Exchange of y^e old lead 5s
a hund^d and for the new that was more than ye old 16s
a hundred the old Lead waied 640 poun[~] & the new was
6 2^q 21 ^{ti} Loder 6 poun[~] of which ^v paid him^r Spent
with him 2d 19.
I - 2 - 6.

Birmingham plumbers worked on Northfield Church on other occasions and for the glazing work recourse was frequently had to workmen from Bromsgrove.

Many glaziers' bills are available for Stratford.

John Izod was perhaps the most wealthy of the Stratford glaziers,

18. Recorder at Knowle. p. 1694.

19. Northfield C.W. Accts. 1682.

other glaziers who did work for the Chamberlains included Shasespere Hart, Emmanual Right, Nicholas Smith and Samuel Scriven. Scriven worked in the early years of the century and repaired most of the glass in Trinity Church. He made a contract for the repair of the church windows in 1618.

"Aprill 7th 1618

This daie Samuell Scriven is compounded and agreed withall to keepe in good Repaier all the glass wyndowes boeth in the church and in the yles of the same, for seaven years next comminge yf the said Samuell so longe shall, for Twentie Shillings a yeare, and at th' end of the said tearme so to leave them whole and sound without holes as now they are at his enterance.

20.
Samewell Scriven".

The Scriven family were glaziers for the church over a great period of years. In 1641 a contract was made with John Scriven.

"Febru, 2 1640 At ~~this~~ Vestrie it was also agreed that John Scriven the glasier shall sett the glasse windows of the Church in good repaire, and then to have X ls paid to him, and shall have

xxvj^s. viij^d. after paid him yearlie by the Churchwardens for

20. Stratford Vestry Minute Book. p. 55

keeping the said windows in good and sufficient repaire vizt, a noble
a quarter the first pay day to begin at Midsummer nexte and soe
forwarde^{21.}".

Later in I656 Thomas Scriven undertook the contract
for the same yearly fee of 26s 8d.

In I624 Samuel Scriven had undertaken a contract
for the repair of the church roof in conjunction with Richard
Dawkes.

"The 23th day of June Anno Dⁿⁱ I624.

Also at this meeting it is agreed upon betweene John Barber,
Christopher Smith, Henry Normand, and Thomas Burnett, Samuell
Scriven, and Richard Dawkes shall have payd them from the
churchwardens aforenamed for taking up & placinge agayne all
those sheets of Leade that shall be thought by them needfull
on the south side of the church, the sum of xij^s and for
casteing of the Lead delivering, weight for weight the sum
of 'ij^s iij^d the hundred and for soe much new Lead that is
needfull more xij^s a hundred for soder viij^d. the pound.

Samuell Scriven
Signum ^{22.}
Richard R.D. Dawkes. "

The plumbers and glaziers often performed each other's
task. It would be quite usual when most windows were leaded

21. Stratford Vestry Minute Book. p.55.
22. p.24.

and placed in iron or stone casements.

A bill of the glazier Nicholas Smith shows the glazier receiving daily wages, but, also providing his material.

1689 " Mr John Hunt Chamberline his bill from

Nich Smith.

Imp for 2 doz & 2 quar of glass in the markett house windowes	0 - 1 - 10
new leadinge 3 foote of old glass	0 - 0 - 9
mending a casement	0 - 0 - 6
6 th ½ Lothor	0 - 6 - 6
I daies worke my self	0 - 2 - 6
I day my man	0 - 1 - 0
paid Thomas cap for heating Irons	<u>0 - 0 - 6</u>
Sum	0 - 13 - 7
Att the Chappell	
for 21 doz of quarries	0 - 17 - 11
6 panes of glass repared	0 - 1 - 0
2 th 3 th of new Lead at 2d.	2 - 12 - 2
26 th Soder	1 - 6 - 0
6 daies worke my selfe	0 - 15 - 0
7 daies my man	0 - 14 - 0
7 daies my boy	0 - 7 - 0
2 strike & ½ charcoale of Mr Smith	<u>0 - 2 - 1</u>
Sum	6 - 15 - 2.

Att Mr Crofts

2 doz & 4 quarries	0 - 10 - 4
mend 2 doz of quarries	0 - 1 - 8
for 8 squares of glas	0 - 1 - 0
25 foot & $\frac{1}{2}$ & 3 Inches of new glass	0 - 10 - 9
repairinge & headinge 8 foot & $\frac{1}{2}$ of old glass	0 - 2 - 1
X <i>24 panes of old glass</i>	0 - 6 - 0
<i>repair worke done since comes to</i>	0 - 2 - 0
	<hr/>
Sum	1 - 13 - 10

Att the Schoole

9 doz. of Quarries	0 - 7 - 6
New Leadinge 4 foot of old glass	0 - 1 - 0
Repairinge 18 panes of old glass	0 - 4 - 6
16 footd & 10 inches of new <i>glass</i>	0 - 7 - 0
	<hr/>
Sum	1 - 0 - 0

At the Schoolmasters'

2 doz Quarries	0 - 1 - 8
Repairinge 6 panes of old glass	0 - 1 - 0
2 foot of old glass new leaded	0 - 0 - 6
	<hr/>
Sum	0 - 3 - 2

At the Alms houses

17 doz & $\frac{1}{2}$ of quarries

0 - 14 - 7

6 foot of new glass

0 - 2 - 6

repairinge 25 panes of old glass

0 - 6 - 4

Nailes

0 - 2 - 0

1 pane for

0 - 1 - 0

23.
Sum 1 - 8 - 5

~~1 pane for~~

ti - s - d

3 - 13 - 7

6 - 15 - 2

1 - 13 - 10

1 - 0 - 0

0 - 3 - 2

1 - 8 - 5

11 - 14 - 2

Recd in old lead $\frac{3}{3} - \frac{2}{2} - \frac{7}{7}$ } rest due $\frac{11}{9} - \frac{10}{10} - \frac{2}{2}$
at 12^d of et

The glaziers bills show that they were not paid immediately and that they ran up considerable accounts for the chamberlains.

At the end of the century the common charges of the glazier appear to have been $2\frac{1}{2}$ d. per foot new leading old glass, and 5d. per foot new glass. Quarries were 8d. and 10d. per dozen, lead 1d. and solder 1s- 0d. per lb.

Conclusion.

