Weights and measures

Deciphering units of weights, measurements, and money in historical documents can cause problems for researchers.

Virtually every unit of measurement used up to the mid-twentieth century has now been replaced, or is being replaced, by decimal or metric measurements. A few old measurements are still in current use in the UK, such as pints and miles, but most people will now need to consult reference works in order to understand the measurements used in the past.

The information provided within this skills unit aims to identify and explain some of the most common difficulties and pitfalls and to provide sources of assistance. It is concerned only with English and Welsh measurements. Researchers should check specialist publications and the Scottish Archives Network (SCAN) Weights and Measures Guide for information on Scottish measurements.

Standardisation of weights and measures in England and Wales was a long and complicated process. The measurements referred to here are predominantly those used from the late sixteenth and early 17th centuries onwards, and those in force after the Weights and Measures Act of 1824. For medieval and earlier measurements, researchers should consult specialist works.

Engraving of a pair of scales in a shop, from The Child's Arithmetic: A Manual of Instruction for the Nursery and Infant Schools (London: William S. Orr and Co., 1837)

Imperial and Metric measurements

Imperial measurements were derived from the measurements used by the Romans. Over time, measurements used by different countries began to vary. For instance, the standard Imperial measurements used in Scotland were different from those used in England and Wales.

The Metric system was developed by the French and was enforced there in 1795. It bases all measurements on decimal divisions - dividing units into ten. The word 'metric' comes from 'metre', the French unit of linear measure. The system is now officially called the Système International d'Unités, or SI.

Metric measurements were gradually adopted by other countries. In 1969 the UK government began a process of phasing out Imperial measures, but progress has been slow. Most pre-packed goods have been sold in Metric measurements (kilos, grams and litres) since 1995. On 1 January 2000 it became illegal to sell loose goods such as fruit and vegetables in Imperial measurements (pounds and ounces). The exception to the rule is draught beer which is still sold in pubs in pints. Milk is also still sold in pint-sized containers, although they are officially measured in litres.

Area and linear measurements are also at a half-way stage. Acres have made way for hectares, and most measurements are now officially calculated in metres and centimetres. However, roads and speeds are still measured in miles rather than kilometres. Despite these legal changes, most people still use Imperial measurements in everyday conversation and to

describe their own height and weight. However, they may not be aware of all the archaic measurements which appear in historic documents.

Throughout the unit, illustrative images are taken from the collections held by Manuscripts and Special Collections at the University of Nottingham.

This unit was written in August 2006.

Next page: Weights

Weights

The Imperial system used in England and Wales involved three main types of weight measurements, used for different things: Avoirdupois weight, Troy weight and Apothecaries' weight. The standard measure of weight in each was the pound (lb). The abbreviation 'lb' comes from the Latin word for pound, 'libra', which was also used for the monetary pound (£). Pounds were divided into ounces (oz).

However, many commodities were sold according to their volume or capacity, rather than according to their weight. Specialist terms used to describe quantities of produce often refer to the containers in which they were usually sold, and not to how much they weighed. For instance, a container for tea was a 'caddy'. This contained tea weighing one and a third pounds. Vocabulary also varied between different regions of the British Isles. Dictionaries and specialist works on archaic weights and measures should be consulted by researchers who wish to know what weight was meant by these quantities.

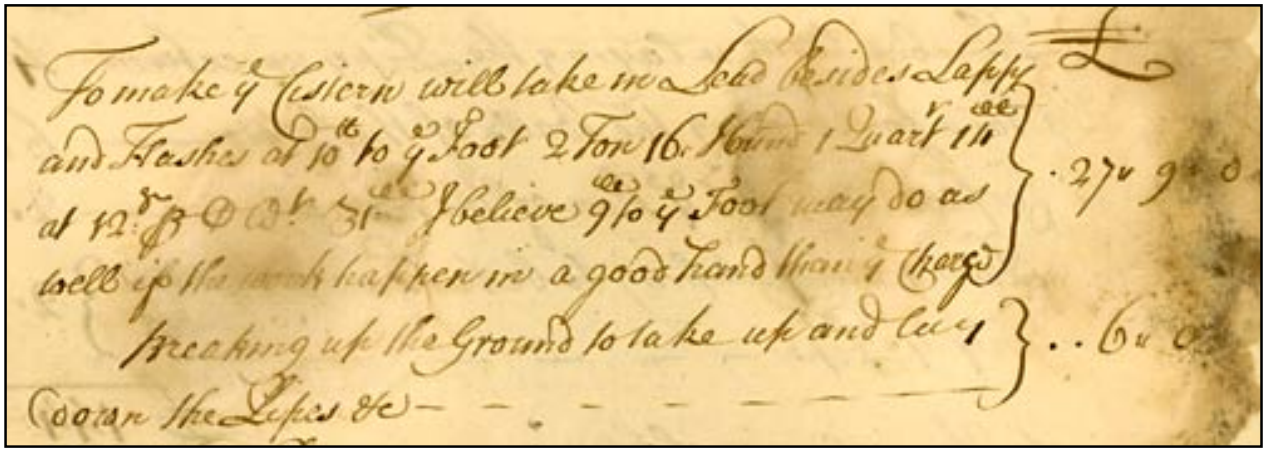
Avoirdupois weight
This was used to measure large and bulky items, and was the most common weight measurement, eventually becoming the standard for virtually all weights. The smallest unit was the dram or drachm. This system is still used by many people in the UK to measure their own weight (stones and pounds, or pounds and ounces for babies).

Table of units of measurement:

16 drams	1 ounce (oz)
16 ounces	1 pound (lb)
14 pounds	1 stone (st)
2 stones	1 quarter (qtr)
4 quarters	1 hundredweight (cwt)
20 hundredweight (2240 lb)	1 ton

The ton was sometimes called the Long Ton to distinguish it from the American ton, which equated to 2000 lb.

In this 1723 proposal to make a cistern, it is stated that 'To make the Cistern will take in Lead Besides Lapps and Flashes at 10lb to the Foot 2 Ton 16 Hund. 1 Quartr 14 lb'.



