

YARDS, GALLONS, and
GOLDEN SOVEREIGNS.



by

Hope L. Bourne

INTRODUCTION

Hope Lilian Bourne was born in Oxford in 1918. She is famous for seeking a self-sufficient life, moving into an old caravan in the ruins of Ferny Ball on Exmoor in 1970, and living for 24 years by growing her own vegetables, fishing, hunting for rabbits, and drinking from a stream. Getting up at 5am each day, she'd help neighbouring farms with lambing and feeding, write her journal, and go for a ramble with her sketch pad. She wrote a weekly column for the *West Somerset Free Press*, which she picked up every Friday when she went into Withypool to collect mail, bread and, when she could afford it, chocolate. Hope Bourne said that she never borrowed money, nor claimed a penny from the public purse.

Known as the Lady of Exmoor, Hope Bourne wrote five books on the area, and became famous through newspaper features and two television documentaries: *About Britain; Hope Bourne Alone on Exmoor* (1978) and *Hope Bourne – Woman of Exmoor* (1981). Clips of these are available to view on Youtube. In the late 1980s, Hope was persuaded to have a telephone put in for emergencies and, in 1994, was forced by ill health to move into a bungalow.

Hope Bourne died in August 2010, aged 91. In 2014, Hope's lost manuscript *A Village of the Moor* was found in the Exmoor Society's old storeroom, recording her insights into Withypool village life in the late 1960s.

P R E F A C E

In this Year of Grace 1992 Britain enters fully into the European Common Market. In so doing we must inevitably lose much of what has hitherto been traditional and peculiar to ourselves.

Of such things, those destined to go first - indeed have officially already gone - are our ancient weights and measures. These, built-up over a thousand years, serving us well through the centuries, are now to be wholly replaced by an alien metric system.

Yet, despite this, I think our ancient English measurements will never really die, they are too deeply ingrained in our being.

Though we may be forced, even by law, to accept the metric system for general trading, and to teach it in schools, yet in the hearts and minds of country people the old ways remain, and will do so. Metrics may prevail on the supermarket shelves, but go to any village fete, flower show, or other country junketing and there you will find everything in pounds, ounces, yards and inches.

In the village shop I ask for butter, cheese and apples by the pound, and paraffin by the gallon. And get it. In the haberdashers I ask for a yard of cloth or ribbon, and they know what I mean.

So here is just a little book to remind us of those things which are just as much a part of our heritage as our folk-tales and nursery-rhymes.

Long live old England!

H.L.B.

Long ago, when the English ceased from being wild sea pirates and settled down in England to be farmers and traders, they began to work-out measurements to suit English land and country people. Some they already had, some they borrowed, but most they invented as life went along through the years and the centuries.

Now the first thing needful when you are settling down is to be able to measure line and land. You must be able to gauge how wide your new ox-stall must be, the length of your barn, the width of your house, the height of its beams. Then you need to know how far your land extends, what is a fair furrow-length for oxen to plough before they stop for a rightful rest. What distance you may reasonably cover in an hour's or a day's walk, how far it is to the market-place of the nearest township.

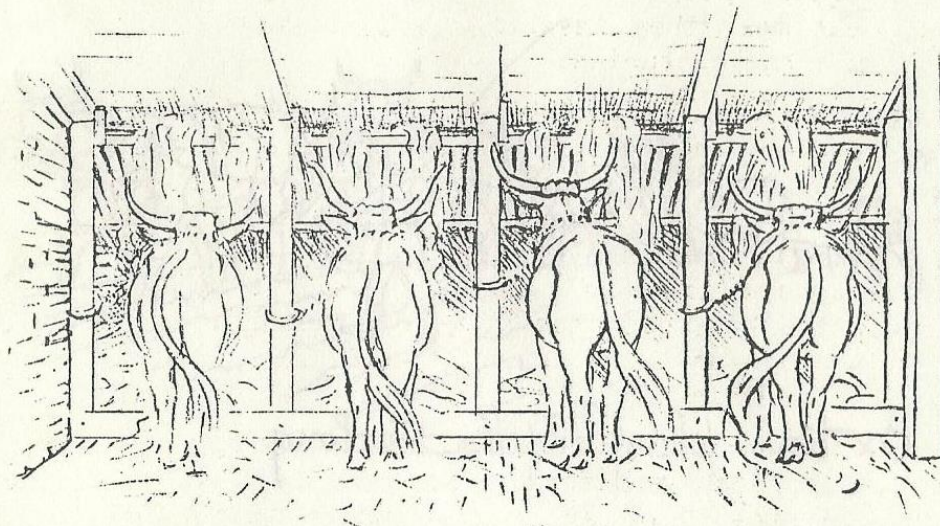
The handiest things to measure with are those literally to hand: your hands and feet. So you start with an inch, which is the breadth of an average man's thumb (hence "the rule of thumb" for any small statutory matter). Four of these go to a hand, which is the height or thickness of a man's clenched fist. Twelve inches or three hands make a foot, which speaks for itself - the length of an average man's foot.

