

Bread in Late-Medieval England

This handout contains materials pertaining – sometimes loosely – to the price of bread in late-medieval England, for a class given at Pennsic 36 by Dani of the Seven Wells, who may be contacted at dani@pobox.com.

“Also in this yere the kyng confermed to the citezeins of London alle there liberties and fraunchises. Also he yaf them a charter for to chastise bakers and mellers; that is to seye, for bakers that make nought breed after the assise, and for mellers that stelen mele and corne, the herdell; and for nyght walkers the tounne.”

- Chronicle of London, 1274

By our standards, people in late-medieval England ate an incredible amount of bread – and, if they were not wealthy, incredibly little that wasn't bread. An example [from *Agrarian History*] from the low end of sufficiency is the diet allocated to famuli working for the Peterborough Abbey in 1294. The daily average for a man works out to:

- 5-1/4 pounds of rye bread.
- Pottage made from 2-3 ounces of oats and an ounce of peas or beans.
- Half an ounce of cheese and a quarter ounce of butter. (These are averages.)

Women got less, but not much less. There was no ale in the allowance, which is below par even for abbey servants. There would also have been an annual salary that might have been about 5s (a little over a penny a week.)



The Baker.—From an Engraving of the Sixteenth Century, by J. Amman. ¹

¹ Lacroix, figure 75.

An Assize

When a Quarter of Wheat is sold for 12d, then Wastel Bread of a farthing shall weigh £6 and 16s. But Bread Cocket of a farthing of the same grain and bultel, shall weigh more than Wastel by 2s. And Cocket Bread made of grain of lower price, shall weigh more than Wastel by 5s. Bread made into a Simnel shall weigh 2s. less than Wastel. Bread made of the whole Wheat shall weigh a Cocket and a half, so that a Cocket shall weigh more than a Wastel by 5s. Bread of Treet shall weigh 2 wastels. And bread of common wheat shall weigh two great cockets.

When a quarter of wheat is sold for 18d., then wastel bread of a farthing white and well-baked shall weigh £4 10s. 8d. When for 2s., then £3 8s. [skipping 36 entries] When for 20s., then for 6s. 9d. $\frac{3}{4}$.

And it is to be known, that then a Baker in every Quarter of Wheat, as it is proved by the King's Bakers, may gain 4d. and the Bran, and Two Loaves for advantage, for Three Servants, 1d. ob. for Two Lads, ob. in Salt, ob. for kneading, ob. for Candle, q. for Wood, 2d. for his Bultel ob.

- Assize of Bread, 1256²

The table below shows the weights of various grades of bread at selected grain prices. In a sense, the purpose of this class is to breathe as much life as possible into these dry numbers.

Weight of a Farthing Loaf, in pounds [troy]

Price	Wastel	Cocket	Whole	Treyt	Common
1s	6.80	7.05	10.58	13.60	14.10
1s 6d	4.53	4.78	7.18	9.07	9.57
2s	3.40	3.65	5.48	6.80	7.30
2s 6d	2.72	2.97	4.45	5.44	5.94
3s	2.40	2.65	3.98	4.80	5.30
4s	1.80	2.05	3.08	3.60	4.10
6s	1.13	1.38	2.08	2.27	2.77
8s	0.85	1.10	1.65	1.70	2.20
10s	0.68	0.93	1.39	1.36	1.86
12s	0.57	0.82	1.23	1.13	1.63
15s	0.45	0.70	1.06	0.91	1.41
18s	0.38	0.63	0.94	0.76	1.26

² The assizes were republished many times after 1256, with different versions differing in small details. (E.g., a version of 1309, quoted (in Latin) in Lloyd, allows the baker a profit of 3d instead of 4d.) The text of this page is transcribed from Luders/Halsall.