Detail from proposal to make a cistern, 1723 (Pl C 1/389)

Troy weight

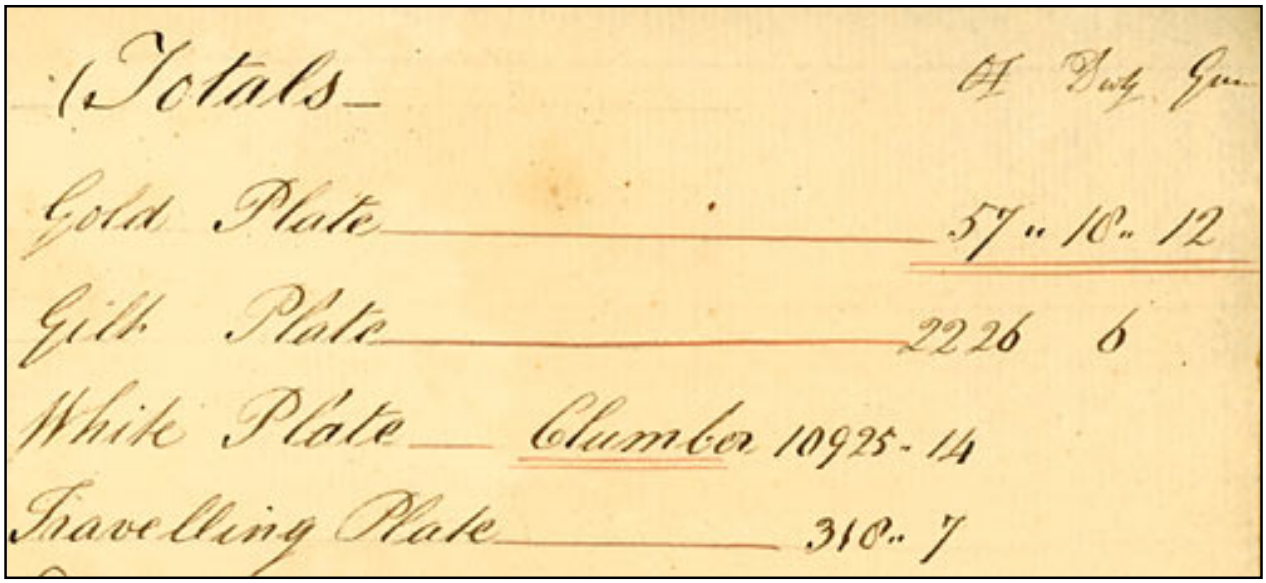
This was used to measure small amounts of gold, silver, metals and gemstones by silversmiths or jewellers. Use of the Troy pound was abolished by the Weights and Measures Act of 1878, but the Troy ounce is still used to measure precious metals and stones. The smallest unit in the Troy weight system was the grain.

Table of units of measurement:

24 grains	1 pennyweight (dwt)
20 pennyweight	1 ounce (oz)
12 ounces	1 pound (lb)

A troy pound, at 5760 grains (about 373.24 grams in the Metric measurement), was lighter than an avoirdupois pound, at 7000 grains (about 453.59 grams).

In this example from the Newcastle Collection, the weights of gold plate are given in the Troy measurements of 0£, Dwt and Grn.



Detail from inventory of plate, 1791 (Ne 5 I 1)

Apothecaries' weight

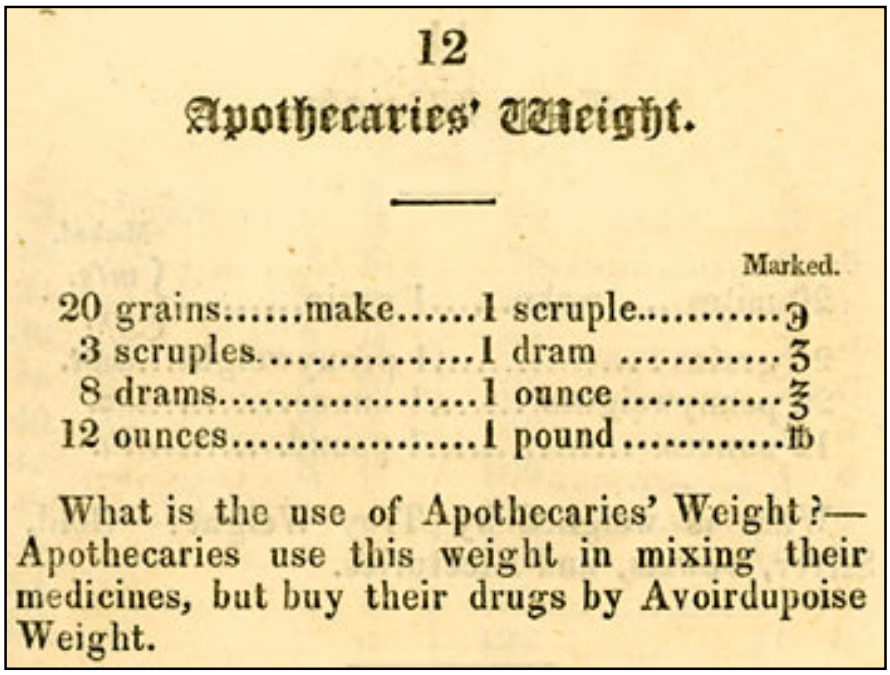
This was a version of Troy weight, used by apothecaries or pharmacists to measure out their powders. Pounds and ounces weighed the same as their Troy equivalents, but different units were used for the lighter weights. The smallest unit was the grain.

Table of units of measurement:

20 grains	1 scruple
3 scruples	1 dram or drachm
8 drams	1 ounce (oz)
12 ounces	1 pound (lb)

Apothecaries' measures were officially abolished by the Weights and Measures Act of 1978.

This table of Apothecaries' Weight, from a schoolbook published in 1822, shows its particular abbreviations.



12

Apothecaries' Weight.

Marked.

20 grains.....make.....1 scruple.....℈
3 scruples.....1 dram .....ʒ
8 drams.....1 ounce .....℥
12 ounces.....1 pound .....lb

What is the use of Apothecaries' Weight?—Apothecaries use this weight in mixing their medicines, but buy their drugs by Avoirdupoise Weight.

Detail from *An Explanation of the fundamental rules of arithmetic*, 1822 (Briggs Collection, LT 210.QA/E9)

Metric weight

Table of units of measurement:

1,000 milligrams (mg)	1 gram (g)
1,000 grams (g)	1 kilogram (kg)
1,000 kilograms (kg)	1 tonne

Note the different spelling of 'tonne' from the Imperial 'ton'.

Next page: Measurements

Measurements

Distance (length, height or width)

The standard linear measure in the Imperial system was the mile, which was divided into furlongs, chains, yards, feet and inches.