Three feet go to a yard, which is the average man's easy unhurried stride. This is, or was, the standard or unit measurement for most linear things. It is the 'pace' by which one stepped-out a measure of ground.

The next step forward, literally, is the rod, pole or perch. This is a measure of five-and-a-half yards. or 16 feet 6 inches. A useful farmyard measure, the bay of barn or shippon where a span of four oxen stand : the standing required for each ox being reckoned four feet - the extra six inches probably represented the width of the pillar or the partition.

How to find out what the rod should truly be? If there was any argument about this length or width or what-have-you (as between farmer and builder) why, the way to find out was to stand outside the church door at morning service on a particular Sunday - probably the first in the month - and as the congregation come out take the first sixteen men to emerge, and make them stand in line toe-to-heel, and whatever

was the aggregate, then this was the lawful rod, pole or perch for the parish at that particular time. (the extra six inches would be made up by the soles of the boots.)



Oxen in the Shuppon -- the Rod, Pole or Perch -

Well, that's the tale that was told me a long time ago. And if you say, what a haphazard way of doing things, in actual practice it is remarkable how accurate the aggregate of the average, or the average of the aggregate - whichever way you like to put it - can be.

Next came the furlong. Literally the 'furrow-long', the length of the furrow as ploughed by a team of eight oxen. It was made up of 40 rods or 220 yards, which was considered the proper length for oxen to toil with the heavy wooden plough before they stopped for a breather and were turned-around. Assorted land-measurements were made in furlongs, and horse-races were, and still are, run over furlongs.

Finally, there was the mile, its length consisting of eight furlongs or 1760 yards. This, the 'statute mile' has become our standard overall land measure.

Beyond this, for a while, was the league. A league was generally assessed at three miles. It was a distance reckoned to be covered by an average person in an hour's easy walking.

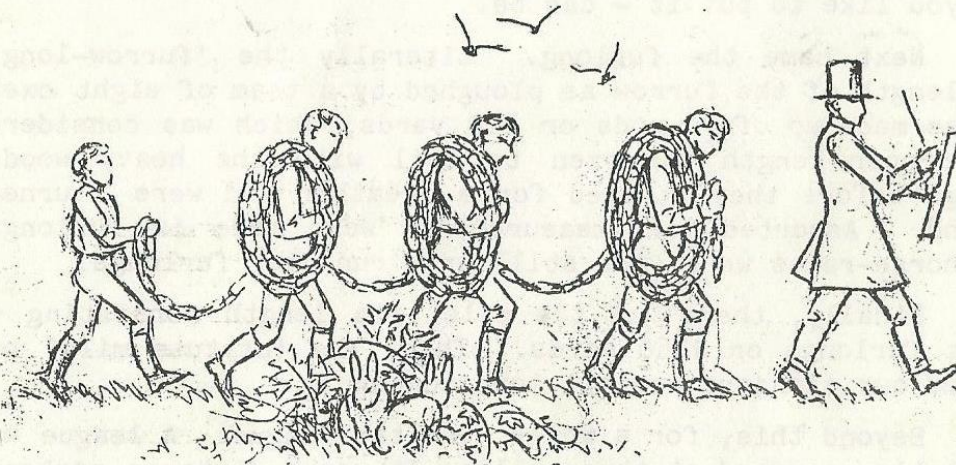
And what was an hour? The twelfth part of a day or night at the equinox - But this belongs to the realm of numbers, see page. 7.



Ox team ploughing the Furlong

At a later date, in a more mathematically-minded age, the measurement of the chain came into the system. This was a surveyor's measure. It began as chains do, with a link, which was a fraction under eight inches. 100 links made one chain. Ten chains equalled one furlong, and 80 chains made a mile.

