





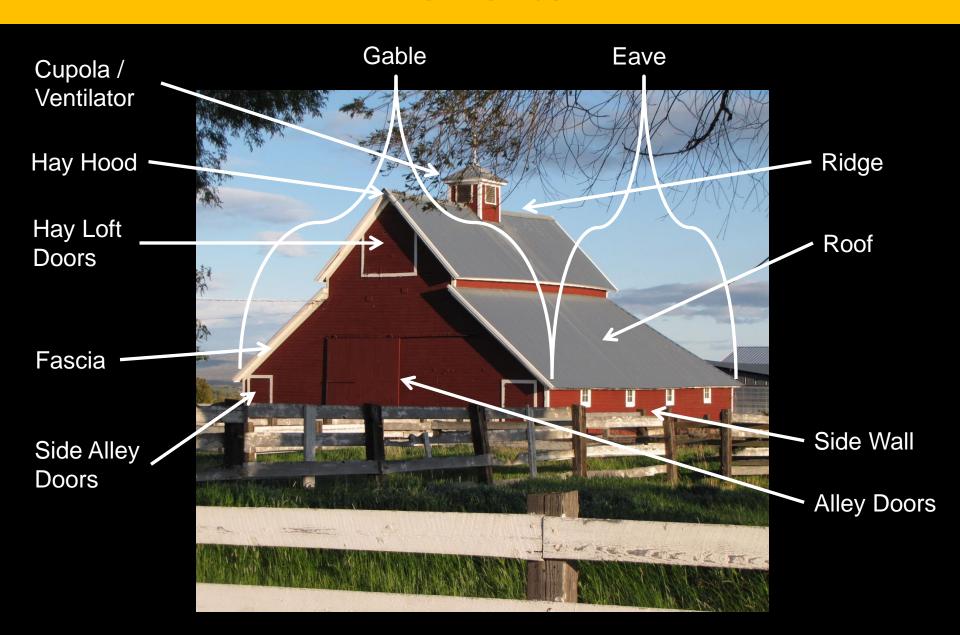
Michael Houser, Washington State Architectural Historian





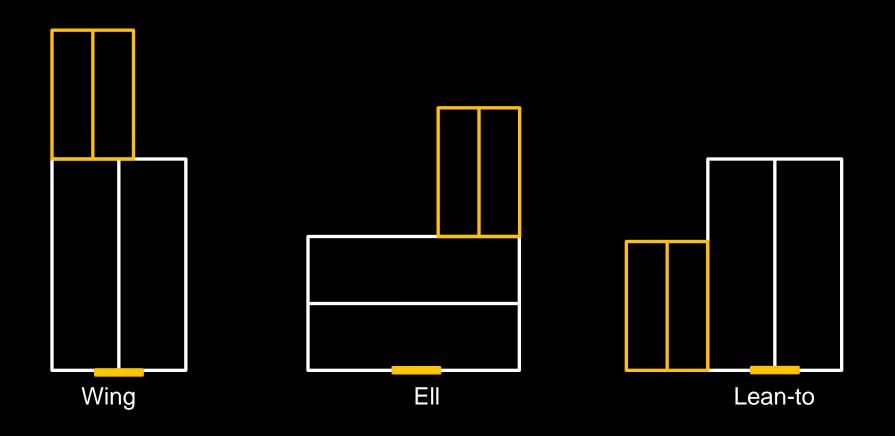
June - 2019

Barn Elements



Barn Elements

Wing vs. Ell vs. Lean-to

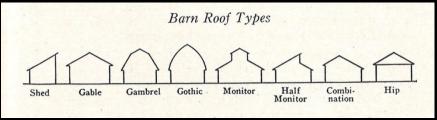


Barn View in Plan

Barn

Forms and Types







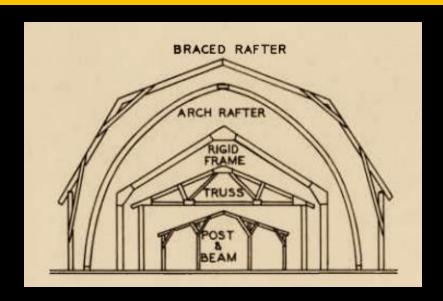


Barn classification can be based on:

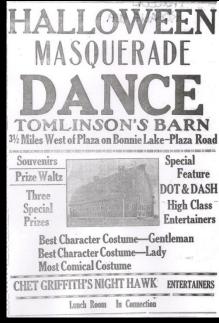
- Use/Purpose,
- Plan and shape,
- Framing system,
- Roof form

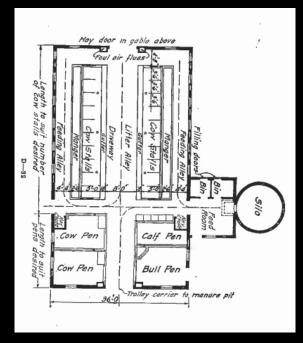


DAHP method









Gable (sometimes referred to as an English / Yankee barn)