The mile was based on a Roman measurement of 1,000 paces. The word 'furlong' comes from 'a furrow long', or the distance that could be ploughed by an ox without a rest. A foot was traditionally the length of a man's foot, and 'inch' comes from the Latin word 'uncia', meaning 'one-twelfth'.

This system is still used by many people in the UK to measure distance (miles), and their own height (feet and inches).

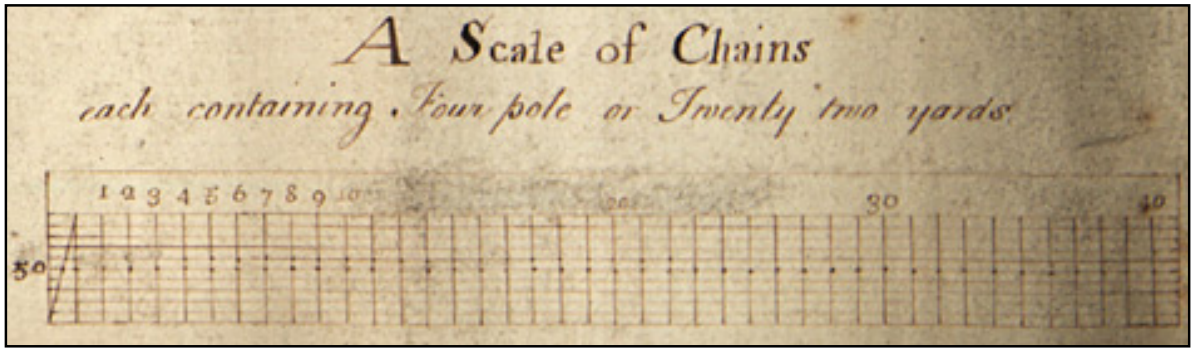
Table of units of standard linear measurement:

3 barleycorns	1 inch (in or '')
12 inches	1 foot (ft or ')
3 feet	1 yard (yd)
5½ yards	1 perch, pole or rod
40 poles	1 furlong
8 furlongs	1 mile
3 miles	1 league

Therefore, there were 5280 feet, and 1760 yards in 1 English mile.

Many maps use land surveyors' measures of distance in their scales. These are as follows:

100 links (4 poles, 22 yards or 66 feet)	1 chain
10 chains	1 furlong
80 chains	1 mile



Detail of a scale of chains from plan of Newark Fields, pre-1768 (Ne 6 P 3/15/3)

Metric units of measurements are as follows:

10 millimetres (mm)	1 centimetre (cm)
100 centimetres (cm)	1 metre (m)
100 metres (m)	1 kilometre (km)

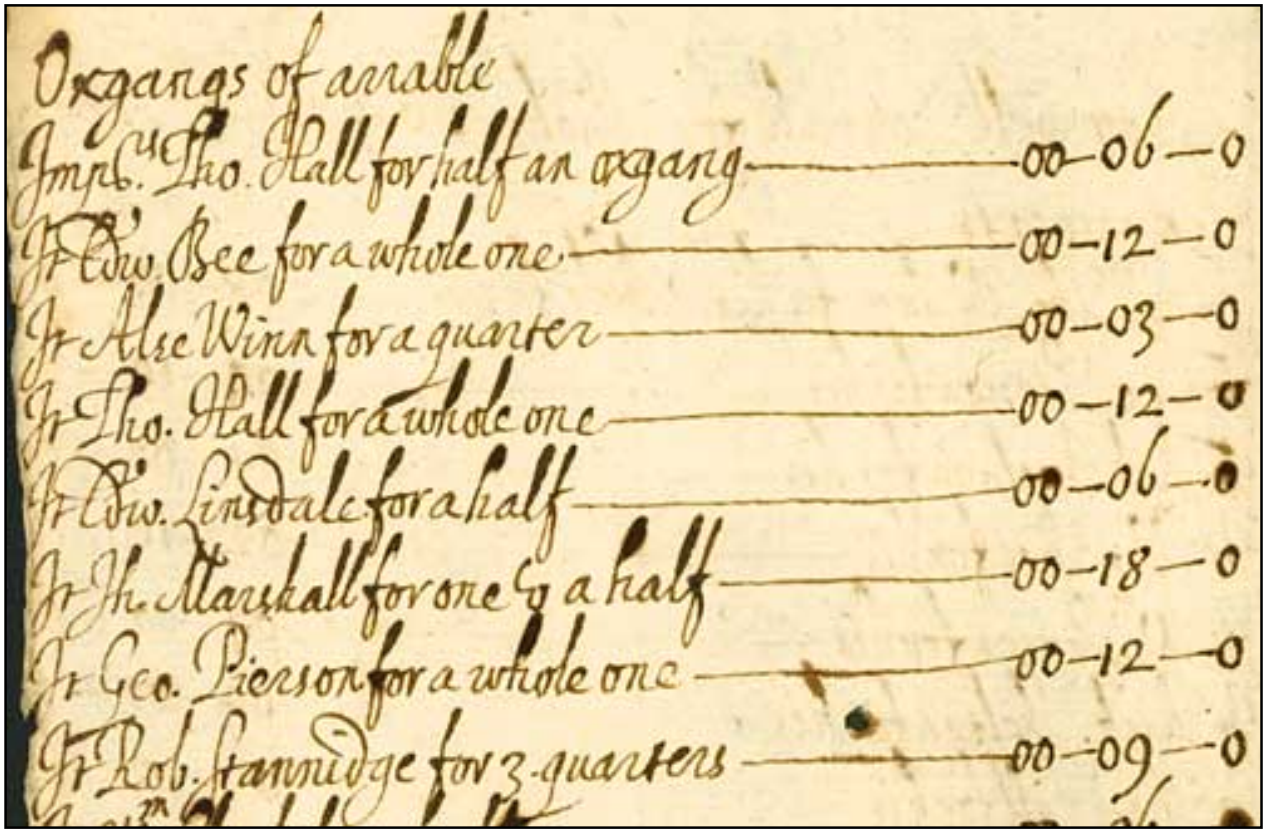
Kilometres are shorter than miles: 1 foot equals 30.5 centimetres, and 1 mile equals 1.6 kilometres. Conversion tables are widely available in printed books and on the internet.

