PROPERTY TYPE ANALYSIS

FARMHOUSE

Few persons believe that they have no right to build until professional help can be afforded; yet such a position would be well taken. Houses stand not for a month nor for a year, but for a generation; by then the thrift of a community is judged, by then the ideals and taste of a community are formed. He who deliberately builds an ugly house condemns himself as a poor citizen; while he who builds a beautiful house proves himself a good citizen, for his personal effort contributes to the public welfare.

Helen Brinkerd Young, 1914

I. Description

In analyzing farmhouse designs that were popular during the pre-1930 period in Region 5, it is apparent that no one style of architecture was dominant because no true American type had evolved. However, several farmhouse types were prevalent in Region 5 including:

A. Log Cabin Farmhouses

(1) Single-Pen Cabins

Single-pen log cabins were one room units (usually about 12′ X 14′) consisting of one story, an end chimney, and gable roof. Logs were prepared for walls by squaring off the inside and outside facing edges and purposely notching the corners to leave ample space between each log which was filled with caulking of mud, stones, and wood chips.

(2) Double-Pen Cabins

A second room was added to the single-pen version. It retained the one-story height, gable roof, and end chimney; but was larger in dimensions (usually 12′ X 28′)

(3) Saddle-Bag Cabins

The saddle-bag cabin featured the addition of a second room to the chimney end of a single-pen cabin. The central chimney with one room on either side resembled a saddle bag over a horse, hence the name saddle-bag. It retained the gable roof and one story height.

(4) Dogtrot (also known as "two-pens-and-a-passage," "hallway house," and "breezeway house.")

The main feature of this type of log cabin was the open, roofed passageway placed between two main rooms. It had one or two end chimneys, porches varied, and retained a gable roof and one story height. Dimensions were usually about 12' X 36'. Originally built of log, it may have also been covered with board-and-batten or clapboard, or a combination of either of those sidings.

B. I-House

The basic plan of the I-House was one room deep, two full stories high, and two-three rooms wide. It always possessed sideward facing gables. Chimneys varied from none to matching end wall versions. Finishing materials also varied, but the most common in Oklahoma was clapboard.

C. Colonial

Colonial style farmhouses were usually broad, with a hall in the center and rooms on both sides, the parlor and living room on one side, dining room and kitchen on the other, with the bed chambers arranged symmetrically on both sides of the second floor hall. Some of the distinguishing characteristics of the exterior of the Colonial farmhouse are tall, stately columns, small porches, roofs either gambrel or high-gabled, narrow eaves, and symmetrically placed windows.

D. Dutch

Dutch farmhouses were usually quite sedate and symmetrical. They are placed with a central entrance on a broad side to the front. Broad porches support large, simple columns. In these houses, the living room is quite large and is often used as a dining room. Bed chambers are almost always on the second floor.

E. Mission

The Mission Style features included large, plain wall surfaces, usually of stucco, occasional high, severe towers, and close grouping of windows. To brighten the dull surface of the cement walls, red roofing tile and bright color in window sash and frames are used.

F. California Bungalow

The California bungalow consisted of low construction, broad, overhanging eaves, and comparatively low roofs. Bungalow farmhouses may be one, one and one-half, or even two story construction; even though a true bungalow is of but one story.

G. Chicago, Natural, or American

The Chicago, Natural, or American Style farmhouse had traces of the influence of several styles that have preceded it. The farmhouses built in this style have a peculiar quiet dignity and an appearance of solidity. Low-pitched roofs, wide eaves, and high windows combine to make a distinct impression of attractive simplicity which harmonized well with the country landscape.

H. Additional Description

Several sources indicate the interior of the farmhouse in the pre-1930 period should be a two-room structure including a kitchen, dining room, living room, a minimum of four bedrooms, office, wash room, bathroom, man's room, several closets, and a veranda. The kitchen floor dimensions should be no less than 150 square feet. Good lighting and good ventilation are two essentials for the kitchen. Doors should be well placed and as few in number as possible because they occupy wall space, and wall space is valuable for cupboard and shelving. The dining room should be large enough to accommodate a good-sized table. Since an ordinary table is 4 1/2' wide, and the width taken up by persons seated at the table will increase the space needed to a least 7', it is recommended that 11' be the minimum dimension for a dining room. Living rooms should be large enough to accommodate the entire family and several guests. A fireplace is almost essential. Built-in bookcases and window seats add to the comfortable appearance of the room. The room should be no less than 300 square feet and should serve as the center of the social life of the family.