£1	0.34	0.59	0.89	0.68	1.18
£1 (<i>alt</i>)	0.34	0.35	0.53	0.68	0.71

Some Actual Grain Prices

Average price (shillings per quarter) of wheat in the Bishopric of Winchester (source: Titow)

1310-1	1311-2	1312-3	1313-4	1314-5	1315-6	1316-7	1317-8	1318-9
9.08	6.08	5.75	6.25	7.42	16.92	16.58	9.17	4.75

Average price (shillings per quarter) of Grain in Oxford (source: IISG)

	1303-4	1308-9	1309-10	1310-1	1321-2	1332-3	1334-5	1336-7
Wheat	3.78	6.42	7.21	7.58	11.81	4.77	4.21	3.97
Barley	2.50	4.47	5.31	4.93	8.19	3.32	3.13	3.50
Oats		1.97		2.56	3.73	2.00	1.92	

Excerpts from the "Chronicle of London"

1288. This yere was so gret plente of where that men solden a quarter of whete for xvj d. And this yere was a passing hoot summer, and specially in harvest.

1317. This yere was a gret derthe of corn and other vitales, for a bussell of whete was worth v s: and the poure peple eten for hunger cattes and hors and houndes; and too yere and an half a quarter of whete was worth ii marc; and the poure peple stal children and eten them, and thane anon after there fille a gret pestilence among the peple.

1336. This same yere was a gret oreyn of beestes and of men also, and gret habundance of reyne, where thorough there was so gret derthe of corne that a quarter of wheat was worth xl s.

1337. Also in this yere was a gret plente of vitaille, that a quarter of whete was sold at London for ij s; and a fat oxe for vj s. viij d; and vj pegons for a peny: but natheles it was ful gret scarste of money.

1401. In this yere a quarter of whete was worth vj s.

1447. And this yere a quarter of whete fil fro the price of ix s. to iiij s.

A Demographic Digression³

In 1348, the bottom fell out of English society⁴. Demographically, it stayed out for a long time.

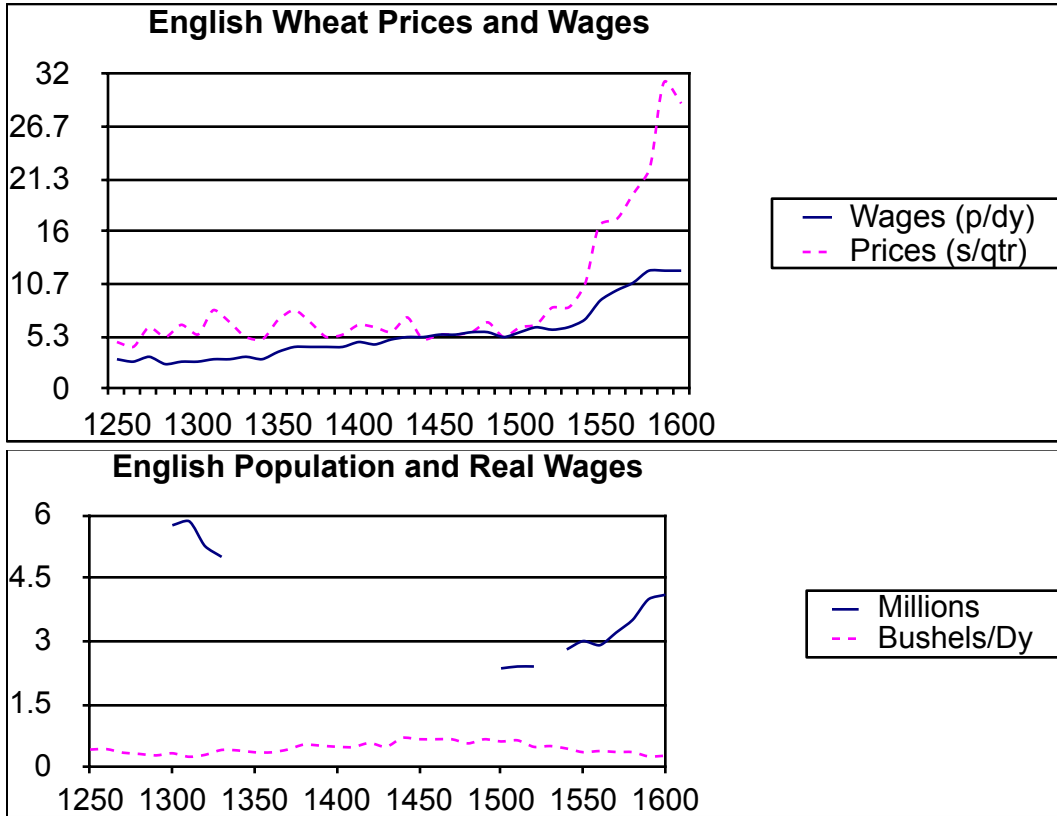
... Because a great part of the people and especially of the workmen and servants has now died in that pestilence, some, seeing the straights of the masters and the scarcity of servants, are not willing to serve unless they receive excessive wages, and others, rather than through labour to gain their living, prefer to beg in idleness: We...ordain that every man and woman of our kingdom of England, or whatever condition, whether bond or free, who is able bodied and below the age of sixty years, not living from trade nor carrying on a fixed craft, nor having of his own the means of living, or land of his own with regard to the cultivation of which he might occupy himself, and not serving another, - if he, considering his station, be sought after to serve in a suitable service, he shall be bound to serve him who has seen fit so to seek after him; and he shall take only the wages, liveries, meed or salary