In the seventeenth century many masons were craftsmen and capitalists. There is evidence that the direct labour system was being superseded. Under that system the mason or workman was employed merely for his skill and he did not undertake to provide any of the materials. At Hartlebury and at Northfield masons did at times work under these conditions, but at least at Northfield masons and plumbers often worked under a contract system in which they provided his materials. In the towns of Coventry, Stratford and Warwick the masons appear to have often supplied materials for the repairs, even if they were not always mason-contractors. When a number of masons were engaged on a repair it was more usual for one or more of them to be mason-contractors working in conjunction with those who were mere craftsmen, than for all to be working under a direct labour system.

But with ~~the~~ mason it is particularly difficult to ascertain when the direct labour system has been dropped and contracts for labour and materials inaugurated. Quarries were often open to all who wished to draw stone from thence, and new pits were frequently opened on wasted ground. Masons engaged on repair work at Coventry and those who worked on such a great undertaking as Bolsover Castle were their own quarrymen. Here the two systems appear to cover identical conditions. The mason who worked on the Coventry walls and supplied stone from the Whitley Common pits may be said to work under a contract system. Some masons at Bolsover Castle can be included under a direct labour system for they worked for a few weeks at the building followed by a short period at the quarries. The difficulty comes from the comparative free access which local workmen had at most quarries, and from most if not all the charges for stone going to the hewer and the carter. The pay would probably be the same to the mason who was employed to hew stone and the mason who as a contractor had

agreed to obtain the stone from the quarry.

Among the masons a division was scarcely discernable between the skilled workman and the capitalist-contractor. The wages of these two classes of workmen appears to have been the same. Wages were much higher than the county assessments but wealthy contractors did not have higher wages than those who were skilled workers. In Coventry the charges among the masons for the post of the chief mason for a repair on the wall shows the equality of the majority of the masons. The wages received by masons working alone in villages compared favourably with the wages of the Coventry and Warwick masons. Master-masons whether capitalists or not received the same treatment in both villeges and towns.

All skilled masons had a good chance of becoming capitalists, for all capitalists in the building trades came from their ranks, and the capitalists had not developed large scale businesses.

In Warwickshire masons did not develop quarrying of stone. At Coventry and at Warwick small outcrop workings were utilized. The Coventry quarries at Whitley Common were worked by the builder masons and the quarries at Wilmcote were often worked by the Stratford masons. The masons only thought of obtaining stone for the work on which they were engaged. No important work in the supply of stone had been started. Masons were more intent on expending their funds on the acquisition of all the materials for the repair in hand, than in developing any particular trade. They were adding to the task of building that of a builders merchant.

Coventry Masons supplied stone, lime, sand and even ironwork, and a Northfield mason once provided brick. The mason would not have stocks of these materials, but would acquire them when he had contracted to do a piece of work. Though the Coventry masons were in a position to contract for the repair of the City walls, they were not even able to cart their stores from such near pits as those at Whitley Common.

They had to work in conjunction with the general carriers of the town. At Stratford the masons who worked there and at the Wilmcote quarries even when contracting to do work left the transport of stone to carriers. John Page, mason of Chipping Campden who owned Westington Quarry there did not agree to transport the stone or provide the lime when he contracted to build Stratford Market House in 1634. There were often stringent limits to the contracts which a mason could undertake.

To cope with ordinary repair work several suppliers were required at Coventry, Warwick and Stratford. When new building operations were undertaken increased supplies from the ordinary sources were not sufficient, the general tendency was to increase the number of suppliers, and to fetch supplies from further afield. This implies that brickmakers, lime-men, carriers and builders were all in a small way of business. The lime and brick trades seem to have reached the same stage of development.

There were a number of important brick and tile works and lime kilns, but their output was not enormous. Their products were certainly distributed over a wide area, and river navigation was an aid to their transport. At the same time there were brickmakers and limemen in each town who had small works and who sometimes set up temporary brick or lime-kilns for the erection of a new building.

In the brick and tile trades merchants tended to play a conspicuous part. Warwick and Coventry merchants dealt in these commodities. They were wealthy and belonged to the class from which the members of the corporations were chosen. At Stratford wealthy merchants are again found in the trades, and the ironmongers there appear to deal in almost all building materials. The ironmongers were always a wealthy class so it seems, and the merchants of the higher classes had certainly found it advantageous to play a part in some of the supply trades of the building industry.

The smiths, plumbers, glaziers and carpenters like the masons were small masters working on their own account. The carpenters occupied a place most similar to that of the

masons for they remained general builders throughout the century. They supplied timber and other materials for the work they had in hand. But the small size of the carpenters' and masons' business organisations, is especially discernable in the way in which they sometimes worked together. At the repairs of the Coventry walls the carpenters provided scaffolding and made equipment for the masons without being paid by them. They sent in separate bills to the corporation, and were treated as workers engaged on the repair independently of the masons.

The smiths, plumbers and glaziers were probably less accustomed to working for daily wages than the masons and carpenters. They often provided their own materials and it was rather costly. The smiths making metal fittings were paid for their work according to the weight of the finished article. Plumbers and glaziers supplied lead solder and glass and sent in important bills to the chamberlains. The need to call in plumbers and glaziers from the towns to do work at the villages suggests that they were important workmen who had established

their businesses in the towns. It is quite probable that the plumbers and glaziers were fewer in number than the masons and that on the whole plumbers and glaziers were more wealthy and more clearly identified with the capitalist class.

Though the businesses of these building workmen were limited in the various ways which have been enumerated, the contracts show the extensive work undertaken by individuals. A single mason or carpenter, or carpenter and mason working together undertook a comprehensive contract, which included the work of many crafts. These builders were quite able to contract to finish a building in every detail including the smith's, plumbers and glaziers work.

On many occasions the contractors were willing to arrange for the transport of the material. It was by no means an invariable rule with masons that they could not cope with the transport charges. It does not appear that these contracts were at all unusual. They suggest that the businesses organisations of builders were steadily increasing in size. But it is unlikely that a mason or carpenter had stocks of material to

undertake all this work by himself. No doubt he would have to sub-contract a considerable part of it. It is indictive of larger building organisations to this extent, that the builders who performed this contract work were in a sound financial position. They would have to pay out considerable sums of money both on workmen and materials before they were reimbursed for their contract work. Several instances of workmen laying out large sums on building operations have been noted. In Warwickshire masons often expended considerable sums on the repair of bridges. The county authorities were unreliable in their payments and the countless delays involved before the workmen were paid in full more than indicates a sound financial position.