There should be a minimum of four bedrooms, and sometimes that number is insufficient when farm operations require more than the usual quota of men. One bedroom may be placed on the first floor, though in most designs all are placed in the upper floor.

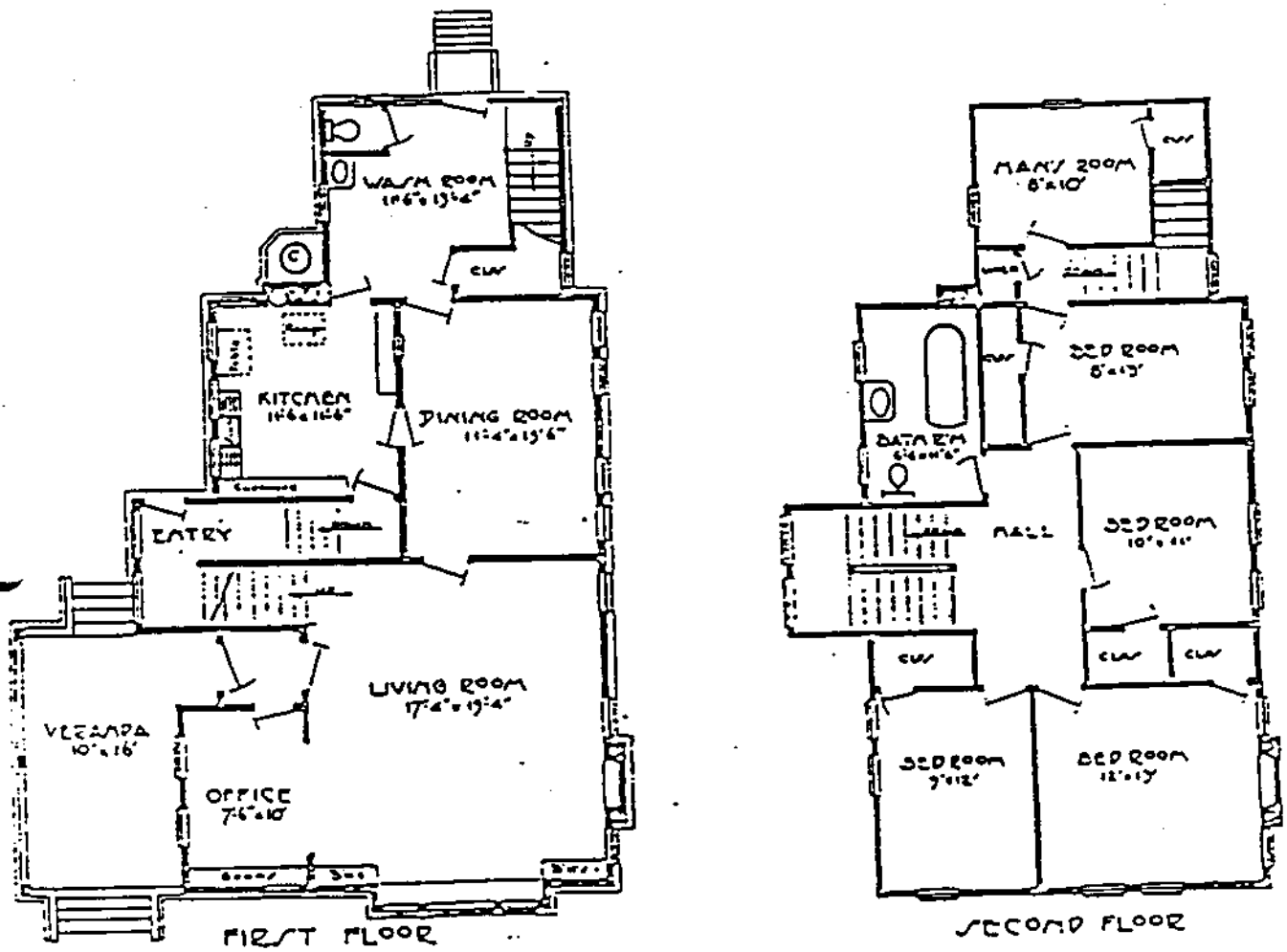
A wash room to the rear of the first floor is a necessity for farmhouses because a place is needed to wash and change clothes before entering the dining room for a meal. Furnishings should include a

lavatory, an ample supply of clothes racks, and a strong, simple bench seat. The wash room may also serve as a laundry room and, when wood is used for fuel, as a wood storage room (see Figures 4 and 5).