³ The charts below are spliced from several sources, chief of them being Hatcher for population before 1540, Wrigley and Schofield for population after 1540, Dyer for wheat prices and wages till 1510, Hoskins for wheat prices from 1520, and Munro for wages after 1500. It should be noted that medieval-population estimates rely heavily on what, in some fields, would be called guesswork. The wages are based on those of a carpenter.

⁴ And European society, and middle-eastern society, and Chinese and Indian society...

which, in the places where he sought to serve, were accustomed to be paid in the twentieth year of our reign of England, or the five or six common years next preceding.

- from the Statute of Labourers (1349)⁵



Bread and Diet, Revisited⁶

	Harvest Worker - 1256		Harvest Worker – 1425		Luttrell 1425-6
	% cost	qty/day	% cost	qty/day	% cost
Bread	41	2.7 lbs	13	2 lbs	16
Pottage Corn	1	1 oz	1	2 oz	
Ale	13	1.1 pts	41	6.3 pts	23
Meat	4	1.4 oz	28	17 oz	23
Fish	13	5 oz	6	3.5 oz	12
Milk/Cheese	28	1 pt/2.5 oz	9	0/4 oz	
Wine					23

⁵ Cited in Henderson.

⁶ These figures draw upon “Changes in Diet, The Case of Harvest Worker’s”, in Christopher Dyer’s “Everyday Life in Medieval England”, and secondarily upon his “Standards of Living in the Later Middle Ages”.

Spices					3
Totals	(0.75d/dy)	(5000 cal.)	1.5d/dy	5000 cal.	£107/yr

In 1256, 74% of the harvesters' calories come from bread, 4% from ale, and 2% come from meat. In 1424, 40% of the calories come from bread, 23% each come from ale and meat by this reckoning. A 1497 assize⁷ of bread allows significantly higher costs and incomes:

Furnace and wood	6d
Miller	4d
2 Journeymen, 2 Apprentices	5d
Salt, yeast, candle, sack bands	2d
Himself, his house, his wife, his dog and his cat	7d
In all	2s 0d

A passage from "Piers the Ploughman":

Had not Piers with a pease-loaf prayed Hunger to cease
 They had been buried both believe thou none other!
 'Suffer them to live,' he said 'let them eat with the hogs
 Or else beans and bran baked up together,
 Or else milk and mean ale' thus prayed Piers for them.

....