Shed, OR



Champoeg State Park, OR



Boyd, OR



Hillsboro, OR



Kitsap County, WA

Gable (sometimes referred to as an English barn)



Adams County, WA



Adams, OR



Peirce County, WA



Lincoln County, WA

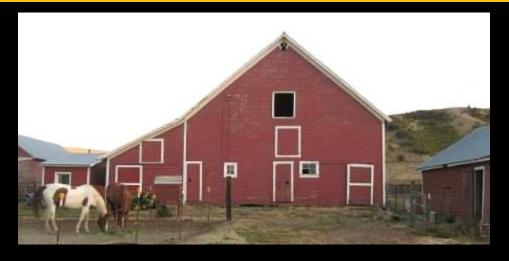


Skagit County, WA



Dayville, OR

Salt Box (integrated lean-to)



Spokane County, WA





Brownsville, OR



Pierce County, WA

Wallowa Valley, OR

Salt Box (integrated lean-to)



Benton County, OR



Philomath, OR



Finley National Wildlife Refuge, Benton County, OR



Waitsburg, WA



Poulsbo, WA

Dutch Barn (roof projecting down to 1st floor)





Stevens County, WA

Dufur, OR



Benton County, OR



Snohomish County, WA



LaPine, OR

Dutch Barn (roof projecting down to 1st floor)





Colfax, WA

Labanon, OR



Skagit County, WA



Victor Point, OR

Broken Gable / Gable with High Lean-tos



Klamath Falls, OR



Walla Walla, WA



Mount Angel, OR



San Juan County, WA



Hayward, OR

Broken Gable / Gable with High Lean-tos



Diamond, OR



Deschutes County, OR



Baker, OR



Walla Walla County, WA

Barn - Forms & Types Gable-on-Hip



Drake Crossing, OR



Coupeville, WA



Snohomish, WA



Burnt Wood, OR

Barn - Forms & Types Gable-on-Hip





Weston, OR

Walla Walla County, WA



Dufur, OR



Molalla, OR



San Juan County, WA

Barn - Forms & Types English Gambrel



Thurston County, WA



Donald, OR



Ellensburg, WA



Lynden, WA

Enterprise, OR

Barn - Forms & Types English Gambrel



Tangent, OR



Near Crater Lake, OR



Columbia County, WA



Lincoln County, WA

Dutch Gambrel (note flare at eave line)



Fairfield, WA



Elgin, OR



Grays Harbor, WA



Willamette Valley, OR



Salem, OR

Scappose, OR

Dutch Gambrel (note flare at eave line)



Woodburn, OR



Pendleton, OR



Pend Oreille County, WA



Troutdale, OR



Island County, WA

Gambrel w/Lean - To



Pierce County, WA



Elgin, OR



Mount Vernon, WA



Yakima County, WA

Deer Park, WA

Barn - Forms & Types Gambrel w/Lean - To



Eugene, OR



Snohomish County, WA



Scholls, OR



Sheridan, OR



Coupeville, WA



Moxee, WA



Condon, OR



Vancouver, WA

Gothic (pointed arch roof truss)





Lacey, WA

Keizer, OR



Willamette Valley, OR





Wilbur, WA

Vancouver, WA

Gothic (pointed arch roof truss)



Stayton, OR



Uniontown, WA



Colfax, WA



Weston, OR

Bow / Rainbow Truss

(note completely arched trusses)

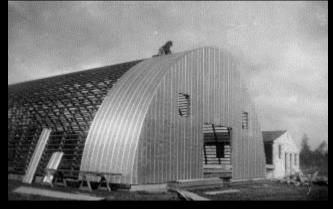






Pullman, WA

Ridgefield, WA



Satsop, WA



Sedro Wooley, WA



Western Barn/ Monitor Barn / Basilican



Wasco, OR

Joseph, OR



Yakima County, WA



Skagit County, WA

Western Barn/ Monitor Barn / Basilican



Stanwood, WA



Joseph, OR



Linn County, OR



Thurston County, WA

Conical / Round / Centric Barns



Klickitat County, WA



Medical Lake, WA









St. Johns, WA

Centric / Round / Conical Barns



Lakeview, OR



Grandview, WA



Hillsboro, OR



Blachly, OR



Pullman, WA



Lookingglass, OR

HOMEGUARD SUPER QUALITY BARN PAINT

This brilliant red, high gloss, top grade paint will protect your property for years. It is economical because it weers so long. Barn paint must provide maximum protection at minimum cost. Made from the finest ingredients available . . . assures great covering power and extreme durability. Each of its fine, balanced characteristics prove this to be, "a barn paint of real quality,"



GAMBLE STORES



WESTERN STORES MINNEAPOLIS LOS ANGELES







LIFE IS COLORFUL DOWN ON THE FARM

Red, for the barn and sheds, stands out country. Natural shingle roof and White trim. Garage, Colonial Yellow. Green house with White trim. White barn has Silver Gray shingles and Dark Green trim. Garage and fence, White.