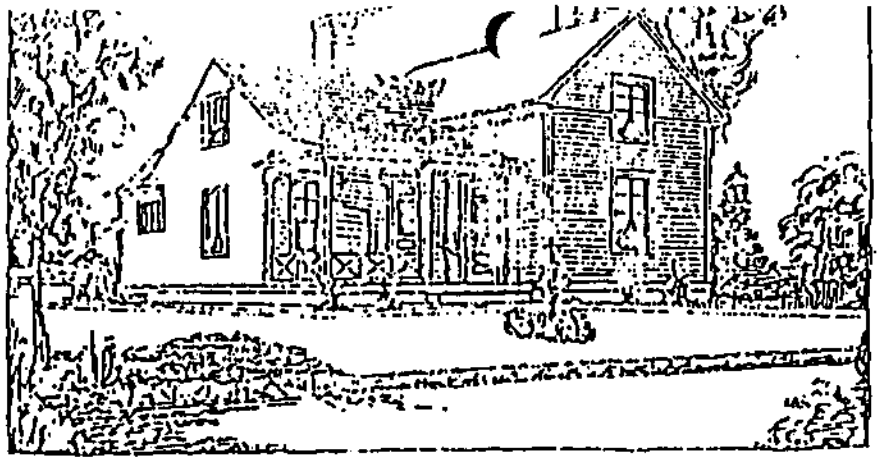
According to U.S.D.A. bulletins of the early 20th century, the farmhouse is the most important building on the farmstead because it is the farmer's residence and office. Three essentials should be combined in every farm house: comfort, convenience, and economy. In locating the farm house, consideration should be given to soil type and air flow. A dry, well-drained soil is absolutely essential. A site too closely shut in by timber will lose what it may gain in shade by the absence of free circulation of air by cutting off breezes during the sultry days of summer and the absence of sunlight in winter. Distance from the main road is also an important consideration. If the farm house is too far from the main road the almost inevitable loneliness and isolation of farm life is intensified. On the other hand, if too near the road all privacy is lost, the dust becomes an annoyance, and there is an undesirable appearance of being crowded for room.

The U.S.D.A. bulletins suggest two plans for farm houses: $600 house with $500 addition and the $1,000 house. Both plans are of the balloon frame type consisting of sills, studding, plates, joists, and rafters. The first plan provides a main building with a living room 15′ x 15′, a back room 9′6" by 10′6" with a commodious closet and a staircase from the first floor. The second floor has two rooms, respectively 15′ x 15′ and 9′6" x 10′6". The plan provides for a further addition for enlargement of the house when financial conditions permit. This addition will be 16′ x 28′, providing on the first floor a living room and kitchen and on the second floor a bedchamber. The kitchen will be 11′ x 11′6" with a pantry and stairway to cellar. The walls of the main building are 14′ high and those of the addition 12′. The house should also have a porch 8′ x 16′, large enough to prove not only an ornament, but a great convenience during warmer portions of the year (see Figures 6, 7, and 8).