Area

There were a wide variety of traditional measurements of land used into the seventeenth century. The following measurements were based on how much could be produced or worked from a particular piece of land, and therefore varied widely according to the quality of the soil and the climate. They do not have absolute quantities, but can be measured against each other:

1 acre	The area that could be ploughed by a team of eight oxen in one day
1 hide	The area deemed to be able to support a typical peasant family, ploughed in a year by a team of eight oxen. Nominally 120 acres, although the actual area varied. Also called (among other names) a carucate or a ploughland A hide was made up of 8 oxgangs or bovates, or 4 virgates

In this 1642 rental from the parish of Cromwell, meadow ground is given in acres, but arable land (which had to be ploughed) in oxgangs:



Detail from Cromwell rental, 1642 (Ne A 54) - 'Oxgangs of arrable'

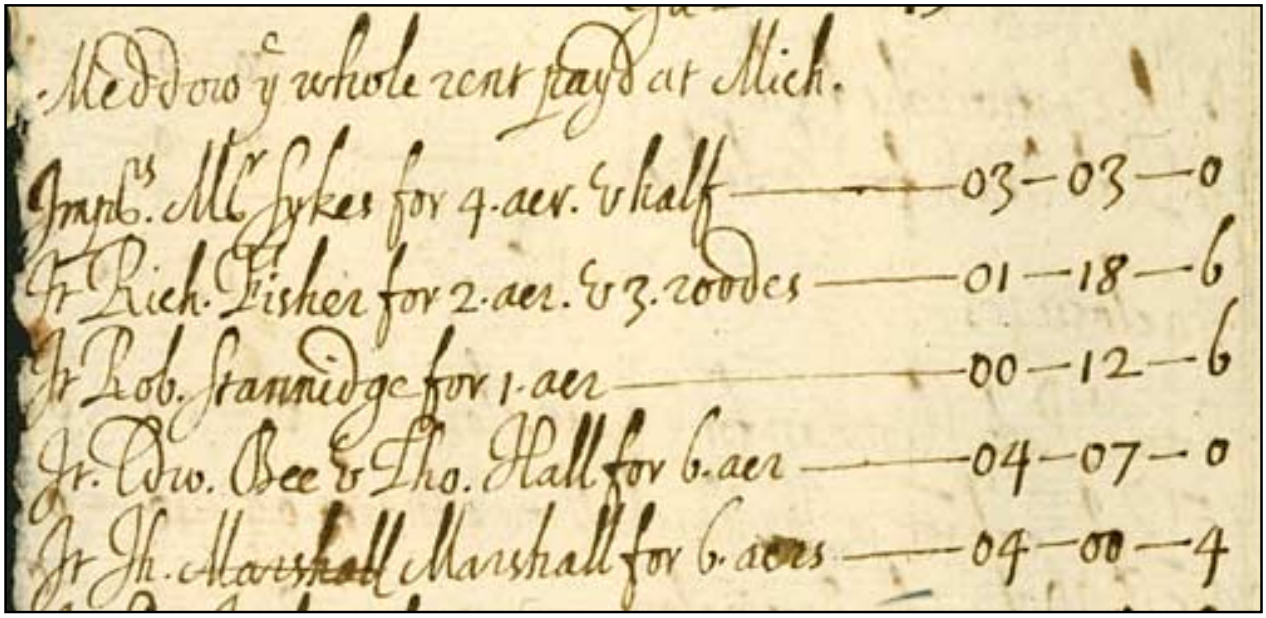
The standard area measure in the Imperial system was the acre, which was divided into roods and perches. Area measurements were often abbreviated using the letters a.r.p.

The acre was defined officially as being 1 furlong (40 poles = 660 feet) in length, and 4 poles (66 feet) in breadth. The rectangular shape of this measure came about because arable fields were made up of long strips of land, each containing furrows running lengthwise. One 'furrow long' = 1 furlong.

However, most land was not this shape, so square measurements became standardised, in order to be able to measure irregularly shaped pieces of land. Table of units of square measurement:

144 square inches	1 square foot
9 square feet	1 square yard
30¼ square yards	1 perch
40 perches	1 rood
4 roods	1 acre
640 acres	1 square mile

Here is another detail from the 1642 rental from the parish of Cromwell, showing rents for meadow land, measured in acres ('acr') and roods ('roodes').



Detail from Cromwell rental, 1642 (Ne A 54) - 'Meddow the whole rent'

Metric measurements are as follows:

100 square millimetres (sq. mm)	1 square centimetre (sq. cm)
10,000 square centimetres (sq. cm)	1 square metre (sq. m)
100 square metres	1 are
100 ares (10,000 square metres)	1 hectare
100 hectares (1,000,000 square metres)	1 square kilometre

Hectares are larger than acres: 1 acre equals 0.4 hectares. Conversion tables are widely available in printed books and on the internet.

Next page: Volumes or Capacity

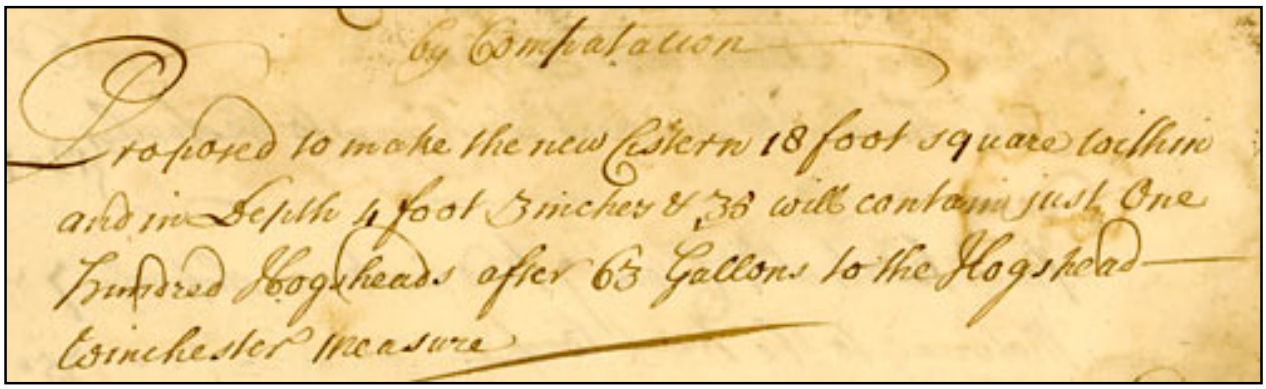
Volumes or Capacity

Introduction

Many commodities were sold according to their volume or capacity, rather than according to their weight. Volumes described here were used to measure both dry goods (grains etc.), and liquids. The basic unit of volume in England and Wales was the gallon.