The work on these same bridges shows the restrictions of the mason-contractors. Mason contractors did at times have large numbers of workmen under their control, but at the same time masons on a repair often worked in co-operation as mason contractors. The mention of them in the Quarter sessions Book as "workmen" signifies that they were of the artizan class though

they were capitalists as well. But the title workman certainly did not mean a mere manual worker as it does to-day. Highly skilled craftsmen and architects were referred to by this title. Though these builders were skilled craftsmen and capitalists, they scarcely seem to have gained the social status of the merchants of the towns except in a few isolated cases. They did not generally appear to have been chosen as members of the corporations.

They could undoubtedly still count themselves as mighty skilled craftsmen for they undertook the duties of an architect in addition to that of a builder. With large building operations it was becoming more common to employ an architect, but even under these conditions it seems likely that a chief mason would design much of the architectural details. The mason or carpenter who was a general builder in the seventeenth century was still very much of a craftsman and a capitalist with modest resources.

APPENDIX I .

D E R B Y S H I R E .Rates of Wages.

WAGE ASSESSMENT.

Easter 1634

Artificers and other workemen for a day worke ffrom
untill Michaelmas 1634

A Master Carpenter free mason plumer glasier or
Joyner having ij or iij workemen under them by
ye day vjd., and finding himselfe xijd.

Bricklayers Tilers Slaters free masons and
plasterers for theire dayes wages with meate
and drink vjd., and finding themselves xijd.

Any of the said Artificers theire Apprentices
or servants being xvij years of age or above
and an apt workman for theire dayes wages vd.,
and finding himselfe xd.

Sawyers Charcole maker & Collyer to have by
ye day vd. and finding himselfe xd.

A Sawyer by ye great for sawing one c. of
Boards reckoning six score to the hundred and
every foote xxij inches broad and xij inches long ijs.

And from Michaelmas till our Lady Day in Lent
every of the said artificers or workemen which
had in summer time meate and drinke and vd. a day
to have inwinter meate drinke and liijd. a day
and without meate and drinke xd.

And they that had from the sayed Lady Day untill
 Michaelmas meate and drinke and vjd. a day to have
 from Michaelmas until the said Lady Day with meate
 and drinke vd. and finding himself xd.

Derby, Easter 1648.

A Master Carpenter Free Mason Plumor or Joiner
 haveing 2 or 3 workemen under them by the day
 xvjd (viiij?) or finding himself xvjd.

Bricklayers Tylers Slaters Freemasons and Plas-
 terers for their dayes wages with meate and
 drinke viijd. finding themselves xvjd.

Any of the sayd Artificers theire apprentices or
 servants being xviiij yeares of age or above being
 apte and for his dayes vjd. and finding himselfe xvd.

Sawyer Charcole maker and Collyer to have by the
 day viijd. and finding themselves xvjd.

A Sawyer for the great for saweing one hundred of
 boardes reckoning 120 foote to the hundred and
 every foote 12 inches broade and 12 inches long iiijs.

And they that had from the sayd Lady day untill
 Michæelmas meate and drinke & vjd. a day to have
 from Michaelmas as until the sayd lady day with
 meate and drinke viijd. and finding himselfe xvjd.

From Cox - Annals of Derbyshire.

WarwickshireWage Assessments by the Justices Easter 1657

Labourer's wages March 25 - Sep 29 not to exceed	By the Day d 8
Except at mowing and reaping, and then not to exceed	1s
Sep. 29 - Nov. 1 not to exceed	6
Feb. 2 - March 25 not to exceed	7
Carpenters, masons, and tilers not to exceed at any time of year	1s

From Warwickshire Quarter sessions Vol. IV p. 11

Warwickshire Wage Assessment 1684

	By the Day	
	With meat and Drink	Without meat and Drink
A Freemason	d b	s d 1 - 4.
A Master brick Mason	b	1 - 4.
Their Servants and apprentices above the age of 18	4	0 - 8.
A Master Carpenter his charge	b	1 - 0.
Their Servants and Journeymen above the age of 18	b	1 - 0.
Their Servants and Apprentices	4	0 - 8.
A plowright and cartwright	b	1 - 0.
A master bricklayer	b	1 - 0.
A tyler, plasterer and shingler	b	1 - 0.
Their Servants and apprentices above the age of 12	3	0 - 8.
A master plasterer	4	0 - 8.
A master thatcher	b	1 - 0.
His Servant	4	0 - 8.
Fellers of wood, threshers, and all other common labourers the time of harvest excepted	4	0 - 8.
The man haymaker	4	0 - 8.
The woman haymaker	2	0 - 4.
Wedges of Corne	2	0 - 4.
Mowers of Corne and Grass	b	1 - 0.
A taker in Corne Harvest	3	0 - 6.
The man reaper	b	1 - 0.
The woman reaper	4	0 - 8.

1627 Oct.

On Bishopstreet gate & Spon Streete gate	<u>s</u> <u>d</u>
Paid to Michael Packwood Carpenter for 7 days a 12 ^d a day	7-0
Paid for taking downe & setting up the gates	6-8
Paid for timber of the Bishopstreet gate	16-0
Paid for carriage of it.	0-12
Paid for drink bestowed on them that did helpe to take down and set up the gates	0-12
paid to William Briscoe the mason and his man for a Dayes work at 11 ^d a day	2-4
paid to William Larke Smyth for 2 hookes, 26 barrs, 50 nayles 1 clipp, 1 hooke and 1 staple weighing 151 ^{lb} at 4 ^d the pound	40-4
paid for cutting the Rivitts out of the side of the gates and fitting the barr, and helping to hang up the gates, and cutting a hinge	2-6
paid for 4 short barrs and 12 Rivitts for the weather sill of the Spon gate weighing 32 ^{lb} at 4 ^d the pound	10-8
paid for 4 grate stones set at Bishopstreet gate to keep Carts off the gates and for setting them in all w ^{ch} appeare by a bill under m ^r Maiors hand	3-0
	5-0-6