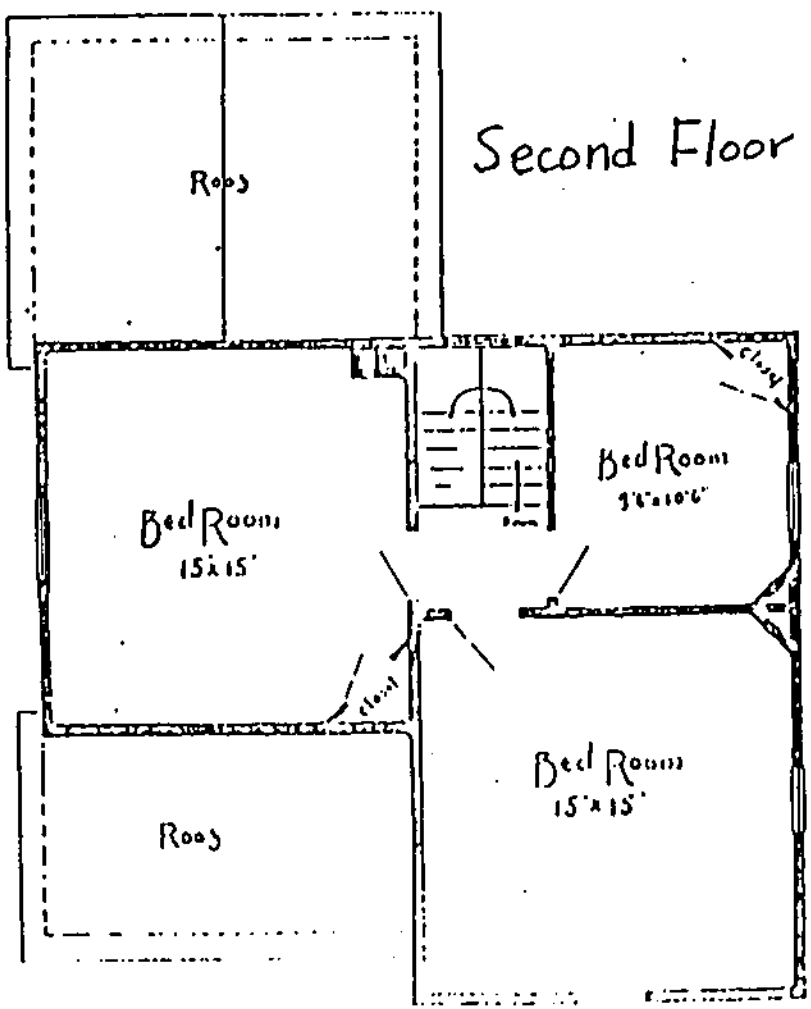
The $1,000 house design provides for a somewhat roomier house, an attractive exterior design, and one capable of being made into a larger, finer residence eventually. A large living room, a conveniently large kitchen, and two good-sized bedrooms, together with a large covered porch, take up the space on the first floor. The second floor will provide a hall, a garret, two bedrooms and bathroom. A single chimney