The blind and bedridden were bettered by thousands;
 Those that sat to beg silver soon were they healed;
 For what was baked for a horse was a boon for the hungry,
 And many a beggar for beans glad was to sweat,
 And each poor man was well please to have pease for his hire;

....By that it nighed near harvest new corn came to market....
 Then would Waster not work but wandered about,
 Nor no beggar eat bread that had beans therein
 But asked for the best white, made of clean wheat;
 Nor none halfpenny ale in no wise would drink,
 But of the best and the brownest for sale in the borough.

Labourers that have no land to live on but their hands
 Deigned not to dine at day on worts a night old.
 May no penny ale please them nor no piece of bacon,
 Only fresh flesh or fish fried, roast, or baked,
 And that *chaud* or *plus chaud* 'gainst chilling their maw.

from passus 6

"The second price of wheat being at 5s.6d. the bushel, the quarter at 44s, the penny white loaf is to weigh seven ounces and a half troy weight. [9 oz. dim.] The penny wheaten loaf is to weigh eleven ounces and a half, troy weight. [14 oz di] The penny household loaf fifteen ounces, a quarter of an ounce, and 1d. weight sterling. [18 oz] This size to begin upon Tuesday the 9th of Nov. 1624"

"The first price of wheat being 5s. the bushel, the market day Wednesday the 12th of June 1644, the penny loaf of wheaten bread made of meal dressed through a meal sieve only,

⁷ Cited by Webb.

according to His Majesty's proclamation of June 1644, is to be 12 ounces, of which bread no baker shall sell to any person who shall retail it more than 13 to the dozen; neither may any baker bake any bread here in Oxford of a finer sort than that aforesaid."

- Two post-period Oxford assizes [Lloyd]

Penalties

And if a Baker or Brewer be convicted that they have not kept the foresaid Assizes, the First, Second and Third time they shall be amerced, according to the Quantity of their offence; and that as often as a Baker shall offend in the weight of a farthing loaf of bread not above 2s. weight, that then he be amerced as before is said; but if he exceed 2s. then he ought to undergo the judgment of the Pillory without any redemption of money. In like manner shall it be done if he offend oftentimes and will not amend, then he shall suffer the Judgment of the Body, that is to say, the Pillory if he offend in the weight of a farthing loaf under two shillings weight as is aforesaid. Likewise the woman brewer shall be punished by the Tumbrell, trebuchet, or castigatorie, if she offend divers times and will not amend.

- also from the Assize of 1256

A sequence of court appearances:

[10/3/1481] Richard Harward constable and his fellows sworn present the wives of Edward Wardall 2d and Richard Goodelad baking and selling bread against the assize amerced Wives of Richard Barbur 2d Ralph Manseoure 2d Richard Goodelad 2d and William Cusseworth 2d brewing and selling beer against the assize amerced John Dawes 2d and Richard Bothomley 2d butchering and selling meat against the assize amerced.

[5/1/1482] Richard Goodelad constable and his fellows present Robert Ellys 4d John Sewall 4d Thomas Dolle 4d William Darley 4d Henry Wodhouse 4d not attending the tourn all amerced Wives of Edward Wardall 2d and Richard Goodelad 2d baking and selling bread against the assize amerced Margaret Harward 2d the wives of Richard Goodelad and William Cusseworth 2d brewing and selling beer against the assize amerced Richard Bothomley 2d and John Dawes 2d butchering and selling meat against the assize amerced John Clyff 4d on 8th March 22 Edward IV [1482] at Harthill by force of arms made affray on Margaret Harward against the peace so he is amerced

[10/9/1482] Richard Goodelad constable and others present Henry Wodhus 4d Richard Spenser 4d Robert Rogger 4d and Thomas Dolle 4d not attending tourne amerced Edward Wardalff 2d and the wives of John Harward 2d and John Whitehead 2d baking and selling bread against the assize amerced Wife of Richard Harward 2d brewing against the assize Richard Bottomley 2d and John Dawes 2d butchering and selling meat amerced Roger Wodruff on 8th August [1482] at Harthill by force of arms made an assault on William Belgh And at the same time drew blood from him against the King's peace So he is amerced William Wodhous 4d on 20th July [1482] at Harthill assaulted William Smith against the peace of the lord the king amerced William Haresand constable there this year