What exactly was a gallon? There were actually various different gallon measurements in existence in England and Wales. You used a different gallon depending on what it was you were measuring. The traditional corn gallon used to measure dry goods, as defined in 1696 and known as the 'Winchester Measure', measured 268.8 cubic inches. There was also an ale gallon, measuring 282 cubic inches, and a wine gallon measuring 231 cubic inches.

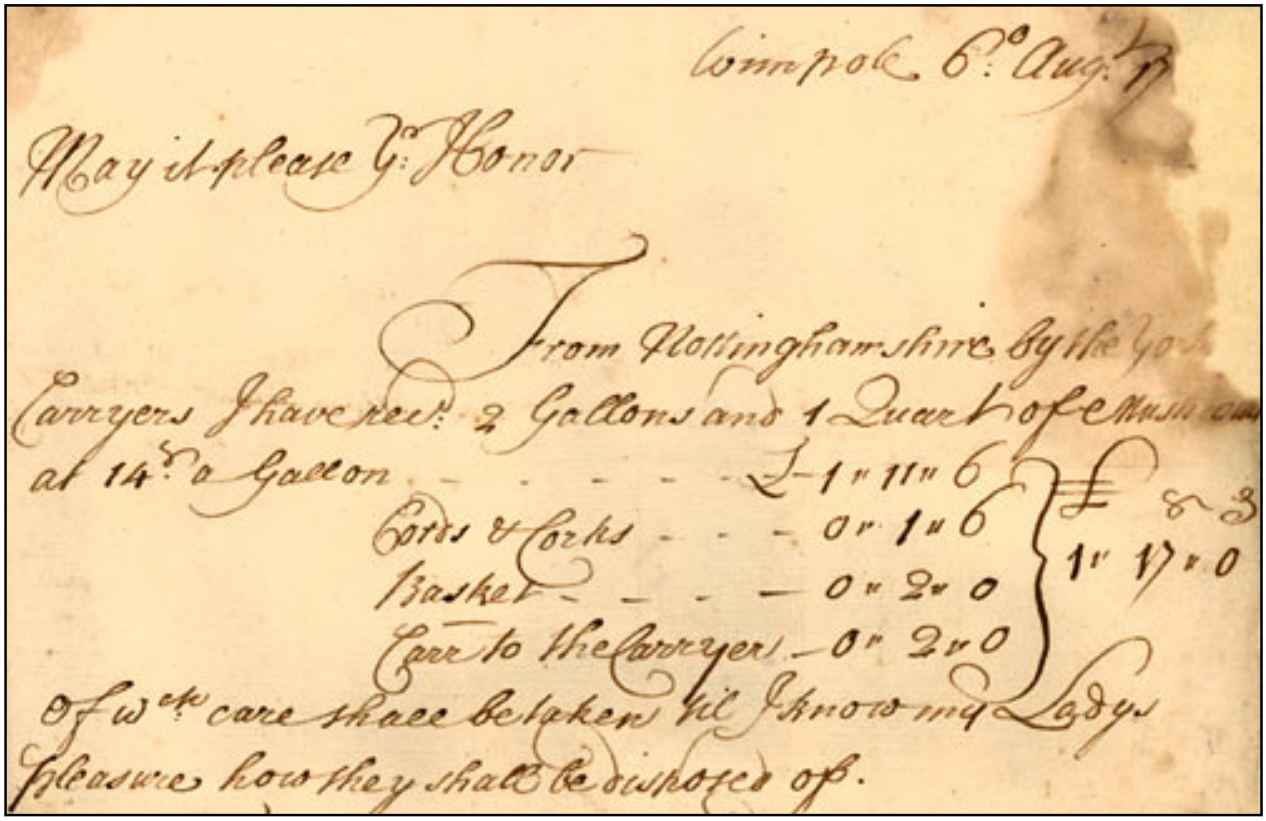
This proposal for pipe-laying, referring to gallons of water, but specifying that the Winchester Measure was to be used, is dated 1723.


by Computation

Proposed to make the new Cistern 18 foot square within
and in Depth 4 foot 3 Inches & 36 will contain just One
Hundred Hogsheads after 63 Gallons to the Hogshead
Winchester Measure

Detail from proposal for pipe-laying, 1723 (Pl C 1/389)

It can seem surprising that commodities now measured by weight were often measured by volume in the past. This letter refers to 'two gallons and one quart of mushrooms' received by John Cossen, agent to the Earl of Oxford in 1724.



Detail from letter from John Cossen, 1724 (Pl C 1/468)

In 1824 the government abolished all existing gallon measurements and substituted a new, standard, Imperial gallon of 277.42 cubic inches, to come into effect on 1 January 1826. The Imperial gallon was able to hold ten avoirdupois pounds of water at a temperature of 62 degrees Fahrenheit. The capacities of the other measurements of volume were adjusted to take account of this new gallon.

Researchers should be aware that many specialist terms were used to describe quantities of particular goods or commodities. Vocabulary also varied between different regions of the British Isles. Dictionaries and specialist works on archaic weights and measures should be consulted by researchers who come across measurements not given here.

Liquids up to 1 pint

20 minims	1 fluid scruple
3 fluid scruples	1 fluid drachm
8 fluid drachms	1 fluid ounce (fl. oz.)
5 fluid ounces	1 gill
4 gills (20 fluid ounces)	1 pint

Dry goods and liquids up to 1 gallon

4 gills	1 pint
2 pints	1 quart
4 quarts	1 gallon

Once above a gallon, various different units of volume were used depending on the type of commodity being measured. The actual measurements contained in each unit of volume or capacity also varied over time.