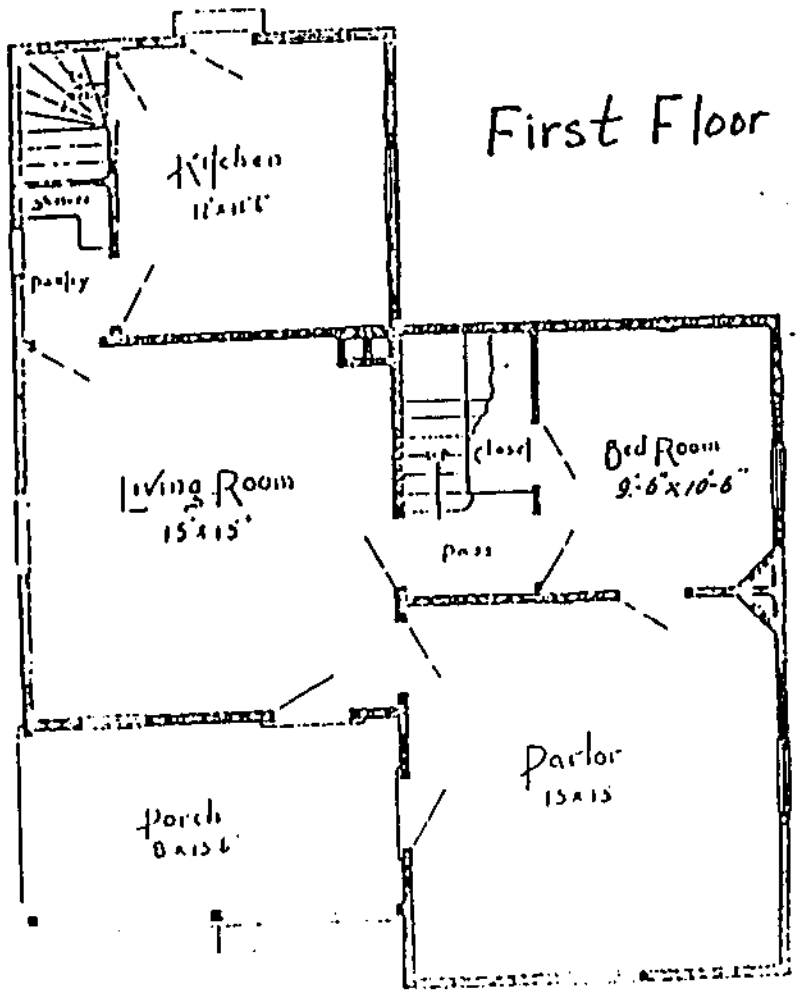


Figures 4 & 5
Convenient Farmhouse Plan
ca. 1915



Figures 6, 7 & 8
A $600 Farmhouse
with $500 Addition
ca. 1900





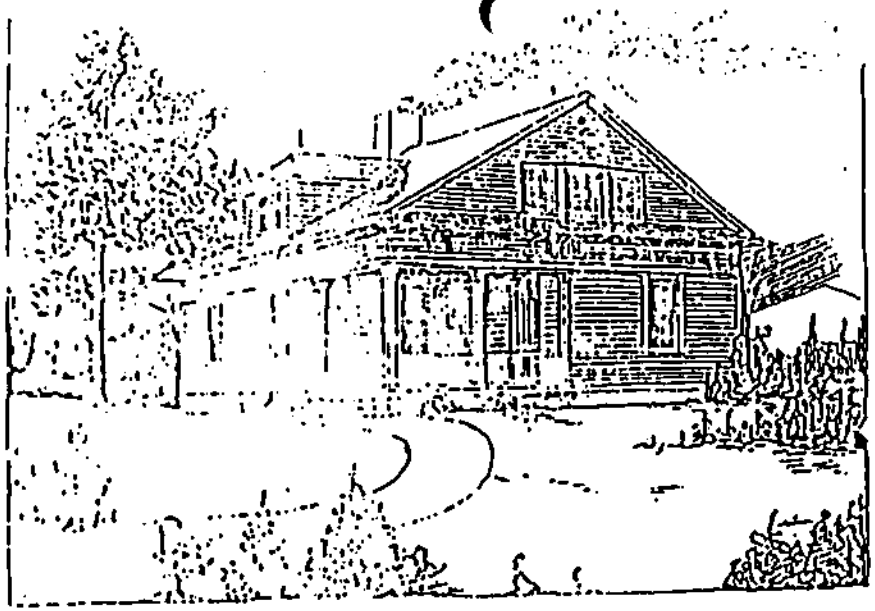
with two flues is so placed as to make it possible to have a stove in each of the first floor rooms (see Figures 9, 10, and 11).

The foundation for these two plans may vary. The most inexpensive foundation consists of short wooden posts extending from below the frost line to a foot or more above ground, set near enough together to adequately support the sills. A second, more expensive type of foundation consists of a brick wall, two bricks (9") thick. Such a wall will extend well below the frost line. If there is to be a cellar, the wall should be 7′ high.

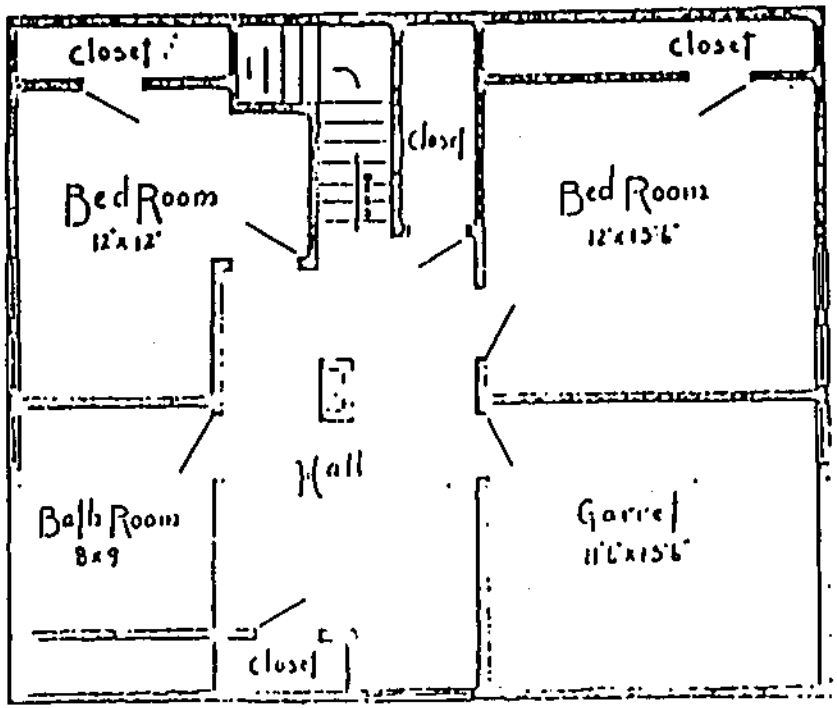
The chimney for both house plans should start from the ground. It should have a solid foundation of brick or stone. The exterior walls should be two bricks thick and the division walls one brick thick. In case the chimney is lined with one of the patent fire-clay linings one brick will prove of sufficient thickness for the exterior walls.