It must have been heavy work on a hot day lugging these chains about over rough ground!



The Surveyor's Chain

Sailors, evolved their own system of measurement. Their unit was the fathom, a length of six feet or two yards, which was based on the width of a sailor's outstretched arms. It was used for both depth and distance.

10 fathoms went to a cable, and 10 cables or 1000 fathoms made a knot or nautical mile, which was longer by some 240 yards than the statute land mile.

A ship's speed was assessed by its knots-to-the-hour. The more knots a ship was making, the faster she was moving. Thus, "moving at a rate of knots" has passed into our language as a term for anything coming up fast. Which proves we are an island race.

The next step onwards from linear measurement was to fix one's square or area measures. You needed to know the space of your land, this was very important.

So things were worked-out thuswise: nine square feet went to one square yard, and $30\frac{1}{4}$ square yards made one square rod (or pole or perch). This was a handy measure for gardens or any small parcels of land.

40 square rods made one rood. A rood or quarter-acre was generally considered a fair garden-size for a cottager, on which he could grow fruit and vegetables, and keep a pig and poultry, also bees, enough to keep a family in all save bread and milk.

Four roods made one acre, which, through the centuries, has been our basic land-measure. An acre was reckoned to be the amount of land a plough-team - oxen, and later horses - might fairly plough in a day's work.

Another old English measure, now gone out of fashion, was the hide, standardised at 120 acres. This, though, was the midland hide: it varied according to region, being in the hill-country of the west probably little more than 40 acres. Various explanations are offered for the origin and status of the hide, the most probable one being that it represented the amount of arable the old ox-team could plough in an average season. In the high wet western parts, where ploughing could rarely start until the end of the winter (for spring-sown corn) the area of cultivation must of necessity be smaller

than that of regions where ploughing began in the autumn and went on through the winter (for winter wheat). Anyway, "a hide of land" was indeed something - a measure of wealth, a noble grant, a fit gift from a prince - and is quoted in many an ancient document.

The surveyor's square measure, which came later, was ten square chains to the acre (see page 3).

Finally, 640 square acres made up one square mile. Who said anything about hectares?

Now the first requisite of trade, and of household management, is to have a system of recognised weights-and-measures, understood by everybody. So as time went on the farmers, craftsmen, merchants and housewives of old England worked-out the sound principles of the system based on the unit called the pound (written lb.) which has lasted with us to the present day.

This scale of weight was applicable to all general merchandise:

- 14 pounds went to a stone
- 2 stones or 28 pounds made a quarter
- 4 quarters or 8 stones or 112 pounds made a hundredweight (written 'cwt', nobody seems to know why)
- 20 hundredweights made one ton.

Almost everything, other than stuff that went by capacity or number, was measured or was capable of being measured thuswise.

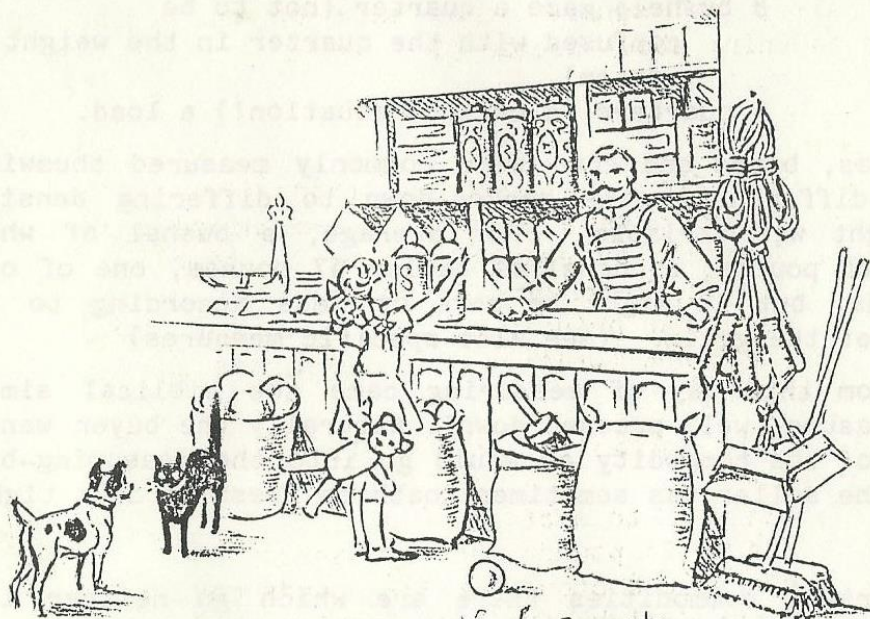
For the convenience of the housewife or others who dealt in small quantities of things, the pound was divided into ounces (written oz.) 16 of these going to a pound.