1632. Oct.

" Paid for repaire and mending of the newe gates as appeareth by a bill of the particulers thereof under m^r Maio^{rs} hand viz to Michaell Packwood Carpenter for 25 dayes worke for taking downe the gates & setting them up againe and for Craines and ropes 27^s 6^d to the sawyers for sawing the timber or boards for the gates 5^s 6^d for carriage of the timber 2^s to the mason for putting in 2 great hooks and two stones 2^s 6^d for 3 qtrs of an hundred and 7^{ti} o leade 9^s - 10^d for one long barr for the greate gate weighing half an hundred 2^{ti} at 2^d the pound 9^s given to the workmen to drinke 2^s to Willm Lake Smyth for a hinge and a hooke weighing 36^{ti} at 4^d the pound 28^s - 8^d for another hinge weighing 38^{ti} besides the reek 12^s - 8^d the Joynte of the wickett weighing 13^{ti} 4^s - 4^d a plate weighing 9^{ti} 3^s the Bolts of the gate and 3 Staples for it a staple for the bolt of the wickett and 8 bairs for the staples weighing 32^{ti} and an half 5^s - 10^d. 22^{ti} of bairs and Rivitts 7^s - 6^d for piecing an old booke & making 20 bairs 18^d for making a Barr & an hasp & two hooks 2^s for piecing Rivitts & Rivitting of them 3^s - 2^d for a plate for the wickett & mending bolt 12^d albeit the Bill cometh to 6^{ti} 14^s for that there was received for old Iron that was not fit to use again 7^s "

	s	d
Paid to William Cumberidge plumer for casting of 100 th weight of new gutters of lead at 2-4 the hundred, and 2 ^d given them to drinke	23	8
Paid to him for 21 th of sodder	13	8
Paid to him for 4 dayes	4	0
Paid to his labourer for 5 dayes	3	4
Paid to him to heat theire Irons	0	6
Paid to John Lax for 140 th foots of board at 6-8 the hundred	9	4
Paid to his two carpenters for 2 dayes worke a piece there	4	0
Paid for timber to lync the leads	4	0
Paid to one Carpenter more for one day in amending the dores and about the house of Gorrecon a[[w ^{ch} appears in a bill under Mr Mayjors hand	0	12
	<hr/>	
	3	3 - 2
	<hr/>	

1640 Oct.

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"Reparations made this year upon the Towne Wall and paym^{ts}
as followeth Paid for timber work at the new gate and casting
the gutters there and for mending the port-cullis at Newgate and
Spon-gate in August 1640 as appeareth by a bill under M^r Maio^s
hand whereof for new Timber to Thomas Bennett Carpenter for a beame of
10 foot long and 13 inches square which was used to set the port-cullis
to the old being rotten downe 11^s for 2 lynnings and 2 corbit pieces to
support the beame 4^s 10^d a side piece lying under the royst 12 foot and 6
ynches square 5^s pieces of 18 foot long and of 9 ynches and 9 ynches
and 4 ynches 3^d for the studs 4^s for losse of Timber cutting these to
the uses 12^d a corbett piece to under prop the hall chimney 18^d for
2 levers for the pair of Port-cullis 4^s to Robert Pinley for 125^{li} weight lables
being 60 yds yards long at 8^d the pound for the port-cullisses 3^{li} 3^s 6^d
to the carpenters & labourers in this work as appeareth p^rculars by
the same bill 32^s 6^d The Plummers bill for Newgate received of the old
lead from that gate 8^d 2q 20 for the exchange^{ing} of this at 2^s 8^d the
at 46^s 6^d delivide in new lead 24^{li} so that there is more than the old
lead by 5^{li} 78^{li} at 15^s the at 3^{li} 9^s 9^d spent there in sodder 5^{li} at 9^d
the pound 3^s 9^d to Bartholomew Bewley plumber for his paines 2 dayes
& an half at 2^s 6^d 6^s 3^d & his son for 2 dayes at 8^d the day 3^s for
the 2 new pullis for the portcullis to Richard Haynes 12^{li} to divers men
for letting down the portcullis & drawing them up again: for their
paines to drinke 12^d more given them to drink 6^d albeit the totall
charges & expense mentioned in this bill cometh unto 14^{li} 2^s 3^d yet

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these Accomptants paid but $11^{\text{th}} 6^{\text{s}} 3^{\text{d}}$ thereof in regard that Bartholomew
Bewley plumber making an end of reckoning of $8^{\text{th}} 0^{\text{v}} 20^{\text{li}}$ weight of
lead left in his hand he did pbate for $4^{\text{th}} 19, 20^{\text{li}}$ weight which
he did owe to the city to make up the $8^{\text{th}} 2^{\text{v}} 20^{\text{li}}$ weight at 12^{s}
the $\text{of } 5\text{s}$ so the reste is clearly discharged of the wholl lead in
his hand so paid these Accomptants."

APPENDIX III CONTRACT FOR THE COVENTRY CROSS.

An Indenture of Covenant between Cuthbert Joyner, Simon Parker, John Jett, Aldermen of the City of Coventry; and Henry Over and Christopher Warren, Citizens of the same on the one party; and Thomas Phillips, free-mason, and John Pettit of Wellingborough in the County of Northampton, on the other party.

Thomas Phillips and John Pettit covenant for them their executors and administrators that for nine score and seven pounds, six shillings and eight pence, to be to them truly paid as after shall be expressed, etc., before the feast of St. Michael the Archangel which shall be in Anno Domini 1543, they would build substantially, and workmanly make and set up and fully finish a new cross, of good, sure, seasomable free stone of the quarries of Attleborough or Rowington, in the County of Warwick; or of both the said quarries; except the stones belonging to the steps of the same cross, which shall be had and made of hard stone, in the late Priory of the said city at the only proper costs and charges and expenses of the said Thomas Phillips and John Pettit and their assigns.

The same cross to be erected and set up at the Market-place, in the said city, called Cross Cheaping, in such place there as the old cross now standeth, after the manner, form fashion, and due proportion of a cross ready made and set up in the town of Abingdon, on the County of Berks.

And further to set on every principal pinnacle on the

lowest story of the same new cross, the image of a beast or a fowl holding up a fan; and on every principal pinnacle in the second storey, the image of a naked boy with a target, and holding up a fan.