In framing the farm house, the vertical width of the sill should not by less than 8". The horizontal width of the sill should be 6". This allows for 2" space inside the studding on which the flooring should rest, making the walls tight at the bottom to exclude both drafts and vermin. The floor joists should not be less than 2" x 8" and should be cross-bridged once in every span of 10′, twice in a span of 15′, and so on. The studding in the frame house should be 2" x 4". At all corners and on either side of all door and window openings, the use of a 4" x 4" or two 2" x 4" spiked together is recommended. The plates should consist of 2" x 4" laid double, securely spiked into the top of every stud and with all joints broken. Rafters should be of 2" x 6" stuff, long enough to permit generous eaves and accurately sawed to allow tight nailing to ridge boards and plates.

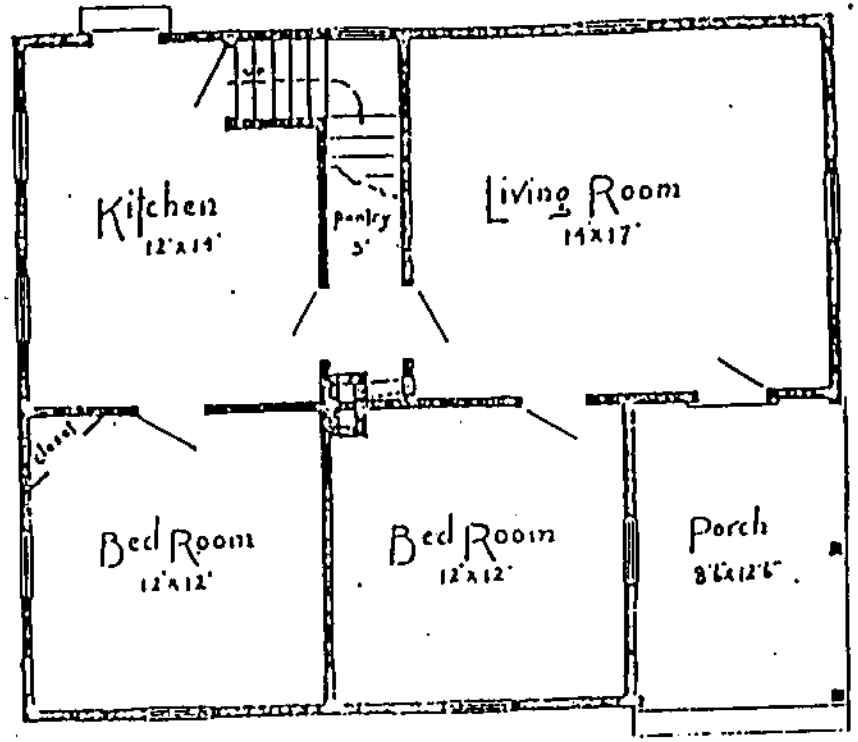
The flooring should be of double thickness. The first floor may be of rough stuff, but must be brought to an even thickness and laid diagonally. If possible use 4-inch match flooring for this layer. In completing the building after the plasterers are through, this floor should be covered with a layer of good building paper and 1" x 2" strips nailed on top of that and immediately over the joists, and then a thoroughly dry 3-inch matched floor laid on the strips, blind nailed and butting squarely against the grounds. The second floor joists rest on bearers, usually 1" x 6", let into the studding at the required heights.