Blue trim, a Venetian Red roof, for an attractive color scheme. French Gray sheds have Venetian Red roafs. Fence is White. Colors blend together nicely!

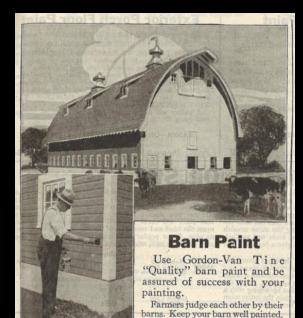
Barn **Paint**







Barn Paint



Everyone sees it and it's the one best evidence of thrift and "getting on."

Our "Quality" brand barn paint is good and we know it. We don't sell anything but good paint. It is equally good for shingles or metal roofs, fences, bridges, grain elevators and silos. It will lengthen the life of shingles and metal roofing. It is a wood preservative and will add years to the life of your building.

servative and will add years to the life of your building.

You may use this paint with perfect confidence, knowing that we will stand back of every can or barrel. Only the best ingredients are used. It is ground to an unusual fineness and thoroughly mixed and remixed by the most up-to-

date machinery.

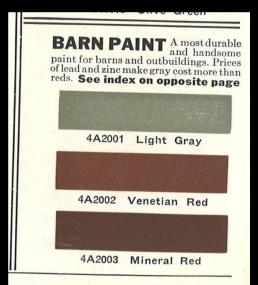
One gallon of Quality barn paint can be depended upon to cover about 250 square feet of surface, two full coats. Measure for it by the "square foot" method. You will never regret having given it a trial. Colors (See Page 65).

4A2001—Light Gray. 4A2002—Venetian Red. 4A2003—Mineral Red.

PRICES PER GALLON

25 and 50 Reds \$1.33 | 5 Gallon | Reds \$1.42 | 1 Gallon | Reds \$1.55 |
Gallon Barrels | Gray | 1.60 | Kits | Gray | 1.70 | Cans | Gray | 1.80 |

Gordon-Van Tine Co. Catalogue – c.1924















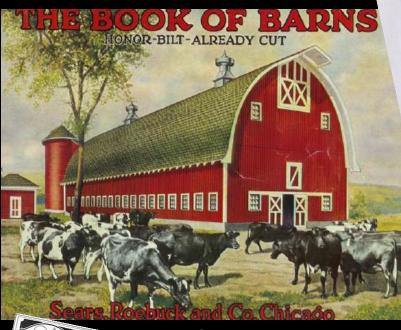
Barn Plans

- Farmer
- Itinerant Builder
- Architect
- Plan Service
- Extension Office
- Lumber Yard
- Factory Pre /Ready-Cut





Barn Plans Ready Cut



A Practical Farm Barn, Costing \$1160

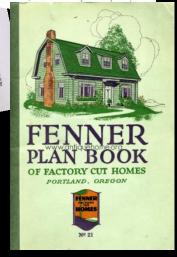
Practical Farm Barn

Sears & Roebuck - 1919

Fenner Manufacturing Co., Portland, OR - 1921



SPECIFICATIONS The driveway goes clear through the barn, in the center. To the left of this driveway are stalls and accommodations for live stock, while the space Couler girders and sills, 4x2. Smela, 5x4 and 4x4. Trat flater joints under stalls, 2x2. Last Joints, Trie, 18" O. C. Stradius, 254, 16" O. C. Stradius, 254, 24" O. C. Stradius, 254, 24" O. C. Shrathing for root, Root, Rettn * A * red e strates. PASSAGE STALL of loors, stalls txit plank, and loft WAGONS STALL 03 SYALLO



Plans for this Barn, \$100 Gordon Van Tine- 1915

Fenner Manufacturing Company of THE WEST

Fenner Barn No. 422

The driveway goes clear through the barn, in the center. To the left of the driveway goes clear through the barn, in the center.

It is our policy to show in this catalog only those barns which are of a standard and standard during that those were recognized as the loaders.