Dry Goods measurements

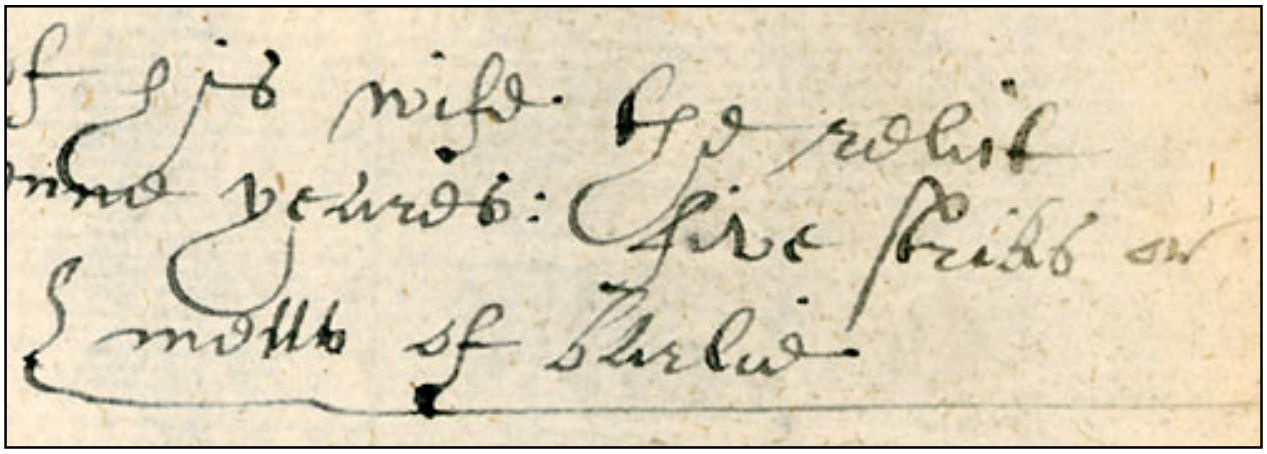
Standard measurements:

2 gallons	1 peck
4 pecks	1 bushel
2 bushels	1 strike or raser
8 bushels	1 quarter
5 quarters (40 bushels)	1 load or wey
2 weys (80 bushels)	1 last

Some commodities, such as coal, were sold as 'heaped' measures. They used the following additional measurements:

3 bushels	1 sack or bag
12 sacks (36 bushels)	1 chaldron

In this example from the Archdeaconry of Nottingham Presentment Bills, dated 1622, a parishioner is presented for failing to provide for the parish clerk 'five striks or metts of barlie'. A 'met' is an archaic or dialect term for a measure. Users should be aware that non-standard terms are often used in original documents.



Detail from Presentment Bill, Sutton-on-Trent, 1622 (AN/PB 326/3/37)

Ale, Beer and Porter measurements (1688-1803)

8½ gallons	1 firkin
2 firkins	1 kilderkin
2 kilderkins	1 barrel
1½ barrels (51 gallons)	1 hogshead
2 barrels (68 gallons)	1 puncheon

2 hogsheads (102 gallons)	1 butt
3 puncheons (204 gallons)	1 tun

Ale, Beer and Porter measurements (after 1803)

4½ gallons	1 pin
2 pins	1 firkin
2 firkins	1 kilderkin
2 kilderkins	1 barrel
1½ barrels (54 gallons)	1 hogshead
2 barrels (72 gallons)	1 puncheon
2 hogsheads (108 gallons)	1 butt
3 puncheons (216 gallons)	1 tun

Engraving showing a boy taking beer from a barrel, from The Child's Arithmetic: A Manual of Instruction for the Nursery and Infant Schools (London: William S. Orr and Co., 1837)

Wine, Spirits, Cider, Vinegar, Oil and Honey measurements

18 gallons	1 rundlet
31½ gallons	1 barrel
42 gallons	1 tierce
2 barrels (63 gallons)	1 hogshead
2 tierces (84 gallons)	1 puncheon
2 hogsheads or 3 tierces (126 gallons)	1 pipe or butt
2 pipes or 3 puncheons (252 gallons)	1 tun

Measurements after 1824:

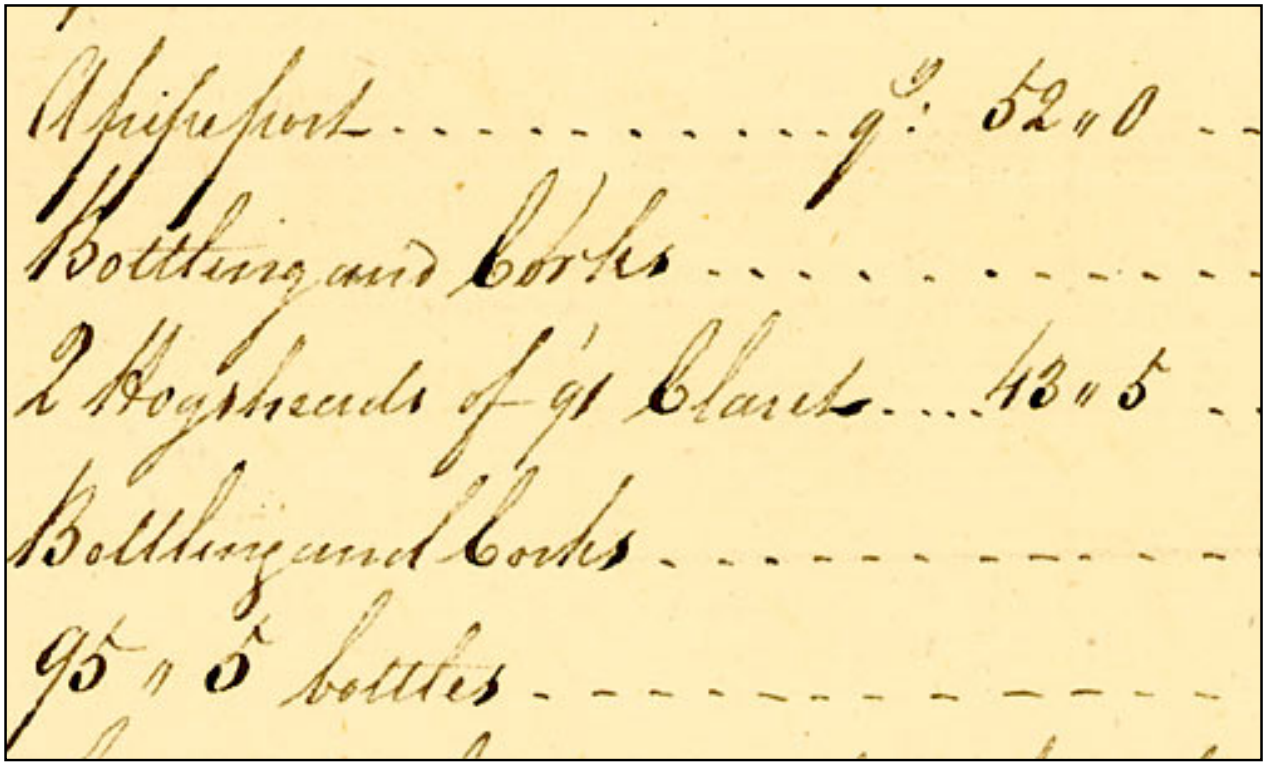
15 Imperial gallons	1 rundlet
26¼ Imperial gallons	1 barrel
35 Imperial gallons	1 tierce
3½ rundlets or 2 barrels (52½ gallons)	1 hogshead
2 tierces (70 gallons)	1 puncheon
2 hogsheads or 3 tierces (105 gallons)	1 pipe or butt
2 pipes (210 gallons)	1 tun