And that the same new cross, before the feast of the Nativity of St. John Baptist, which shall be in the year of our Lord God 1542, shall be wrought, made and set up of the height of twenty feet above the highest step of the same cross, except only the workmanship of the images, the finialls, and other pictures, And that the same new cross before the feast of St. Michael the Archangel, then next ensuing, shall be made, wrought and set up of the height of twenty five feet above the highest step of the same cross, And that before the feast of the nativity of S^t. John Baptist which shall be in the year of our Lord God 1543 it shall be made, wrought and set up to the height of forty feet above the said highest step.

And that before the fest of St. Michael the Archangel, then next ensuing, the said cross shall be fully made, wrought and set up to the height of forty-five feet, or higher, if the said cross in Abingdon be higher above the said highest step, and finished in all points, as well in imagery work, pictures, and finialls, as otherwise, according to the due form and proportion of the said cross in Abingdon.

And further, the said Thomas Phillips and John Pettit covenant and grant to find all lead and iron belonging to

the same cross, and all stone, lime, and sand, with the work and carriage of the same, and all other necessaries whatsoever they be, to be had and expended about the same cross, at their costs and charges and expenses; and also at their charge to prepare, find, and make a house or lodge for masons to work in, during the time of making the same cross.

Provided always, and be it agreed between the said parties, that the said Cuthbert Joyner, Simon Parker, John Jett, Henry Over and Christopher Warren, shall find all fans to be set in the said cross, and all iron and lead belonging to the same fans, and also six or eight old images to be set in the said cross, if they will be thought meet for the same work, or else not; the said images to be repaired and cleansed at the charges of the said Thomas Phillips and John Pettit.

Provided always also, and it is agreed between the said parties, that where the said cross in Abingdon is begun in eight panes, and changed in the second storey into six panes, to the deformity of the said cross, this new cross to be made in Coventry, shall begin in six panes until the full finishing of the same.

In consideration of which cross to be wrought, made, set up and finished in form above written, the said Cuthbert Joyner, Simon Parker, John Jett, Henry Over, and Christopher Warren, covenant by these presents to pay or cause to be paid unto the said John Pettit and Thomas Phillips, or their assigns ^{XX} ix vii vis viiid sterling, in manner and form

following:- that is to say, the 18th day of July next ensuing the date hereof 6l.3s.4d., and every fourth Friday then next ensuing and immediately following, 6l.3s.4d., till the sum of 73l.6s.8d. be fully paid. And when the said Cross is at the height of twenty feet above the highest step of the same, (except the images, pictures, and finialls) then to pay on the Friday next, after the accomplishment of the said cross of the said height of twenty feet, 6 l; and then to pay every fourth Friday after 6 l. until the sum of 12 l. be more paid. And when the said cross is at the height of twenty-five feet above the highest step, then to pay every Friday after, 6 l. until the sum of 53 l. be more paid. And when the said cross is at the height of forty feet above the highest step, then to pay on the Friday next before St. Margaret's day next after the accomplishment of the said cross of the height of forty feet 6 l.; and every fourth Friday next after 6 l. until the sum of 12 l be more paid. And when the said cross is fully finished in all points, according to the said bargain, and according to the purport and effect of these Indentures, then to pay unto Thomas Phillips and John Pettit or their assigns, 17 l.6s.8d. in full payment and contentation of the said sum of

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ix viii l. vis. viiid. In witness, etc.

CONTRACT FOR WATER WORKS AT COVENTRY

The Indenture made the Twentie of August Anno don 1633 and in the ninth year of the reign of our soveraigne Lord Charles by the grace of God, Kinge of England, Scotland, ffrance and Ireland, defender of the faith , his Betweene Bartholomew Bewley of the Citie of Coventrey Plummer of thone part, and the Maior Bailiffs and Coialtie of the same Citie of the other part

Whereas long and of ancient times there hath beene amongst othere two Conduits in the said Citie whereof one is commonly called the Bull Conduit and the other called Croscheaping Conduit which Conduits are and have beene usuallie served and fedd with water by a maine pipe of leade laid and placed from the spring or fountaine called Conduit head being in the Countie of the said Citie unto the Conduits aforesaid from and betweene wth two Conduits there is and hath beene anciently a pipe of lead laid and placed in the ground for thone conduit to thother. And whereas by agreement betweene th said parties the said Bartholomew Bewley did in August last past undertake and promise at his own charges to take up the said pipe of lead lying betweene the said Conduit called the Bull and the other Conduit in the same Citie called the Croscheaping Conduit and to case and to make such a sufficient and substantiall new cast pipe of lead of as great louge and fall a proporcion as well as for boare and thickness & weight and should in every respect answerable

unto one piece of cast pipe then brought which cast pipe of lead so brought for a patterne is one inche and three quarters of one Inche in the diameter weighing in substance after the proporcon of eighteen pounce each yard thereof to remain for a patterne in the Counsell house of the said Citie by the said Bartholomew Bewley and to laie that new cast pipe in lead in length from the said Conduit called the Bull Conduit unto the Croscheaping Conduit aforesaid and that the said Citie and th Inhabitants thereof should and might be thereby as freely and plentifully served with the spring water at the said Conduits the Conduits Cisternes and through that new cast pipe so to be cast and made as in former the said Citie and Inhabitants thereof or any of then have or hath at any tyme been served by other pipes or passages with the said spring water in every respect at the said Conduits. And also the said Bartholomew Bewley did then promise, undertake and agree, and with the said Bailiffs and Coialtie that he the said Bartholomew Bewley should and would at his own charges at all convenient speed amend the said Croscheaping Conduit and the Bull Conduit with good substantiall ston worke leade and all other materials whatsoever and to take up the old Cesterne at the said Bull Conduit and make contrive and place there a good substanciall and sufficient new Cesterne of leade to be of like proporcion and quantitie for weight breadth and goodness in every respect as the said old Ceisterne so to be taken up at any time ever was And Further the said Bartholomew Bewley did then promise