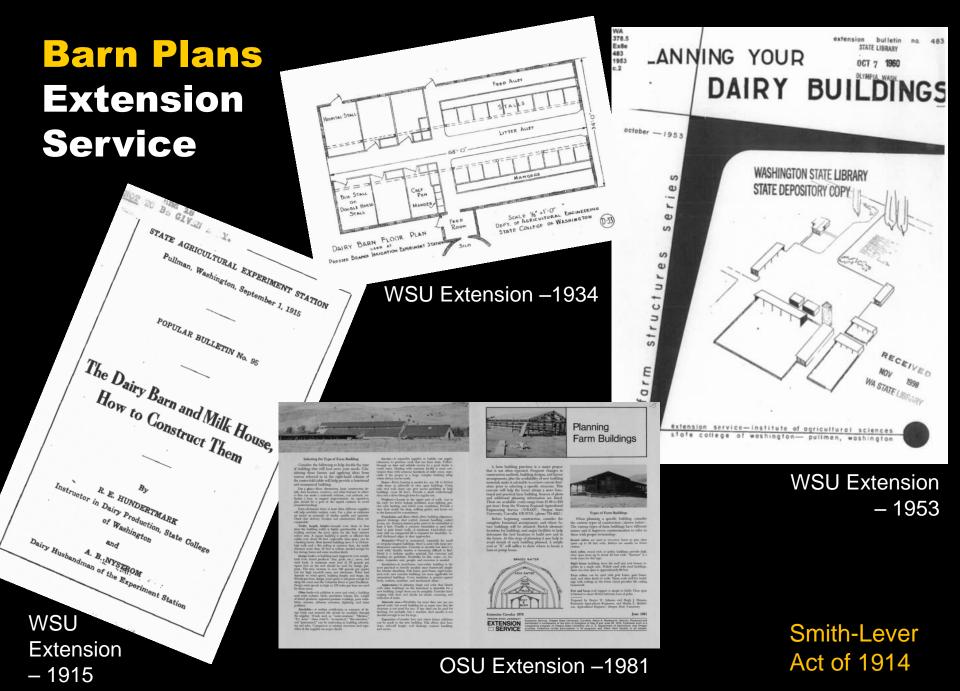
accepted and standard design that they are recognized as the leaders of whore Should the interior expansionent need changing to meet your re-

course, we do not furnish.

accepted and standard design that they are recognized as the teaders of where. Should the interior arrangement need changing to meet your recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the teaders of the standard design that they are recognized as the standard design that they are recogn

where. Should the interior arrangement need changing to meet your rements, we can change it, not only in this, but in any of our barns. Or, with a barn of any special design, it will now many to the property of the control of the c ments, we can change it, not only in this, but in any of our barns. Or, wish a barn of any special design, it will pay you to get our prices, it to your own station, all cut to fit and ready to put together easily and

this driveway are stalls and accommodations for live stock, while the space to the right may be used for storing wagons and implements, or may be used for storing wagons and implements, a sile, which is the right may be used for the home in the right may be used. to the right may be used for storing wagons and implements, or may be use for grain and feed. The barn in the picture is equipped with a silo, which,



Barn Plans Lumber Yard / Plan Service

Weyerhaeuser -1953

"Materially Yours"

WALLA WALLA

TUM-A-LUM LUMBER CO.

YARDS IN WASHINGTON AND OREGON



Radford's Practical Barns Plans – 1907



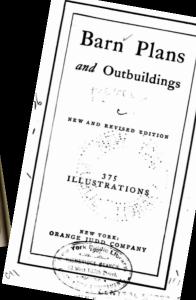
Professionally Planned Farm Buildings

WITH COMPLETE BLUEPRINTS AND MATERIAL LISTS

Suilders who are active in farm con-traction report that they are receiving valuable assistance from the Weyer-seases 4-Square Farm Building Service. It enables them to erect profussionally isnaned farm buildings that give grater stisfaction to farmers, while the blas-rints and accurate material lists make or easier, faster construction.

The 204 designs in the Weyerhaeuser 4-Square Farm Building Service meet the exacting requirements for buildings of maximum use value, nominal cost and enduring service. They meet the needs of modern farming ... which is under the proposition of the proposition of the pro-

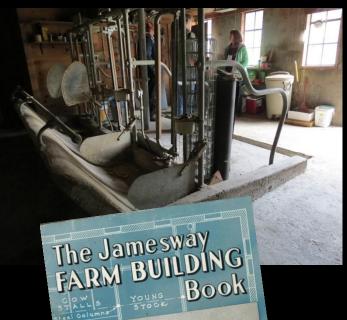
Weyerhaeuser Sales Company



1881



Jamesway Co.