Various homely commodities tended to be sold at certain weights: butter in half-pound (8 oz.) packs, tea in quarters (4 oz. - not to be confused with the 28-pound quarter!) etc.

If you wanted a pound of cheese, half-a-pound of butter a quarter-of-a-pound of tea, two ounces of sweets, and a hundred-weight of corn for the hens, you wrote your list thus:

1lb. Cheese
 $\frac{1}{2}$ lb. butter
 $\frac{1}{4}$ lb. tea
2oz. sweets
1cwt. hen corn

But a lot of things had their own particular measures, of which more hereafter.



A Pennyworth of Sweets.

The next thing was capacity measure. You couldn't weigh-out liquids - at least not very well - so a system had to be devised for containing and measuring-out of milk, ale, wine, oil, and just water.

It was eventually worked out thus, based on the measure of a pint:

2 pints made 1 quart

4 quarts or 8 pints equalled one gallon - and here capacity met the weight system, for 1 gallon of water equated with 10 pounds weight.

Half-a-gallon was of course 2 quarts or 4 pints.

A gill was a third-of-a-pint, though some folk reckoned it to be a quarter-pint - there might be altercation with milkmen about this now-and-again.

Capacity measure was also useful for certain dry, loose commodities, so one gets:

The peck, which was 2 gallons

4 pecks went to a bushel

8 bushels made a quarter (not to be confused with the quarter in the weight system)

5 quarters (a curious equation!) a load.

Peas, beans and corn were commonly measured thuswise. As the different grains packed-down to differing density, the weight was variable. On average, a bushel of wheat weighed 60 pounds, a bushel of barley 47 pounds, one of oats 40 pounds, but it might be more or less according to the quality of the grain. (see also specific measures)

From this way of measuring came the biblical simile 'good measure, well pressed down'. Naturally the buyer wanted as much of the commodity as would go into the measuring-bin, whilst the seller was sometimes loath to press it down tight.

Certain commodities there are which go neither into weight or capacity very well. For these a number system had to be devised.

So the dozen evolved, this being 12 of anything. Why 12 when 10 seems the logical number, both for finger-counting and for simple multiplication? The answer, more or less, is a mathematical one: while it is easy to multiply 10 it is less easy to divide it. You can only divide it once down the middle to give two 5s, or otherwise to give five 2s - the latter difficult of precision. Now 12 you can divide down the middle to give two 6s or otherwise to give ~~three~~ four 3s or three 4s or six 2s. (Generally speaking, this was a very ancient system, borrowed from antiquity, giving twelve months to the year and twice twelve hours to a day).

So of course eggs were always counted in dozens and half-dozens - or threes or couples - you couldn't have $2\frac{1}{2}$ eggs!

From the half-dozen which was six, came our ever - current saying on occasions where two parties to a quarrel were held to be equally to blame: "six of one and half-a-dozen of the other."

Then twelve dozen, 144 of anything, made a gross. Retailers bought from wholesalers by the gross, and school exercise books also were ordered by the gross.

A 'Baker's dozen' was thirteen, presumably because the laws which governed the weight and measure of bread - the 'staff of life' of the common people in past times - were so severe that bakers threw in an extra rather than risk prosecution.

Another useful and generally-used number was the score, which was 20 of anything. You bought young plants for the garden by the score.

Apart from, or in addition to, general weights and measures for general purposes, there developed measures peculiar to certain things. (Or one might say, certain things were always measured in a particular way.)

As we have seen, eggs were bought and sold by the dozen and garden plants from cabbages to wallflowers by the score.

Flour, in larger quantities than the homely pound, was to be had by the peck, assessed at 14 lb., and the sack, going about 280 lb.

Maincrop potatoes were bought by the cwt. (112 lbs.) or the sack, going up to 168 lb.

Butcher's meat by the butcher's stone of 8 lb.

Ale and liquors generally were reckoned in amounts from firkins to butts:

Firkin ($\frac{1}{4}$ barrel)	9 gallons
Kilderkin ($\frac{1}{2}$ barrel)	18 gals.
Barrel	36 gals.
Hogshead ($1\frac{1}{2}$ barrels)	54 gals.
Puncheon (2 barrels)	72 gals
Butt (3 barrels)	108 gals.