[10/20/1483] William Haresand constable and his fellows present the wife of Edward Wardolff 2d baking and selling bread against the assize Margaret Harward 2d and wives of John Smyth 2d and John Harward 2d brewing beer against assize John Dawes 2d and Richard Bothomley 2d butchering and selling meat contrary to the assize so they are amerced John Dawes 4d on 12th July [1483] at Harthill made an assault on Ralph Belgh by force of arms against the king's peace so he is amerced as above William Belgh elected constable etc.

[5/12/1484] William Belghe constable and his fellows present the wives of Edward Wardall 2d John Harward 2d and John Whitehede 2d baking and selling bread against the assize The wife of John Whitehede 2d Margaret Harward 2d and the wives of Robert Goodelad 2d and John Harward 2d brewing and selling beer against the assize Richard Bothomley 2d butchering and selling meat against the assize John Marsshall 6d on 12th March [1483/84] at Harthill made an assault on Thomas Munvile by force of arms against the king's peace...

- Harthill ameracements in court at Conisbrough, 1481-4

Finer Dining: Trenchers and Manchet



- Geoffrey Luttrell, from the Luttrell Psalter

The first year, my son, thou shall be panter or butler,
 Thous must have iij knives keen / in pantry, I say thee evermare:
 One knife the loaves to chop, another them for to pare,
 The iij sharep and keen to smooth the trenchers and square.
 Always thy sovereign's bread thou chop, and that it be new and able;
 See all other bread a day old or thou chop to the table;
 All household bread iij days old / so it is profitable;
 And trencher bread iiij dayes is convenient and agreeable.

from *The Boke of Nurture* (spelling modernized, except where it would spoil rhymes)

[Wait for the usher to seat you...]
 If he ye set at gentleman's board,
 Look thou be hynde [courteous] and little of word,
 Pare thy bread and carve in two,
 The over crust the nether fro;
 In four thou cut the over dole,
 Set them together as it were whole;
 Sithen cut the nether crust in three,
 And turn it down, learn this at me.
 And lay thy trencher thee before...

from *The Boke of Curtasye* (spelling modernized)

Ale

Ale competes with bread for grain.

When a quarter of Wheat is sold for 3s. or 3s. 4d. and a Quarter of Barley for 20d. or 2s., and a Quarter of Oats for 16d., then Brewers in cities ought and may well afford to sell two gallons of beer or ale for a penny, and out of cities to sell 3 gallons for a penny. And when in a town 3 gallons are sold for a penny, out of a town they ought and may sell four; and this Assize ought to be holden throughout all England.

- also from the 1256 assize of bread and ale

From Ramsey abbey court rolls⁸

All the customary tenants of Houghton and Wytton, namely sixty-nine virgaters and semi-virgaters, are accused in this court by the steward of having gone to Huntingdon and St. Ives for penny ale at other times than during a fair. And this is done against the license and ordinance established by Abbot William of Godmanchester as may be found in the rolls for the autumn court of the fifth year of that abbot, and has now been renewed by Abbot John, as may be found in the autumn court held on Saturday the morrow of the feast of Saint Margaret in the tenth year of this lord abbot, that if any of the above customaries should be convicted of the above offense he should pay a twelve penny fine to the lord. These customaries come and admit that truly none of them is able to acquit or absolve himself of other than guilt against the above license and ordinance...that the above fine, namely sixty-nine shillings, be leveled on these customary tenants, namely twelve pence from each of them.