Barn Roofing

- Wood Shake / Shingle
- Standing Seam
- Corrugated Metal
- Asphalt



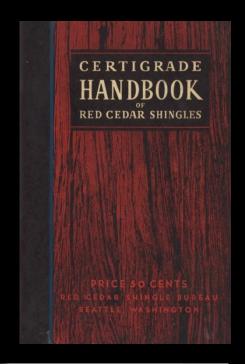




Roofing – Wood Shingle / Shake





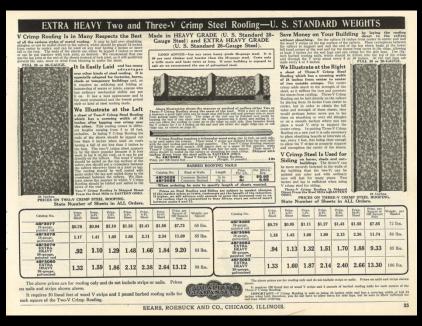








Roofing – Standing Seam

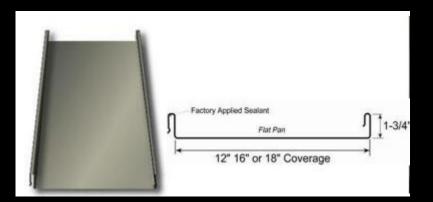




Sears &
Roebuck
Roofing
Catalogue 1939

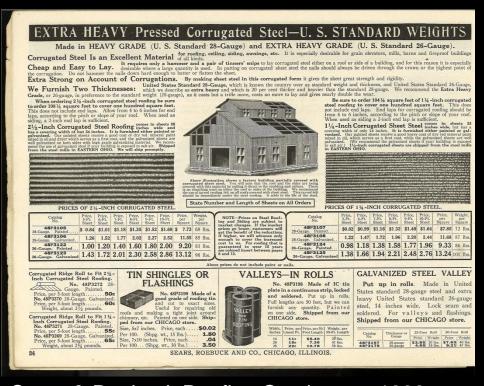


Sears & Roebuck Roofing Catalogue - 1908

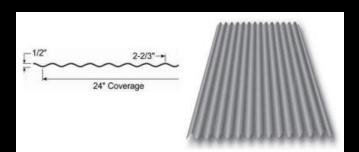




Roofing – Corrugated Metal



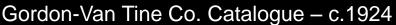
Sears & Roebuck Roofing Catalogue - 1908





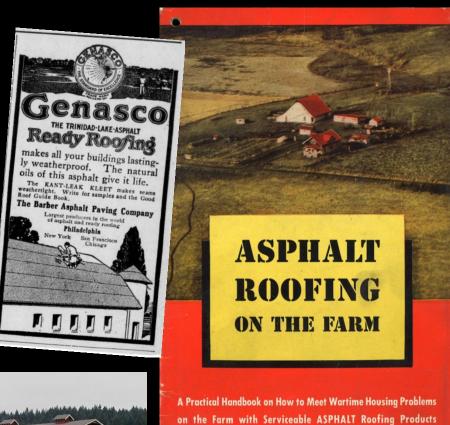
Roofing - Asphalt











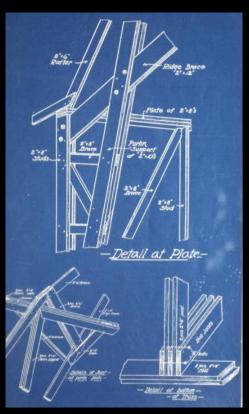
Asphalt Roofing on the Farm– c.1950

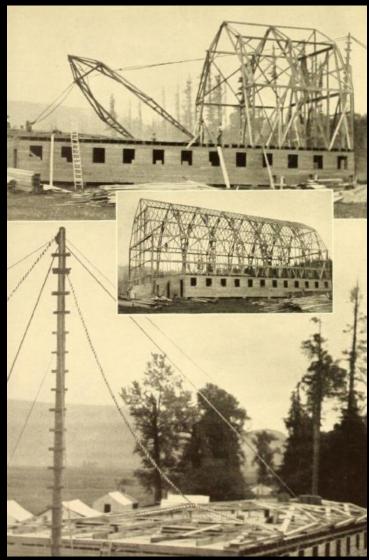
Framing / Truss System

- Log
- Heavy Timber Frame
- Pole Construction
- Plank Truss Frame
 - Braced Truss
 - lowa Truss
 - Shawver Truss
- Concrete
- Clay Tile / Brick