Which is an awful lot of alcoholic beverage. A certain Duke

of Clarence was drowned in a butt of Malmsey. Whether he fell in in a drunken stupor or was up-ended by someone, nobody seems sure.

Cloth was measured by the cloth-yard. This was the same as the ordinary yard, or at least reckoned equal to it, but was measured-out differently. To gauge the length of a bolt of fabric, or the amount you wanted to buy, the assistant took the edge of the material between his or her first finger and thumb and reached at arms length from these digits to the nose.

Of course, like the original foot or yard, this varied a bit according to the size of the person - you would be lucky if your draper had long arms - but I can remember, as a child, seeing the shop-assistant in a local shop measuring summer-dress material in this way!

Another meaning this yard has had in English history: the arrows of the English bowmen, the "whistling death" of Creci and Poitiers, were sometimes called 'clothyards' because this was their length.

The weight of a pig was assessed in scores, a porcine score being 20 pounds. A pig of 30-score was a lot of pork and bacon!

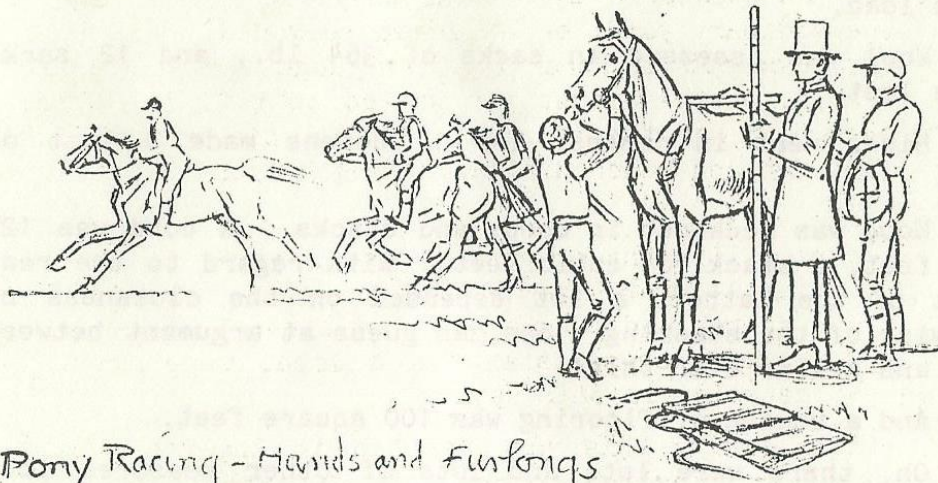
Sheep were weighed in pounds, cattle in hundredweights. People weighed themselves in stones. At 14 lb. to a stone, 12 stone made a good big chap!

Horses were measured in hands: a hand was, and is, 4 inches. A horse standing at 5 feet and two inches would be recorded at 15.2 hh.

(The place of measurement was the point of the withers. Herein was scope for jiggery-pokery in the days of pony-racing: in order to get a pony under a certain height you starved the beast somewhat, so that the withers sunk down between the shoulder-blades, then took off the shoes and pared the hooves so as to bring the feet close to the ground. By these means height could be reduced by at least an inch, perhaps by nearly half-a-hand. Once measured, shod, and fed-up, the pony regained its natural height!)

Horse-races were measured in miles and furlongs. Five furlongs was a bit over a half-a-mile - five-eighths of a mile

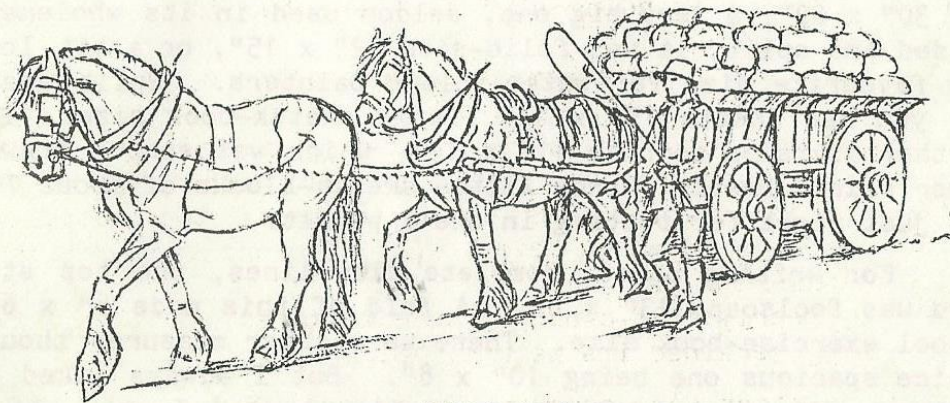
to be precise. A mile and two furlongs was a mile-and-a-quarter.



