Barns of Western Pennsylvania

The first lesson learned while closely investigating barn building methods is that there are as many different types of barns as there are farmers — each specifies his or her own needs and builds a barn to suit. The second lesson is that these buildings are neither simply nor cheaply built. In fact, most were constructed under the supervision of a master carpenter or builder. Some are "signed," like a group of 20th-century barns in Somerset County built by Josiah Werner and identified by his unique barn star.

There are certainly a wide variety of barns to see in Western Pennsylvania. In fact, the Heinz Architectural Center at the Carnegie Museum of Art recently filled their galleries with photographs, models, literature, and tools relating to about three dozen of the 25,000+ barns in the 33 counties of Western Pennsylvania — and still they had to leave out many beautiful barns.

The most common style in this region is a gable-roofed, unpainted bank barn with a storm shed, which is a variant on the forebay, a porch-like overhang on the side of barns with basement entries.

Instead of having an open forebay, a storm shed barn's lower level is completely enclosed. On the interior, nearly one half of the lower level is an open space designed to allow animals free movement during the long winter months. This space also offers end-wall entries rather than a series of doors in the long wall.

The region's earliest barns were built of logs notched and stacked to make pens or "cribs." The two cribs were separated by a space and then a single roof covered all three areas to create a central threshing floor. Because it was simple to construct, this type of barn was built as late as the mid-19th century. A smattering of log barns remain in the region, but they are hard to distinguish from a distance since they are nearly universally hidden behind either wood or metal siding. Sometimes a central dip in the roof gives them away, but generally you need to know where a log barn is in order to catch a glimpse of one.

We also have many stone barns, not as many as eastern Pennsylvania, but still a good representation. One in Fayette County dating from 1794 incorporates several Germanic building techniques, which include, for instance, an elongated roof slope over the shed portion next to the banked entry and a cantilevered forebay on the opposite side to shelter the entrances for animals on the lower level.
Most 19th-century barns were built using heavy timbers (i.e. logs hewn into a square shape). These timbers were joined together by matching carved tenons (tongues) with mortises (pockets) and drilling holes for large wooden pegs to join the two. This type of joining is a medieval building technology that survived because it was durable enough to withstand the force of thousands of pounds from heavily laden hay wagons, a winter's worth of stored hay, and heavy animals nudging and jostling against the barn's frame.

About 1900, as nails became more affordable, it was cost effective to build a barn using balloon frame technology (i.e. lumber sawn to particular dimensions and nailed into a frame) rather than using the more cumbersome and labor-intensive timber frame construction. Of course, some barns employ both methods at once: an older barn is dismantled to make room for a new barn and its heavy timbers re-used in combination with sawn lumber, as seen in this decorated barn from Somerset County. Generally, barns built after 1900 no longer use the timber frame, unless they are constructed by members of the Plain Sects, like the Amish, who still use this method today when building from scratch.

More elaborately designed barns appeal to those who go off to make their fortunes and return to towns of their birth to share a symbol of their wealth with the home folks. A stellar example was built in 1899 for William Woolverton in Alexandria, Huntingdon County, Pennsylvania, who became president of New York Bell Telephone. He hired a local carpenter to design an enormous barn with pseudo-Palladian windowed cupolas and unusual windows that direct light into the basement. It's just one of the state's many intriguing barns.

Lu Donnelly is one of the authors of Buildings of Pennsylvania: Pittsburgh and Western Pennsylvania, a forthcoming book in the 58-volume series on American architecture sponsored by the Society of Architectural Historians titled Buildings of the United States. She recently organized the exhibition Barns of Western Pennsylvania: Vernacular to Spectacular for the Heinz Architectural Center at Carnegie Museum of Art.