However, note that different measurements were used for **imported wine and spirits** from other parts of the world. Just a few are given below:

1 pipe of Madeira	92 gallons
1 pipe of Sherry	108 gallons
1 pipe of Port	115 gallons

1 hogshead of Hock, Rhine and Moselle	30 gallons
1 hogshead of Claret	46 gallons
1 hogshead of Brandy	57 gallons

This wine merchants' bill from the archive of the Dukes of Newcastle, dated 1794, includes 'A pipe [of] port', and '2 Hogsheads of '91 Claret'.



Detail from wine merchants' bill, 1794 (NL 9)

Next page: Money

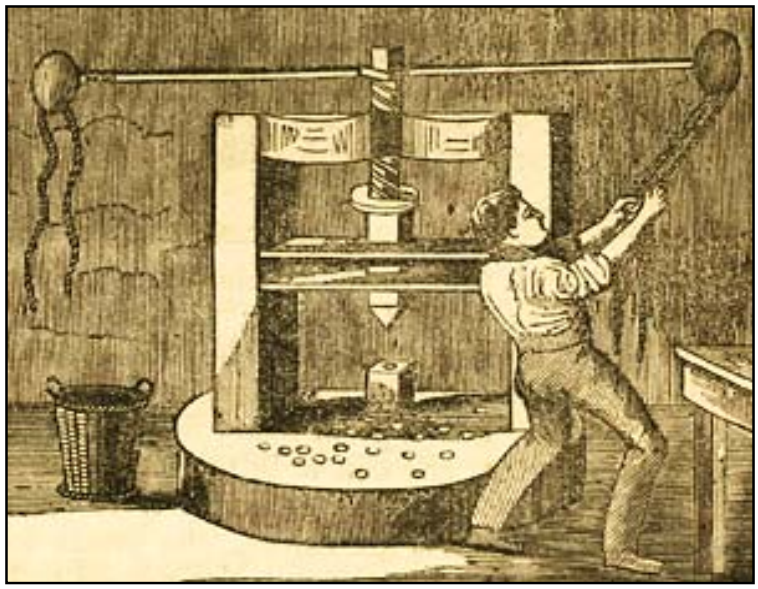
Money

Introduction

Until 1971, British money was divided up into pounds, shillings and pence.

One pound was divided into 20 shillings.
One shilling was divided into 12 pennies.
One penny was divided into two halfpennies, or four farthings.

There were therefore 240 pennies in a pound.



Engraving of a mint, from The Child's Arithmetic: A Manual of Instruction for the Nursery and Infant Schools (London: William S. Orr and Co., 1837)

Common abbreviations

£	The sign for a pound was either the abbreviation 'li', or the £ sign. Both come from the Latin word 'libra', meaning 'pound'. The £ sign developed from a very elaborate capital 'L'.
s	Shillings were usually abbreviated to 's'. The 's' stands for 'sesterius' or 'solidos', coins used by the Romans.
d	Pennies were, confusingly, abbreviated to 'd'. This is because the Latin word for this coin was 'denarius'.
ob	A still smaller Roman coin was an 'obulus'. The abbreviation 'ob' was used for halfpennies.

qua	Farthings were abbreviated to 'qua', short for 'quandrans', or a quarter of a penny. The word 'farthing' is an old English word meaning 'a fourth-thing'.

There were various ways in which monetary amounts were written out.

Amounts in full pounds, shillings and pence could be written in many different ways, and with or without the final 'd':

£1 9s 6d
£1.9.6
£1/9/6d
£1-9-6

Shillings and pence could be written as follows:

9s 6d
9/6 - spoken out loud as 'nine and six'

Shillings on their own could be written as follows. In the second example, the dash represents no pennies:

9s
9/-

Up to the seventeenth century, it was common for monetary amounts to be written out using lower case Roman numerals:

ixs vjd

Coins and units of money

¼ d	Farthing
½ d	Halfpenny, pronounced 'haypny'. The word often appears in print as 'ha'penny'
¾ d	Three farthings
1d	Penny
2d	Two pennies, or 'tuppence'
3d	Three pennies. The coin was sometimes referred to as a 'threepenny bit'. The word was often pronounced 'thrupny', or 'thruppence'
4d	Groat. This coin was in circulation until 1662, and was revived briefly in the mid-nineteenth century
6d	Sixpence, or 'tanner'
1s	Shilling, or 'bob'
2s	Two shillings, or 'florin'
2s 6d	Half a crown
5s	Crown

10s	Ten shillings, or 'half sovereign'
£1	One pound, or 'sovereign', commonly called a 'quid'
£1 1s	One pound and one shilling (21 shillings), or 'guinea'

A 'mark' was worth two-thirds of a pound, or 13s 4d. This was never a physical amount of money represented by a coin, but was a common amount used for accounting purposes.

Decimalisation

Britain changed its currency on 15th February 1971. The decimal system of currency divides one pound (£) into 100 pence (p). The old currency was therefore worth the following decimal amounts:

6d	2½ p
1s	5p
2s	10p
10s	50p
£1	£1

For many years, some of the old pre-decimal coins continued to be used to represent their decimal equivalents. The sixpence piece - now worth 2½ p - was abolished in 1980. The shilling and two-shilling coins - used for 5p and 10p - were brought out of circulation in 1990 and 1992 respectively. For about ten years after decimalisation, the term 'New Pence' was used to distinguish newly-minted coins from the old pennies.