Pony Racing - Harbids and Furlongs

Hounds were counted in couples, pheasants and other game by the brace, which was two. In hunting terms three foxes were a leash. Three lambs made a trip.

Corn went by the bushel (see preceeding page 7) with wheat more or less standardised at 60 lb., eight bushels making a quarter at 480 lb.



The Miller's Waggon.

Hay and straw went in trusses or bales. A truss of new hay was reckoned at 60 lb., old hay at 56 lb., and straw at 36 lb., 36 trusses of new hay was reckoned a ton, and this made a load.

Wool was assessed in sacks of 364 lb., and 12 sacks made a last.

Hides went in dozens, and 12 dozens made a last of hides.

Wood was reckoned in cords and stacks. A cord was 128 cubic feet, a stack 108 cubic feet. With regard to the real amount of the latter, a lot depended on the closeness or otherwise of the stacking - one can guess at argument between buyer and seller over this!

And a square of flooring was 100 square feet.

Oh, there were lots and lots of other measures too. Minute apothecaries' measures for medicines etc., large ones for fish, coal, cotton, tar, hops etc., and almost everything under the sun, and special ones for special wines and liquors. It was a mystique of the trades. But at least it made life interesting!

One set of minor measures has featured greatly in my life. Ever since I began, as a child, to write, draw, and paint, the book-and-paper sizes have been of much interest and sometimes of importance to me.

For drawing, you started with the imperial sheet. This was 30" x 22", a very big one, seldom used in its wholeness. Folded and split, it was folio-size 22" x 15", or a bit less, the favourite size for water-colour painters. Split again, and you had sheets 15" x 11", large sketch-book size. Then further division down to 11" x 7½", which was school drawing paper size. Lastly, handy little sketch-blocks of about 7" x 5", just right for putting in one's pocket.

For writing paper, complete with lines, the top standard was foolscap, 13" x 8". A fold of this made 8" x 6½", school exercise-book size. There were other measures though, a nice spacious one being 10" x 8". But I always liked the foolscap, its scope seemed inspirational, and I soon got to

gauge how many words, on average, went to the sheet, and what size book-page or newspaper column this would make. (Now I am all-at-sea with the new sizes!).

When one bought paper, outside of blocks and books, one bought a quire, which was 24 sheets, or a ream, which was 20 quires or 480 sheets. Incidentally, the quality of artist's paper was assessed by its weight per ream - the heavier the weight, the better the quality - this was always specified.

Printed books came in a variety of sizes, assessed at the number of folds per standard sheet of paper. Thus: Folio (F0) was a sheet folded into two leaves or four pages. Quarto (4T0) folded into four leaves. Octavo (8V0) folded into eight leaves, etc. As the printer's standard sheets varied, so the book-sizes varied too - as for instance, Imperial folio (a large and very rare size) would be approximately 22" x 15", whereas Crown folio would be 15" x 10". But one soon got to know and visualise the sizes.

One thing, or things, I still treasure, are my old school rulers, that gave me the sizes. Of shining honey-coloured boxwood, one in good condition, others chipped and chewed, they have been my friends, my work-mates, through many years. They measure one foot, each of the four edges marked off in 12 inches and divisions of those inches. All my measuring is done with them still, and I would be lost without them.

When things in general got sufficiently settled for trade to be carried on beyond the state of barter, the folk of old England needed (like all others of their kind before them) to have an established currency.

After passing phases of such coins as groats, silver pennies, and golden crowns, the national currency settled into a lasting system of pounds, shillings, and pence, and variants therefrom.

This system was expressed by the symbols £.s.d. The first probably from the Latin libra to which the pound, both weight and sterling, was likened, the 's' just for shillings, and the 'd' for denarius, a small Roman coin. (Our forefathers liked to think themselves classically educated).