undertake and agree with the said Maior Baliffs & Coialtie that he the said Bartholomew Bewley would with all convenient speed afterwards at his owne charges well and sufficiently repair make good and sett in order all other the Conduits of the said Citie and pumpes and all the Conduit heads pipes Cocks Cisternes and works whatsoever of or belonging to all or any the conduits or pumpes of the same Citie or useful or used for the conveying or bringing of water in to the said Citie or to any of the Conduits or pumpes within the same Citie or for the holding receiving or keeping of any water to of for the use of the said Citie or any of the Inhabitants thereof for the endintent and porpose that the said Citie and the Inhabitants thereof should and might be served with such and so much store of provision of the said springe water at the conduits and pumps aforsaid as at any time heretofore hath beene used or accustomed And Further the said Bartholomew Bewley did then likewise promise undertake and agree to and wth the said Maior Baliffs and Coialtie that he the said Bartholomew Bewley his heirs executors and administrators and assignes should and would at his and their owne charges from and after the first day of November then next ensuing and now last past for and during the full time and tearme of Thirty and one yeares then next following well and sufficient keepe repaire and mayntayne all the said Conduits pumpes and pipes of lead with good and sufficient Cisternes leade conduit heads and waterworks thereunto belonging or w^{ch} are or shall be usefull or used

to for or with the same and shall and will discharge and paie
all charges disbursements and payments touching the same or
occasioned thereby In Consideration whereof the said Maior
Bailiffs and Coialtie did agree and paie to the said Bartholomew
Bewley the sum of fortie poubds of lawfull money of England
and to allow and paie unto the said Bartholomew Bewley his
executors administrators and assignes the sum of Tenn pounds
of lawfull money of England yearly and every yeare from the said
day of November during the said time and terme of Thirtie and
one yeares for his sallery wages and charges for these workes
ad two dayes or tymes in the yeare next the first day of May
and the first day of November or within Seventy dayes then
next following if the said Bartholomew Bewley if his heirs
executors and administrators and assignees any of them should
or would from time to time and at all tymes during the said
tearm of Thytie and one yeares well and truly doe performe and
fulfill the agreement aforesaid on the part of the said
Bartholomew Bewley his executors or administrators or any
of them to be performed And Whereas likewise the said
Bartholomew Bewley in pursuance of his said promises and
undertakings hath cast and laid the said new pipes of lead
and planted and sett the said new cisterne at the said conduit
the Bull Conduit and hath performed other workes there And
Whereas the said Maior Bailiffs and Coialtie have paid and
satisfied unto the said Bartholomew Bewley the said sum of
fforty pounds of lawfull money of England before then sealing
and deliverie hereof for and in full discharge of the said Summ

of fforty pounds for as aforesaid agreed to be paid by th
said Maior B_ailiffs and Coialtie Now the Indenture further
witnesseth that the said Bartholomew Bewley doth by theise
presents acknowledge the receipt of the said fortie pounds
and thereof and of every part thereof doth release acquite
exonerate and discharge the said Maior Bailiffs and Coialtie
their Successors and Assignes soever by these presents and
the said Bartholomew Bewley for the consideracon aforesaid
for himself his heirs executors and administrators and
assignes and every of them doth covennt and graunt to and
with the said Maior Bailiffs and Coialtie their Successors
and assignes by theise presents in manner and forme following
(that is to saie) that he the said Bartholomew Bewley his
heirs executors administrators and assignes shall and will
at all tymes hereafter and from tyme to tyme from henceforth
during the said tearme and time of thirtie and one yeares
at his and their own proper costs and charges repair uphold
maintain amend and keep or cause or procure to be repaired
up and mainteyned and kept the said pipe of lead in all good
and substantiall manner and all and singular the Cesternes
and pipes and conduit heads within the said Citie and
Countie of the same Citie or either of them w^{ch} serve for
the publique use of the said citie and suburbs therof or of
the Inhabitants thereof or any of them And all Cocks Cisternes
leade sprouts cesbrates branches and quills of and belonging
unto all every or any of the said Cisternes and pipes conduit
heads or spring or any of them as well as with plumers worke

as Masons worke paveing and all other workes and all materialls workmanship and things thereunto necessarie or belonging by meanes whereof the said Citie and Inhabitants thereof now being or that hereafter during the said tearme shall be and every of them shall or may as freely fully and plentifully be served at the said conduit or spring water at the severall and respective conduits cocks and pipes now comonly used in the said Citie from tyme to tyme and at all tymes hereafter during the said thirtie and one yeares for their necessarie and needfull occasions and uses as formerly the said Citie of Coventrey and Inhabitants thereof or any of them have been served with the said spring water at those conduits or pipes or any of them in any respect by any conduits pipes passages or meanes whatever And the said Maior Bailiffs and Coialtie for them their Successors and Assignes doe covennt and graunt to and with the said Bartholomew Bewley his executors and administrators and assignes and every of them by theise presents that they the said Maior Bailiffs and Coialtie their Successors and upon the performance of the said workes and undertakings of the said Bartholomew Bewley as aforesaid according to the tenor and true intent of theise presents and during so long time of the said tearme of thirtie and one yeares as he shall continue and keepe the same workes pipes and cisternes in such sort as is before menconed shall and will and truly paie or cause to be paid unto the said Bartholomew Bewley his heirs, executors, and administrators or assignes a yearely and every year during the said tearme

of thirtie and one yeares the said Sum of Ten pounds of lawfull money of England so as aforesaid agreed to be paid by the said Maior Bailiff and Coialtie in or upon one day of Maie and 1 Day of November or within twentie dayes then next following by equall and even porcons in or at the hall of the said Citie called St. Mary's Hall Provided alwayes and it is expressly condiconed and agreed upon by and betweene the said parties that if the said conduits pipes or cesternes on any of them shall at any time or tymes hereafter during the said tearme or tyme of thirtie and one yeares want water for the space of three days together to supply the use and occasions of the said Citie or of the Citizens or Inhabitants that are or shall be inhabiting therein or in any part thereof at any tim during the said tearme or tym of thirtie and one yeares soe as the same inhabitants or any of them may not or shall not be supplied and furnished with spring water from therein according to the true intent of theise presents Then he the said Bartholomew Bewley his executors administrators and assignes shall for every such want or defect of water aforesaid forfeit and paie unto the said Maior Bailiffs and Coialtie the sum of five pounds of lawfull money of England for every such default nomme,pane And that it shall and may be lawfull to and for the said Maiors and Bailiffs and Coialtie their Successors and assignes in every such case and for every such default to have retaine and keep in his and their hands and possession the moyitie or one half of the said Tenn pounds by yeare for as aforesaid covenanted