- Houghton, 1274

The prohibition is decreed through the lord's steward and with the consent of all free and customary men lest any of the above customaries be charged henceforth a penny at a tavern, or that he purchase ale for more than a halfpenny a gallon, within the village of Ellington. And if any of the above customaries should be convicted of this, he will give a sixpenny fine to the lord. And with this it is ordered that if the tasters should find any brewer who is selling to a native of the lord for more than a halfpenny a gallon, that ale is to be taken into the hands of the same taster, seized and sold. And the money thereby acquired is to be faithfully accounted to the lord. It is also prohibited to any brewer who is free to sell within the above vill ale for more than a halfpenny a gallon. And if any should be convicted of this, forty pence fine should come to the lord upon each occasion.

- Ellington, 1322

In addition the provision is promulgated...that henceforth all common brewers...should not altogether brew on the same day unless it is necessary, but should have an agreement governing what is brewed and should be brewed...so that the villagers should not suffer from a lack of drink as they have suffered in the past, to their harm and to the damage of the liegemen of the lord king. And so all common brewers within the hundred must henceforth provide in season and out of season an adequate service, especially for those of the neighbourhood and for other liegemen of the lord king, under penalty of six shillings, eightpence to each for every such offence. And henceforth no brewer, tapster, or seller...may sell to any liege of the lord king whosoever in pots, cups, dishes, or bowls, but only in true measures that have been properly marked as the law requires, and this obliges all under the penalty of twelve pence for each offense.

- Abbots Ripton, 1492

⁸ Taken from Raftis.

A balance sheet for ale sellers⁹

Consider a country brewer in 1256 who wishes to brew a batch of ale from three bushels of malt while obeying the assize. Using roughly the same proportions as those used by the brewers at St. Paul's Cathedral (1286), the brewer would have used 2 bushels of oat malt and half a bushel each of wheat and barely malt. On the basis of the lowest grain prices cited in the 1256 assize, we arrive at a cost of 7.5d for three bushels of unmalted grain, or 9.5d for malt. Adding 2d for other costs – primarily firewood – yields us a total cost of 11.5d.

The assize calls for ale to be sold at 3 gallons to the penny. Assuming 7.5 gallons are brewed from each bushel of malt¹⁰, we have 22.5 gallons to sell for 7.5d. As may be seen in the second column of the table, this is a quick road to ruin. Now suppose our enterprising brewer decides she can stretch the malt to provide 10 gallons of ale per bushel, and that her neighbors will pay a halfpenny for a gallon of somewhat-weak ale:

Ale Profits under the Assize	1256 Assize	Plan B
Cost of malt	9.5d	9.5d
Cost of fuel	2d	2d
Amount brewed	22.5 gal.	30
Total sales	7.5d	15
Gross profit	-2d	3.5d
Amercement	-	2d
Net profit	-2d	1.5d

The table showing harvest workers drinking close to a gallon of ale a day are not atypical, in the sense that ale was the preferred drink – not to mention that it was often the only practical alternative to water – and people would drink it in staggering quantities when they could get it. That said, statements to the effect that most people drank half a gallon (or a gallon or some other

⁹ This extended computation is based upon a similar one proposed by Bennett for a brewer selling in Oxford in 1311. The recipe is based upon records from St. Paul's cathedral (see Hagen). Proportions of grain prices to malt prices are based on those reported for 1299 in "The Lives of the Berkeleeyes", cited by Quin. (The cost is sensitive to the ingredients, as wheat is particularly hard to malt, whereas malted oats cost little more than unmalted oats.) Bennett estimates non-grain costs at 50% of the cost of the malt, with fuel being about a third of that. The 2d estimate generously assumes that the brewer is being a country mouse, and can avoid most of the non-fuel expenses.

¹⁰ Bennett reckons that a bushel of malt would have yielded 7.5 gallons of good ale. Alice de Bryene, a century later, expected 7 gallons from a bushel (cited by Hassall), and the brewers at St. Paul's accepted over 8.5.

adduced figure) of ale a day should be received with caution. Calorie for calorie, ale costs three times as much as bread, so the poor must have treated it as a minor luxury¹¹.

