

NOMENCLATURE NITPICKING—THE HARNESS

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This essay was originally written for Kate Smith's e-newsletter, In Praise of the Early Handloom.

Nomenclature, the names we assign to things, matters. The words we use to talk about textile tools reveal our underlying understanding of how technique and technology have developed alongside one another for centuries. The handweaving revivals of the 20th century brought with them a new nomenclature, one with a much more limited vocabulary, which, *in my opinion*,* reveals a shift in understanding about weaving itself, perhaps one that is, I hate to say it, just as limited. If we want to study textile tools of the past on their own terms (pun intended), then it's critical for us to use the same textile tool terminology of the past. Perhaps, someday, we can build on the legacy of Gene Valk and compile an Oxford English Dictionary style compilation of historical weaving terms and their etymology. I should be clear that I'm not interested in demanding allegiance to a particular nomenclature, as there has never been 100% consensus, past or present. Rather, by shedding (the puns keep coming) light on the ways weavers have talked about their tools historically, I hope we can gain a deeper insight into the ways in which they thought about them.

For this newsletter I'm going to get preachy about the assemblage of wood and cord that's directly responsible for shedding the warp. If you learned to weave in America, chances are good you were taught to call this a set of harnesses. You may have been taught to call it a set of shafts. Neither of these ways of identifying them are quite the ways they were known before 1900. I'll quote you some scripture and let you judge for yourself. All bolds are my own.

"... Therefore, whoever intends to weave Cloth to be milled should provide themselves with a Loom, and proper **Slays and Harness** for that purpose..."

John Wily, *A Treatise on the Propagation of Sheep, etc.*, Williamsburg, 1765.

"... I consider the different spaces between any two of the lines, which run across the book, as representing the different **leaves of harness**... The Figures to the right hand side of every page represent the manner of your **drawing in the Web through the harness**... and the little crosses, ... denote the different **leaves of harness**."

"... You will perceive from the Draft, that it is to be wove in **four leave of harness**..."

John Hargrove, *The Weavers Draft Book and Clothiers Assistant*, Baltimore, 1792.

"To weave plain cloth, only two **leaves of heddles** are *really* necessary... For this reason, **four leaves** are now universally used... The heddles are made of stout level twine... stretched on two flat **shafts of wood**."

"... **A back harness** and other apparatus, consisting of five **harness leaves**, and five **plain leaves**, for working a fanciful five leaf tweel."

John Duncan, *Practical and Descriptive Essays on the Art of Weaving*, Glasgow, 1808.

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“Harness. The twine for **the harness of a loom** should be made of good and well chosen Cotton or Linen yarn, and very evenly doubled and twisted. The **wings or harness** [could “or” be a typo for “of”?] should without fail be dressed or starched well...”

“Harness. It is necessary that the harness should be starched or dressed before weaving each piece, which is done in the following manner. Fix a strong cord with a weight to it no [sic] the bottom cords, that lead from **the harness** downwards, so that **one harness will be single** as it hangs in the loom...” [For the Bronsons, “harness” can apparently refer to the whole gang or one singly, but note that even they don’t write “harnesses” plural.]

“Drawing through the Harness. Most persons who have been accustomed to use both **the 2 and 4 shaft harness** for plain cloth, prefer the latter;... For a person who has never seen this kind of harness in operation...”

“On making **a harness**, &c. After the sticks are ready and marked into beers, as a guide to knit on the twine for a harness, you will make the holes for the cords to go through those **shafts**... The cords connected with the **two front wings or harness**, [another “or” typo?] will now be attached to the front short lamb, [sic]... and **the back wings** with the other.”

“**Wings of the harness**, are a number of **shafts**, on which are worked a kind of loop with twine; through these the warp passes... We therefore refer the reader to the engraving, which shews the treadles, lams, **wings** &c.”

J. & R. Bronson, *The Domestic Manufacturer’s Assistant*, Utica 1817.

“After the web was warped there was **a harness** to be made;... She taught her how to wind it upon the beam, and how to draw it into **the harness**,...”

Grandmother, *Bessie; Or, Reminiscences of a Daughter of a New England Clergyman*, New Haven, 1861.

“**The harness, which consists of the various heddle sticks** on which the heddles have been placed,... **The harness consists of two sets of heddles**, one directly back of the other,... The harness, which is made up of the heddles and heddle sticks, ...”

Edward F. Worst, *Foot-Power Loom Weaving*, Milwaukee, 1918.

Now, how did “harness” come to refer to an individual frame or pair of wooden shafts and the heddles stretched between them? My current theory rests on the knowledge that Mary Meigs Atwater got ahold of a copy of the Bronsons’ *Domestic Manufacturer’s Assistant* and their description of dressing the harness led her astray. All of the works I consulted that pre-date the publication of Atwater’s book use the term “harness” singly, I wasn’t able to find an instance of “harnesses” plural. Not even the Bronsons with their dressing directions, or Duncan with his “back harness” use “harnesses” plural. The first instance of “harnesses” I found in my limited library dates to 1928—

“The shedding mechanism of the conventional modern hand-loom consists of **two or more “harnesses”** or “heddle-frames” carrying “heddles,”... **A two-harness loom** will make only two sheds and is limited to the plain weave. **The four-harness counterbalanced loom**,... was the type most popular among the old time “domestic manufacturers”...” [Coincidence that that is the title of the Bronsons’ book? I think not.]

Mary Meigs Atwater, *The Shuttle-Craft Book of American Hand-Weaving*, New York, 1928.

If any readers know of an earlier instance, or have your own theory, let me know!

It should be noted that “leaf” is still alive and well in certain branches of the weaving trade. Among handloom linen damask weavers in Northern Ireland (admittedly a small group), the damask structure continues to be described by leaves—

“Joseph Gardiner weaving the **eight leaf satin** double damask royal proof napkin,...

Deborah White and Ian Ferguson, *Would you draw-in a web for Jack?: The Story of Ireland's Last Hand-Loom Linen Damask Manufactory*, Accessed 27 July 2020, lecalelooms.com.

Why should we care? With the limited vocabulary of the 20th century, we've lost the ability to refer to the individual components, the whole apparatus, and a way of working that acknowledges a broader scope of weaving than that practiced by many modern American handweavers. By recognizing a **wing** or **leaf** of harness as distinct from the pairs of wooden **shafts** that make them, we regain an ability to refer to those components by their individual names. “Shaft stick” is rather redundant, when you get right down to it. By talking about **the harness** as the entire collection of leaves, we reconnect it to the word's general definition, a piece of equipment that controls and makes use of something, as a harness controls and unites a horse and cart. This understanding of the term allows us to consider the mechanisms of complex weaving that might utilize both a back harness and a plain, pressure, or ground harness. In early America, weavers had multiple sets of harness for different weave structures and warp densities, a very different way of working than our modern way of endlessly rearranging heddles on their shafts to create a harness with the requisite number of heddles on each leaf. Will the modern American handweaving community have any clue what you're talking about if you throw around words like leaf or wing? Probably not. But I will, and so would John Wily, John Duncan, the Bronsons, and Bessie. It may have only taken one person's misunderstanding to completely redefine our lingo. How many people would it take to restore it?