

Measuring out on a limb

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Did you ever find yourself needing to measure the length of something, only to realize that you had neither ruler nor tape measure within arm's reach? Did you feel helpless?

Studying architectural history, I discovered that in the very distant past it was usual to find yourself without any of those measuring aids we now take for granted. Why? Because things like rulers and tape measures simply didn't exist.

So how did people measure things? The answer is they used what was at hand – literally. They referred to their body parts, such as hands, palms, feet, fingers, thumbs, arms. In English we've retained a few of the old names for such measurements. We still use foot/feet, and the height of horses is still expressed in hands, although everything has now become standardized, with a foot at 12 inches and a hand at four inches.

A large unit of measure was the pace, from the Latin for step, stride – “passus,” which is itself the past participle of “pandere,” meaning to stretch the leg. In his 18th century dictionary, Samuel Johnson defined pace as “A measure of five feet.”

The ell, from the Old English “eln,” signifying length of the arm, ranged greatly in length from one place to another, depending on how it was measured - either from the shoulder to the wrist, or to the fingertips.

Another unit of measure varying in length was the cubit, a word based on the Latin “cubitum,” meaning elbow. The cubit was usually from 18 to 22 inches, the length from elbow to fingertip.

The thumb, roughly one inch in width, has long been used by tailors and carpenters as a unit of measurement when making an approximate calculation, which gave rise to the saying “rule of thumb.” It was a practice common in other countries as well. The Latin word for thumb, “pollex,” developed into the Italian “pollice” and the French “pouce,” both of which also mean inch in their respective languages.

The root of the English word inch is the Latin “uncia,” which signified the twelfth part of anything, in other words a small measure. An ancient Roman could also have used the Latin word “digitus” to signify inch. “Digitus” literally means finger or toe, and it’s the source of our word digit. In English, digit can refer to both finger or toe and any of the numerals from one to nine – so-called because these were originally counted on the fingers.

In earlier centuries, with nearly every country and city having its own version of measurements, concordances and explanations were needed. To this end, a piece of metal marked with the units used locally (and there would be different ones for architecture, arable land, fabric) was usually exhibited in a public place. If a foreign craftsman came to town, he’d have to first convert all his measurements using that scale.

So, should you ever find yourself lacking the crucial instruments, stop worrying. Just remember you’ve got any number of appendages to your body that will serve the purpose. Thumbs up!