¹¹ Hagen makes the useful point that the grain required to support a general gallon-a-day habit would have required most of the arable land in England.

Definitions

Grades of Bread

Wastel was the finest white bread. *Simmel* was as fine as *wastel*, but it was baked twice (or perhaps boiled and then baked) and shaped like a pastry or biscuit. It may have been baked for special occasions. There are two grades of *cocket*. The finer grade uses the same grain and bolt as *wastel*; it's not clear what distinguishes them. The coarser *cocket* is made from second-quality wheat. *Wholemeal* was whole-wheat bread from which the bran was removed. *Treyt* (or *treet*) was a brown bread made from coarse wheat from which one sifting of white flour had been removed, and to which bran was added. *Bread of common wheat* contained a mix of cheaper grains (oats, barley, maybe rye). *Horsebread* was made from a mix of cheap grains and pulses. It was considered fodder, but the poor would eat it in a pinch.

Some other bread terms that tend to crop up. *Manchet* was the late-period equivalent of *wastel*, but it was made in individual-serving-size loafs. *Maslin* was a mixture of wheat and rye. Dredge was a mixture of barley and oats. *Household* bread appears to have been a common name for *treyt*, though some sources use it when referring to wholemeal bread. Later in period we start seeing *Raise* or *Puff*, which is made with good wheat flour, with eggs, milk and butter added, and baked into small loaves.

Trenchers are plates made of bread. The *Menagier de Paris* describes them as “half a foot in width and four fingers tall, baked four days before and browned.” In the Luttrell household, trenchers were made of *maslin* (a wheat-rye mix). At head table, they would have been carefully squared off. Servants were supposed to replace the trenchers frequently, as they got soggy, and save them for the almoner, who was responsible for distributing them to the poor.

Currency

Costs are generally given in *pounds*, *shillings*, and *pennies* (or pence), notated as £, s, d (short for ‘libra’, ‘solidus’, ‘denarius’). There are 12d to the shilling and 20 shillings to the pound¹². The smallest coins in circulation were halfpennies (sometimes notated as ‘ob’, from the Latin ‘obulus’) and farthings (fourth pennies, sometimes notated ‘q’, from the Latin ‘quadrans’). Thus “2d ob q” is 2-3/4 pence. There was no way to get change from a farthing. The value of a coin depended on almost nothing but its silver content, which meant that a farthing actually had to contain about 1/1000 of a pound of silver – about a sixth the weight of a modern dime. The desperate shortage of silver meant that sometimes there weren't enough coins available for regular business.

Weights

Pounds, shillings, and pence are interchangeably used as units of currency and units of weight. 12d weighs 1s, and 20s weighs a pound. (Precious metals – and currency is canonically assumed to be silver – are reckoned in troy weight. There are 12 troy ounces in a troy pound, so a shilling is 3/5 of a [troy] ounce.)

A modern (avoirdupois) pound weighs 7000 barley grains. A pound troy weighs 5760 grains, or 13.5 modern ounces (rather than 12, since the troy ounce is slightly heavier than the avoirdupois). There was also a Tower pound, weighing 5400 barley grains, and some sources believe that the weights cited in the assizes should be reckoned on the basis of Tower pounds, because those were used by the royal mint.

A quarter is eight bushels. A bushel of grain was reckoned to weigh 64 pounds (troy), so a quarter of grain was reckoned to weigh 512 pounds¹³. When wheat is selling for 4s a quarter, then, its wholesale price 10-2/3 pounds per penny. Be warned that weights and measures tended to be inconsistent. Be also warned that a bushel might hold 50-60 pounds of grain, depending on the type and quality of the grain.

¹² Shillings were not actually minted until the sixteenth century, just used in reckoning.

¹³ Court records sometimes refer to rings of grain. I believe a ring to be half a quarter, but have not been able to verify this.

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