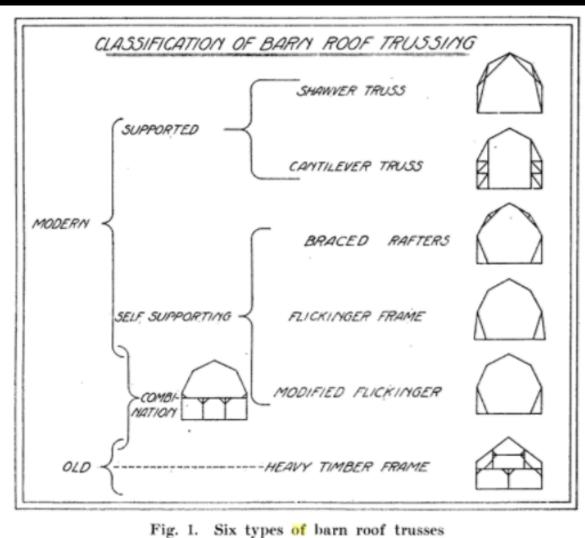






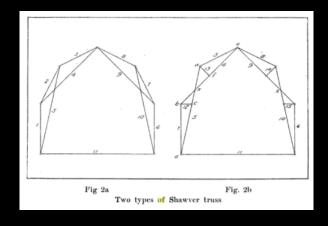


Framing / Truss System





American Society of Agricultural Engineers

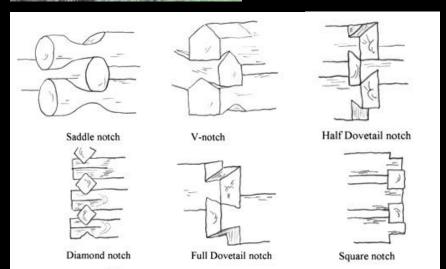


Barn Log Framing





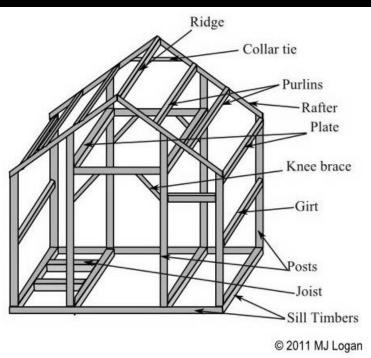






Heavy Timber - Framing

Timber Framing Diagram





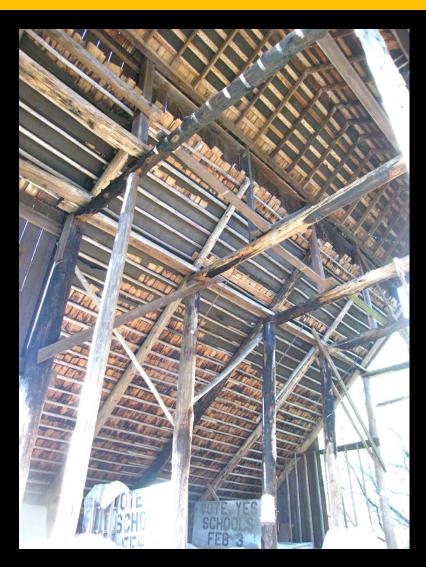








Pole Construction - Framing



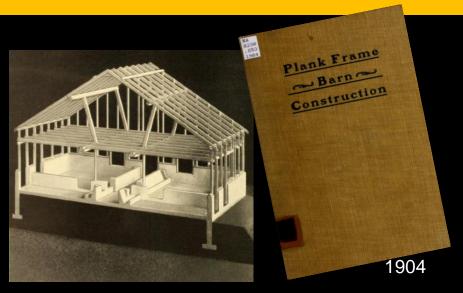








Plank Framing - Gable Framing





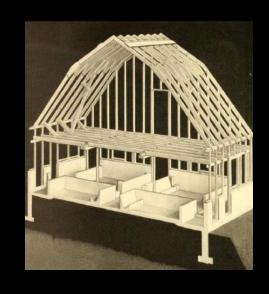




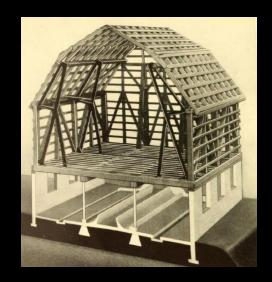
Plank Framing – Gambrel Framing





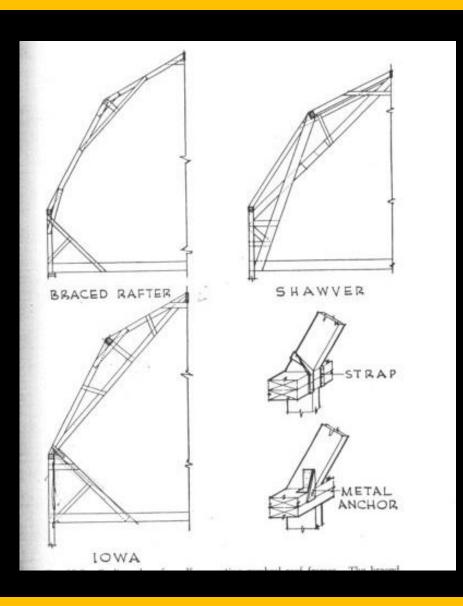








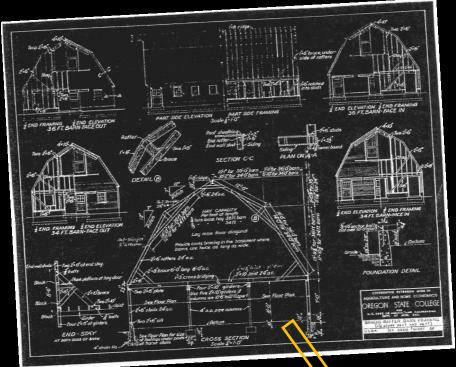
Plank Framing - Gambrel Framing





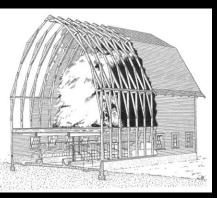


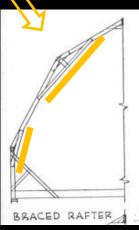
Braced Truss - Gambrel Framing





OSU Extension – Braced Truss





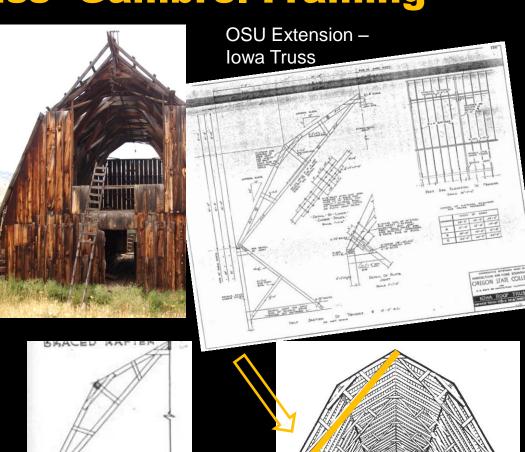




Iowa / Clyde Truss - Gambrel Framing

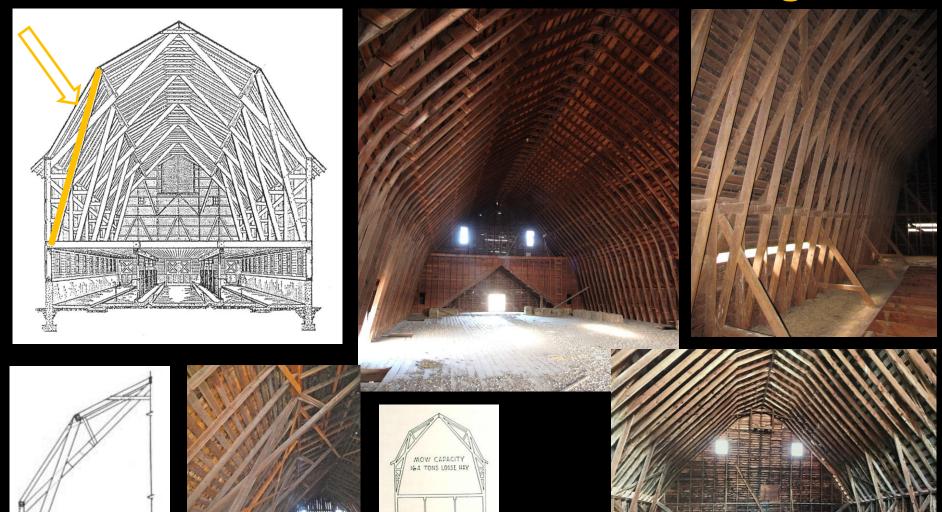
IOWA





Truss developed around 1920

Shawver Truss - Gambrel Framing



Truss developed late 19th Century

SHAWVER

??? Truss - Gambrel Framing

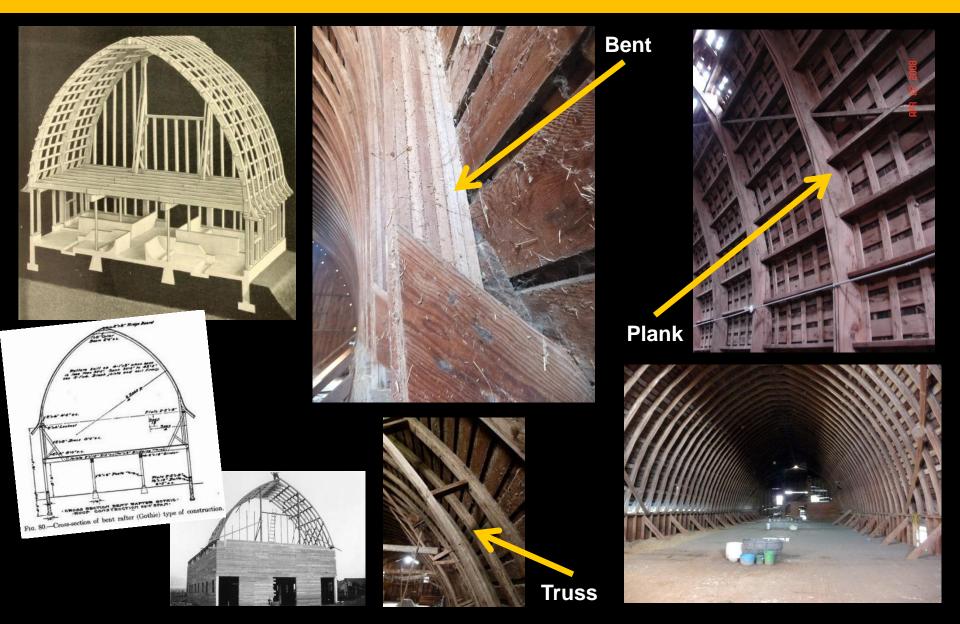
Other truss systems



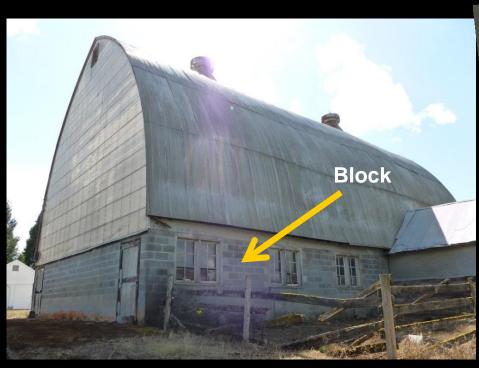


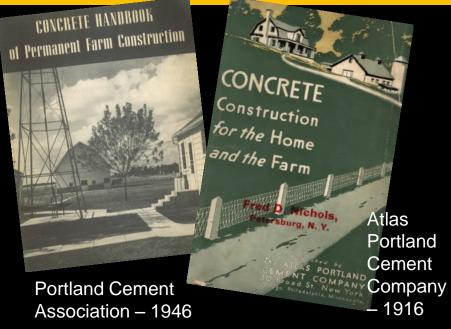


Plank Framing - Gothic Arch



- Concrete: Poured & Block



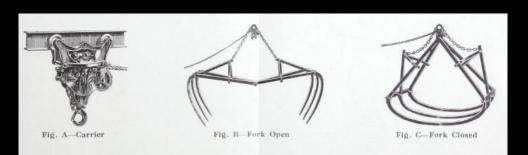






Barn - Details

Hay Hoods



Hay Fork













Barn - Details Hay Hoods