Next page: Glossary

Glossary

acre	Imperial unit of area, containing 4 roods
apothecaries' weight	Imperial system of measurement of weight in which 12 ounces made up a pound
avoirdupois	Imperial system of measurement of weight in which 16 ounces made up a pound
barrel	Imperial unit of volume or capacity used to measure liquid, containing various quantities depending on the type of commodity
bob	Colloquial term for a shilling coin
bovate	Alternative word for oxgang - 1/8 of a hide
bushel	Imperial unit of volume or capacity used to measure dry goods, containing 4 pecks
butt	Imperial unit of volume or capacity used to measure wine, containing 7 rundlets or 2 hogsheads
chain	Imperial unit of distance, containing 22 yards
chaldron	Imperial unit of volume or capacity used to measure dry goods, containing 12 sacks. Also spelt 'chauldron'
crown	Currency measure, worth 5 shillings
decimal	System of measurement based on powers of 10
decimalisation	Process of transferring from old British money (pounds, shillings and pence) to new decimal currency
dram/drachm	The smallest unit in the Avoirdupois system of measurement of weight (16 drams to the ounce), and also a unit in the Apothecaries' weight (8 drams to the ounce)
farthing	Smallest currency measure. 4 farthings made 1 penny
firkin	Imperial unit of volume or capacity used to measure liquid, containing various quantities depending on the type of commodity
florin	Colloquial term for a two shilling coin
fluid drachm	Imperial unit of volume or capacity used to measure liquid, containing 60 minims
fluid ounce	Imperial unit of volume or capacity used to measure liquid, containing 8 fluid drachms
foot	Imperial unit of distance, containing 12 inches

furlong	Imperial unit of distance, containing 10 chains (40 poles)
gallon	Imperial unit of volume or capacity, containing 4 quarts. Various different gallon measurements were replaced in 1824 by the standard Imperial gallon
gill	Imperial unit of volume or capacity used to measure liquid, containing 5 fluid ounces
grain	The smallest unit of Troy weight (24 grains to the pennyweight) and Apothecaries' weight (20 grains to the scruple)
groat	Coin worth 4 pence
guinea	Currency measure, worth 1 pound and 1 shilling
hide	Imprecise unit of area, supposed to be the area which could be ploughed in a year by a team of eight oxen, enough to support a peasant family
hogshead	Imperial unit of volume or capacity used to measure liquid, containing various quantities depending on the type of commodity
hundredweight	Imperial unit of weight, containing 4 quarters.
Imperial	Traditional system of measurement used in Great Britain and its colonies
Imperial gallon	Standard unit of volume or capacity introduced in 1824, containing 4 quarts
inch	Imperial unit of distance (12 inches to the foot)
kilderkin	Imperial unit of volume or capacity used to measure beer. 2 kilderkins made 1 barrel
league	Imperial unit of distance, containing 3 miles
load	Imperial unit of volume or capacity used to measure dry goods, containing four quarters
mark	Currency measure, worth 13 shillings and 4 pence
metric	System of measurement originally developed by the French in the late eighteenth century, based on rational division of weights and measurements into tens, hundreds and thousands
mile	Imperial unit of distance, containing 8 furlongs, and further subdivided into chains, perches, yards, feet and inches
minim	The smallest unit of measurement in Imperial volume or capacity. 60 minims made 1 fluid drachm
ounce	Imperial unit of weight, containing 16 drams (Avoirdupois), 20 pennyweights (Troy), or 8 drams (Apothecaries' weight)
oxgang	Alternative word for bovate - 1/8 of a hide
peck	Imperial unit of volume or capacity used to measure dry goods, containing 2 gallons
pence	Plural terms for penny, meaning the same as 'pennies'
penny	Currency measure, divided into halfpennies and farthings. 12 pennies made 1 shilling

pennyweight	Imperial unit of Troy weight, containing 24 grains
perch	Imperial unit of area (40 perches to 1 rood) Also an Imperial unit of distance, containing 5½ yards (preferred term is pole)
pin	Imperial unit of volume or capacity used to measure beer, containing 4½ gallons
pint	Imperial unit of volume or capacity used to measure liquid or dry goods. In liquid measurements, containing 4 gills
pole	Imperial unit of distance, containing 5½ yards
pound	Imperial unit of weight (lb), containing 16 ounces (Avoirdupois), or 12 ounces (Troy and Apothecaries' weight) Also the standard currency measure (£), divided into shillings and pence
puncheon	Imperial unit of volume or capacity used to measure liquid, containing various quantities depending on the type of commodity
quart	Imperial unit of volume or capacity used to measure liquid or dry goods, containing 2 pints
quarter	Imperial unit of weight, containing 2 stones Also, Imperial unit of volume or capacity used to measure dry goods, containing 8 bushels
rod	Imperial unit of distance, containing 5½ yard (preferred term is pole)
rood	Imperial unit of area, containing 40 perches
rundlet	Imperial unit of volume or capacity used to measure wine, containing 15 gallons
sack	Imperial unit of volume or capacity used to measure dry goods, containing 15 gallons
scruple	Imperial unit of Apothecaries' weight, containing 20 grains
shilling	Currency measure, divided into 12 pence
sovereign	Currency measure, worth 1 pound
stone	Imperial unit of weight, containing 14 pounds.
tanner	Colloquial term for a sixpence coin
tierce	Imperial unit of volume or capacity used to measure wine. 2 tierces made 1 firkin
ton	The biggest unit of measurement in Imperial weight, containing 20 hundredwright.
troy	Imperial system of measurement of weight in which 12 ounces made up a pound
tun	The biggest unit of measurement in Imperial volume or capacity, used to measure liquid. Divided into firkins, puncheons or butts depending on the type of commodity
Winchester Measure	Imperial unit of volume or capacity used to measure dry goods, abolished and replaced in 1824 by the Imperial gallon

yard	Imperial unit of distance, containing 3 feet

Next page: Bibliography

Bibliography

- Margaret E. Bowman, *Romance in arithmetic : a history of our currency, weights and measures and calendar*, 4th ed. (London, 1969)
- Colin Chapman, *How heavy, how much and how long?: weights, money and other measures used by our ancestors* (Lochin, 1995)
- Robin D. Connor, *The Weights and Measures of England* (London, 1987)
- F.G. Skinner, *Weights and measures : their ancient origins and their development in Great Britain up to AD 1855* (London: HMSO, 1967)
- Ronald Edward Zupko, *A dictionary of English weights and measures : from Anglo-Saxon times to the nineteenth century* (Madison, 1968)

Most books on English local history also include glossaries and introductions to historical currency, weights and measures. In addition, old almanacks and volumes such as *Pears Cyclopaedia* from pre-decimal and pre-metric days include tables of weights and measures.

Of course, there are also numerous resources available online which may assist with historical weights, measures and currency, including conversion tools. These should be reasonably accessible using standard search engines and so are not listed here. However, users should exercise a note of caution when assessing the validity of such sites, and ensure that they are both accurate and authentic.