or agreed to be paid unto the said Bartholomew Bewley his
executors administrators or assignes in discharge of the
said nomme pane Nevertheless the true intent of the said
parties to theise presents is that n^oe such forfeiture shall
be had or taken of the said Bartholomew Bewley his executors
and administrators and assignes at any such tim during the
said tearm of thirtie and one yeares as any new pipe or
pipes shall be in new laying and pla ceing in the water works
aforesaid or any of them by the said Bartholomew Bewley his
executors administrators and assignes or any of them by
reason of any brach or breaches happening to be made in the
said cesterne or conduits pumpe soe wanting water as afore-
said be and shall from tyme to tim within six dayes then next
following from tyme to time during the said tearme of
thirtie and one yeares be sufficiently and plentifully
served with the said conduit water and fully and freely
as formerly the same had been **Provided** always and it is
further expressly covennted graunted condiconed and agreed
by and between the said parties that if the said Bartholomew
Bewley his executors administrators and assignes or any of
them doe or shall at any time hereafter during the said
tearme of thirtie and one yeares make or contrive a cause
to be made or contrived any quill sproute or pipe of leade
or otherwise from any of the said conduits pipes cisternes
or maine pipes of or belonging to the said conduits or
pipes or any of them for any private or particular use without
the express licence and consent of the Maior and his brethren

of the Councell house of the said Citie for the time being first had and obtained in writing under their hands and Seales that then and at all tymes from thence forth this present Indenture and every act matter clause and thing therein contained other than this proviso and other than the covennts on the part and behalf of the said Bartholomew Bewley his heir executors and administrators to be performed shall cease end and be fully voyde and determined any thing in theise p sents contained to the contrary thereof in any wise not withstanding Provided alwayes and it is also fully agreed upon by and betweene the said parties that it shall and may be lawfull to and for the said Maior Bailiff and Coialtie theire successors and administrators at all tymes hereafter to make contrive and lay or cause to be made and layde any pipe or pipes of lead cesternes conduits or pipes into or from the said conduits pipes or any of them to convey and carry the said conduit water from the same unto any other place or places whatsoever for any generall or particular use of uses at theise or any of theire free wills and pleasures soe as such new pipes and workes by the said Maior Bailiff and Coialtie their Successor assignes or any of them made or contrived as aforesaid be at the costs and charges of them the said Maior Bailiffs and Coialtie their Successors or assignes Provided always and it is expressly condiconed and agreed upon by and between the said parties to theise presents that if the spring water aforesaid at any tyme or tymes during the said tearme of thirtie and one

yeares be wanting above six dayes together in any of the
said conduits pipes or places aforesaid whereby or by reason
whereof the said Citie or the Inhabitants thereof now being
or w^{ch} hereafter during the said terme shall be shall not be
served and replenished with such store and quantities of the
said spring water according to the true intent of theise
presents that then at all tym the said summ Tenn pounds per
annum to cease end and be utterly determined anything in any
wise to the contrary notwithstanding And the said Bartholomew
Bewley for himself his heirs executors administrators and
assignes and every of them doth covenant to and with th said
Maior Bailiffs and Coialtie their successors and assignes
theise presents that neither he the said Bartholomew Bewley
his heirs executors administrators or assignes or any of
them shall or will at any tym or tymes during the said tearme
of thirti^e and one yeares alter or make in other forme any
of the pipes of leade or to make and laye in steed or place
thereof any pipes or conveyances or timber or any pipe or
pipes of lesse contentment or proporcion or quantitie now agreed
upon without the express licence and consent of the Maior and
his brethren of the Councell House of the said Citie for the tim
being first had and obtained in writing under theirs hands and
seales and the said Bartholomew Bewley for himself his heirs
executors administrators assignes and everie of them doth
covnnt and graunt to and with the said Maior Bailiffs and
Coialtie theirs successors and assignes by theise presents
in manner and forme following (that is to saie) that the newe
cast pipes now already laide and placed by the said Bartholomew

Bewley in the said workes by force of the said agreement are truly and substantiallie made wrought laide and formed according to the said agreement in every respect as well for boare and bignes as for goodnes and sufficiencie and also that neither he the said Bartholomew Bewley hie heirs executors administrators or assignes or any of them shall or will at any tyme or tymes during th said tearm of thirtie and one yeares doe or cause to be done or willingly suffer any act malder or thing whatsoever whereby the said pipe or any of the conduits cesterne pumps cocks or works thereunto belonging of any of them or any part thereof may be impaired hurt or pveindired or whereby the conduits or cesterne aforesaid or any of them or any part of them or any of them may not or shall not from tyme to tyme be well and sufficiently replenished and stored with water as aforesaid or whereby or by meanes where of the said Citie of any of the Inhabitants there of that now are or w^{ch} hereafter shallbe thereof during the said tearme of thirtie and one yeares may not be well and sufficiently stored with water from the said conduits according to the tenor and true meaning of theise presents In witness whereof to thone part of these Indentures remayning with the said Maior Bailiff and Coialtie the said Bartholomew Bewley has put his hand and seale and to the other parte thereof remayning to the said Bartholomew Bewley and Coialtie putte their common Seale the Daie and yeare first above written.

Bartholomew Bewley.

TABLE I - WAGES.

	Coventry	Stratford	Droitwich	Northfield	Hartlebury
1600	.....	1/-	.....	.....	.....
1601	1/- (2)				
1602	(1/-)				
1603	(1/3)				
1606	1/-				1/-
1610	.....	.....	.....	.....	.....
1611	(1/2 (3))				
	(1/- (4))				
1613	1/-				
1615	1/-				
1617	.....	.....	.....	.....	1/-
1618	.....	.....	.....	.....	1/-
1619	1/-	1/-			
1620	1/2				
1621	(1/4 (2))				
	(1/2 (5))				
	(1/- (2))				
1622	.....	.....	.....	1/-	
1624	1/2 1/-				
1625	1/4 1/2 1/-				
1626	.....	.....	.....	1/-	
1627	1/2	.....	.....	1/-	
1628	.....	.....	.....	1/-	
	
	
	
	
	
1630	.....	.....	.....	.....
1633	1/2 (6), 1/-		1635 1/2	1631 1/-	
1637	1/4 (2) 1/2				
1640	1/3 (3) 1/-				
1649	.....	.....	.....	.....	1/- (3)
1650	1/6	.....	.....	.....	1/3 (2)
1660	.....	.....	.....	.....	.....
1666	.....	1/4	.....	.....	.....
1667	.....	1/4	.....	.....	.....
1668	.....	1/4 (4)	.....	.....	.....
1669	.....	1/4	.....	.....	.....