Garfield County, WA



Benton County, OR



Linn County, OR



Klickitat County, WA



Graham, WA





Barn - Details

Cupolas & Ventilation



A ventilating system must be planned individually for the building into which it is to go.

Barn Ventilation By L. KLIMA,

and not much was known about its real food and lifegiving value. It soon being a study of stock raising live stock and mankind. that these animals would be

I N THE days of straw sheds the warm room has increased when stock was not prop- the product, for example, the erly housed, very little atten- flow of milk from the dairy tion was paid to pure air, cow; but this warm, tight building has also brought about a condition that breeds disease; and the disease is came apparent to those mak- proving to be a menace to

more productive when housed It has been proved that pure in warm buildings, and this air is two-thirds of a cow's is what has brought about the ration; in other words, for modern barn. It is true that every pound of feed and water

combined that is consumed it requires the oxygen from two pounds of pure air to properly assimilate this feed. It is true that no farm stock buildings are air tight; but if the stock can get only onehalf the required amount of pure air, it would have the same effect as if they were given only a part of the feed and water they naturally require to sustain life and make them productive.

Much has been written on the subject of ventilation for farm



Whitman Co. - The Smith Place – 1935



Pierce Co. - c1923

Barn - Details Cupolas & Ventilators



Snohomish Co. - Grimm-Jensen Farm – 1932



Spokane Co. -Hyslop Farm – 1926



Adams Co. - Krause Barn – 1901



Pend Oreille Co. -LaPorte Barn – 1901

Barn - Details **Equipment**



Cook Family Farm – 1927



Grimm-Jensen Farm – 1932



Shady Nook Farm – 1920



Schindler – 1909



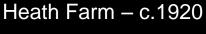
Smith Place - 1935

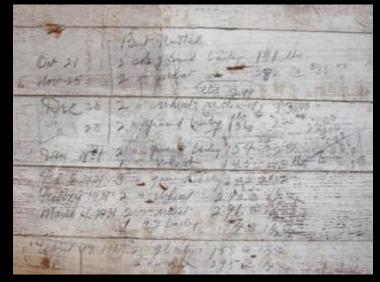


Barn - Details Decoration



Bolick Farm – 1895





Ebby Road Farm – 1923



Brown Farm, Olympia- c. 1905

Barn - Details **Decoration**





Barn, Oakland, OR

Cochran-Rice Farm, Cottage Grove



Polson Farm, Waterville, WA – c. 1915



Gribble Barn, Canby, OR

Associated Farm Buildings

- Bunk Houses
- Fruit Dryers
- Granaries
- Hop Dryers
- Machine Shed
- Milk Houses
- Poultry Houses
- Root Cellars
- Silos
- Smoke Houses
- Water Towers









Associated

Farm Buildings





Farmhouse



Outhouse



Homestead Cabin



Granary



Root Cellar





Wooden Octagonal Silo Asotin Co – c.1895



Vertical Wood Stave Silo Clark Co. – c.1900



King Silo Klickitat Co. – 1920



Brick Silo Spokane Co. – 1919



Concrete Stave Silo Pierce Co. – c.1920



Glazed Tile Silo Clark Co. - 1920



Pierce Co. – c.1935



Poured Concrete Silo Grays Harbor Co. – c.1935



Harvestore Silos Adams County - c. 1948

The Washington State

Department of Archaeology & Historic Preservation



Michael Houser, WA State Architectural Historian 360.586.3076 or michael.houser@dahp.wa.gov