Looking back at the remembered currency of my childhood days, and working downwards from the top, which was the pound sterling, here are money matters as I knew and understood them:

Despite the introduction of paper money, sovereigns were still around. Country people hoarded sovereigns - when they could afford to hoard anything - paper notes being regarded as flimsy, easily damaged, and banks were viewed with suspicion. The golden sovereign, the pride of England, emblem of wealth, was a beautiful thing, not large, but of true shining gold. On the side reverse to the monarch's head, St George trampled the dragon under the hooves of his plunging horse. I loved to be allowed to look at one.

There was, I think, a smaller half-sovereign, but I never saw one of these - the ten-shilling printed note had already ousted this.

Over and above the pound sterling was the guinea, which was one-pound-and-one shilling i.e. 21 shillings. The guinea was the gentleman's currency. One bought horses and works of art, paid subscriptions, laid wagers and offered prizes, in guineas.

Next below the pound in metal coinage was the half crown (or half-a-crown as it was generally spoken). It was a noble coin, bright silver, splendid with heraldic design. Worth two-shillings-and-sixpence (a considerable sum in those days) it was something very special to be given to a child on a birthday or at Christmas.

There was, or had been, an even finer full crown-piece, and I do remember being shown one once: a magnificent big silver coin, having, like the sovereign, St George and the Dragon upon its reverse. But it had gone out of circulation before my time.

Next came the two-shilling piece, or florin, a little less in size than the half-crown, but still quite important, showy with heraldry. Then the shilling itself, an honest coin, the unit of its kind. (Twenty went to the pound.) Then the silver sixpence, half the value of the shilling, a neat little coin, often a child's portion of pocket-money, handy for many things. (The shilling and the sixpence were known respectively as a 'bob' and a 'tanner').

Last and least, the tiny silver threepenny bit. Worth but three pence, yet like the younger son of the fairy tales, it had a special place in life. It was a 'good luck' coin to be put into Christmas puddings and special cakes, the lucky reward of the finder (if you didn't break your teeth on it first). In some households it was the perquisite of the children, to be put in their piggy-banks. In others, less well-off, threepenny-bits were collected from the house-keeping change, and kept in a tin against some special treat or purpose.

You 'crossed a gipsy's palm with silver' to have your fortune told, and for good luck, or you put it in the church collection plate for a blessing.

Yes, the little 'threp'ny bit' was a coin of character and significance!

Below the dignity of silver came the vulgar bronze or copper coins, pennies and their derivatives, collectively called 'coppers'.

The penny, 12 of which went to the shilling, was the coin best known to children, since it was the one with which they were most likely to be rewarded for good behaviour. It was a nice big substantial coin, something you could feel comfortably in your hand or look at with satisfaction - on it Britannia sat in majesty, ruling the waves with trident aloft and buckler by her side, whilst a ship passed in the background - and it would buy a nice lot of sweets or even a small toy.

The half-penny or 'ha'penny', though smaller, was not to be despised: it would buy sweets or you could save it until you had another and then you had a whole penny to spend.

Least of all coins, right at the bottom of the currency hierarchy, was the farthing. A very small thing, in both size and purchasing power. Even so, it had an importance: when you borrowed salt from a neighbour against next shopping-day, you had to give a farthing for it - salt had to be bought, not taken as a gift, else ill-luck fell upon both parties. Like-wise, if any sort of knife was received as a present, such a small coin had to be given to the giver, otherwise the blade would 'sever a friendship'.

What could one buy with a farthing? Well, you could still buy sweets. Not a great many, or of a rich kind, but goodies nevertheless, hand-wrapped in the village shop in a little twisted cone of paper.

How did one learn all this? One didn't. One just lived with it and grew up with it. It was part of being English.

How did foreigners cope with it? They didn't. They were not expected to. If they couldn't understand it, they just had to take the word of an Englishman.

Salute to the things that have been!

-o-o-o-o-ooo0ooo-o-o-o-

Tailpiece

Regarding the derivations here given, others more learned than I may or may not agree with them, but they are as I heard them in my youth, when these systems were in use, and the elders of a community remembered things now forgotten.

As to the writing down of numbers, it was generally accepted that these were written until they and circumstances more-or-less necessitated their being put into figures. (Figures were regarded as a sort of arithmetic shorthand.) You would write one, two, or three, but a hundred-and-twenty-three had to be 123.

However, it was largely arbitrary, and I have written the foregoing just as it seemed to come to me to do so.

H.L.B.