From CH. Accts.

	Coventry	Stratford	Droitwich	Northfield	Hartlebury
1670	(1/6 (2)			
1673	(1/7, 1/4			
1676	(1/2			
1680	(1/4 (2)			
1681	1/2 (2)		1/6	
1685	1/4		1/4, 1/-	
1687	1/4 (3)		2/-	
1690				
1695				
1700				

Table II - Price of Coventry Stone.

	Perpoint	Ashlar	Paving	Steps	Arch	Stone
1600						
1602	6d. per ft.	.....	1d. per ft.	2d. per ft.	3d. - per-ft.	
1603	4d. per ft. (2)	.....	2d. per ft.	3d. per ft.	3d. per ft.	
1605	.....	.....	.....	.....
1606	.....	1½d. per ft.	.....	(2d. per ft. (2d. 4d.		
1610						
1612	1½d. per ft.	2/- per score			3d. (Com-pass)	
1614	½d. per ft.	.....	2d. per ft.			
1615						
1619	8d. per ft.	2d. per Sc. (2)	2/- per Sc.	3d. per ft.		
1620						
1621	.....	.....	.....	.....	3d. quoins	
1624	4d. (2) per ft.	2d. per ft.	.....	4d.	3d. quoins	
1625						
1627	3d. 5d. per ft.	2d. per ft.	2d. (3) 3d.	3d. 3d. (2)	3d.	
1630						
1633		18d. per Sc.				
1635						
1640						

From CH. Acc'ts.

TABLE III
LIME.

	COVENTRY.	STRAITFORD.	NORTHFIELD.	HARTLEBURY.	KNOWLE.
600					
1	6 ⁵ per Str.			1-4 ⁰ per barrel.	
2	4-0 per qr (Walsall) 6 ⁰ per Str.			1-10 ⁰ per barrel.	
3	6 ⁰ per Str.				
4	6 ⁰ per Str.				
5					
6	6 ⁰ per Str.				
7		7 ⁰ per Str.			
8					
9					
1610	1-0 per Bushel.			6 ⁰ per Str.	
11	4-0 per qr (Walsall)	11 ⁰ per Str.			
12	6 ⁰ per Str. (2) 2-0 per Bag.				
13	4-0 per Str. (2) 4-0 per qr.	7 ⁰ per Str.			
14	6 ⁰ per Str.	6 ⁰ per Str.			
15	7 ⁰ per Str. (2) 4-8 per qr (2).			7 ⁰ per Str.	
16					
17	7 ⁰ per Str.				
18	7 ⁰ per Str.				
19	1-0 per Str 8 ⁰ per Str.				
1620					
21	2-4 per sack. 5 ⁰ per Str.		5 ⁰		
22	7 ⁰ per Str.		1-5 per load (C).		
23	4-8 per qr.		1-0 per load		
24	7 ⁰ per Str (3)				
25	2-0 per bag.				
26			8 ⁰ per bushel.		
27	2-0 per bag.				
28	6 ⁰ per Str.				
29					
1630					214

From CH. Acc'ts.

31						
32						
33	2 - 4 per bag.					
34		1/4 - 8 per Qt.				
35						
36						
37						
38		4-8 per Qt. 7 ^o per Str.				
39		6 ^o per Str.				
40						
41						
42		7 ^o per Str.				
43						
44						
45						
46						
47						
48						
49						
50	7 ^o per Str.					
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62		7 ^o per Str.				
63		7 ^o per Str.				
64		8 ^o per Str. 7 ^o per Str.				
65						
66						
67						
68						
69						
70		7 ^o per Str.				

1-8 per load.

1-6 per horse load.

2-2 per Horse Load.

2-2 per Horse Load.

3-1 per Qt.

71	8 ^d per Qr.	2-0 per Horse Load.	1 ^d per bag. 1-6 per bag.
72			
73			
74			
75	7 ^d per Str. (3)		
76	6 ^d per Str. 4-0 per Qr.		
77			
78	6 ^d per Str.		
79			
80			
81	6 ^d per Str. 4-0 per Qr.	2-0 per Horse Load. 2-10 per Qr. (2.)	
82			
83			
84			
85			
86			
87			
88	6 ^d per Str.	2-0 per Horse Load.	4 ^d per str.
89	6 ^d per Str.	1-7 per Horse Load.	4 ^d per str.
90	6 ^d per Str.	1-7 per Horse Load. 1-8 per H.L.	4 ^d per str.
91			5 ^d per Str.
92			
93			
94			3-4 per Qr.
95			
96		1-8 per Horse load.	5 ^d per Str. 7 ^d per Str.
97		1-6 per Horse load.	5 ^d per Str.
98			
99			
100			

COVENTRY

STRATFORD

STRATFORD

COVENTRY

STRATFORD

TABLE IV

217

C = CARTAGE.
H = HUNDRED.
Th = THOUSAND.

		TILES.		BRICKS.	
		STRATFORD.	HARTLEBURY.	STRATFORD.	HARTLEBURY.
600					
1	2				7-4 per H.
3	4		^{s D} 1-4½ per H. (C extra)		
6	8			^{s D} 2-6 per H.	2-6 per H.
7610		^{s D} 2-9 per H.	1-4 per H		
12		2-4 per H.		3-0 per H.	
13				3-4 per H.	
15	16	^{s D} 2-5 per H. : 2-1-2-0 per Th. 2-1-0 per H. : 2-1-2-0 per Th.	1-8 per H.		
17	18		2-1-1-1 per Th. (incl) 1-4 per H.	3-8 per H. 3-9 per H.	
1620					
22					
24			^{s D} 1-3 per H.		
26					
28					
1630					
32					
34				^{s D} 3-9 per H.	
36					
38					
1640		^{s D} 2-6 per H.			
41	42	2-4 per H.			
44				2-4 per H.	
46					
48			^{s D} 16-8 per Th.		^{s D} 1-8 per H.
1650					
52					
54					
56					
58					
1660					1-6 per H.
62					
64		^{s D} 2-2 per H.			
66					
67	68	2-2 per H. ^{s D} 2-4 per H.			
1670					1-6 per H. 1-6 per H.
72					
74					
76					
78					
1680					
82					
84					
86					From C.M. Acc'ts.
88					
1690		2-0-0 per Th.			