Figures 9, 10, & 11
Floor Plan and Perspective
$1,000 Farmhouse 1900



(Second Floor)



The roof should have a pitch of not less than one-third, or better still, one-half. A roof with the latter pitch is less likely to leak, the outward pressure on the walls is less, and the exterior appearance is better. The two most common coverings for the roof are shingles and metal. Where shingles are used, the roof should be sheathed with strips (1" x 3"), nailed to the rafters with spaces between each course of strips of not less than 1". Metal roofs are more expensive and difficult to lay, but if kept well painted will last longer and are less subject to fire.

Generous eaves always prove economic because they protect the walls from weathering. A plain cornice, the ends of the rafters neatly boxed with the least possible molding, is the most sensible method of construction. Ornate gables and cornices are too often used to hide inferior carpentry and add expense to the house. A farm house with good lines, properly proportioned, needs no "gingerbread" or ornamentation.

There are three essentials to a good wall -- good sheathing, good paper, and good weather-boarding. Next to the studding, there should be a sheathing of cheap lumber. The best method is to place this sheathing diagonally so that every board is a brace which will serve to strengthen the frame. This sheathing should fit tight around all window and door frames and extend entirely over corner posts, plates, and sills, completely boxing the framework of the house. A good quality of building paper should completely envelop the outside walls, fitting closely around all openings. The most serviceable and most satisfactory covering for the exterior is clapboard, sawed thinner at one edge than the other and each board overlapping the one below. it should be put on with finishing nails, and they should be driven at least one inch above the lower edge.

Wide windows are always preferable to narrow ones, even though there be fewer of them. The sash should be of the style known as check rail and glazed with double-strength glass. Outside blinds should be considered. Wrought-iron hinges are preferred over cast iron because of cost and durability.

Good broad verandas are almost a necessity. The roof should be supported by plain columns with no railing. The floor of the veranda should always be constructed of narrow, matched strips of heart wood, blind nailed, and, if possible, with not less than three good coats of paint. The ceiling may be of matched and beaded 3-inch stuff.

The farmhouse should be located in a rural setting in a pre-1930 farmstead, usually the most prominent building. It should be located on its original site.

II. Significance

Farmhouses as a property type were vital cultural resources in Management Region 5 because by 1910 there were more than a 1,000 farms in each of the ten counties. By 1930 the number of farms in the region ranged from 1,018 in Murray County to 3,760 in Pottawatomie County. The farmhouse was the most important building in the farmstead group. The farmhouse was a shelter for the child at birth, a protection and refuge during growth and maturity, and a comfort to the elderly in their declining years. The farmhouse was the woman's domain, where she spent most of her time, in the care of the family, in the planning and serving of meals and providing for recreation, rest, and sleep. The farmhouse was also the business center of the farm; there the office was installed, wherein the business records were kept, and the business of selling and buying was largely planned there. Often farm laborers were housed in the farmhouse, and sleeping rooms, wash rooms, and recreation rooms for the help were maintained.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, a farmhouse in Region 5 must retain integrity in setting, materials, and design. The farmhouse should be located in a rural setting on a pre-1930 farmstead, usually the most prominent building. To retain its integrity in setting and location, the farmhouse must be located on its original site and should not have been moved to another location on the farm acreage or to a nearby farm or town.

To be eligible single-pen log cabin farmhouses must have log walls intact and contain basic features such as one room, one story, gable roof, and end wall chimney of sandstone or limestone. The original wood shake shingle roof may have been replaced over time as well as the original caulking between spaces of log walls.

Double-pen log cabin farmhouses must include two rooms with end wall chimney of sandstone or limestone. It should also be one story high and possess a gable roof.

Saddle-bag log farmhouses must be constructed of log materials and be one-story, consist of two rooms, and gable roof. The one feature it must possess is the centrally located fireplace and chimney which distinguishes it from the double-pen version which has end wall chimneys.

Dogtrot log cabins must be constructed of log materials, many have one or two end wall chimneys, gable

roof, and one-story height. The main feature of the dogtrot for it to meet eligibility requirement is the open, roofed passageway placed between the two main rooms.

To be eligible, all log cabin farmhouses must be free of additions or major alterations, and should not be covered with siding materials which detract from their architectural integrity. Roofing materials and caulking between logs in wall surfaces may have been replaced over time, however, original roof lines and basic wall construction must be present.

The I-house as a farm dwelling must possess the basic floor plan of one room deep, two full stories high, and two-three rooms wide with sideward facing gables. Finishing materials and decorative elements may vary, but to be eligible the I-house must retain the basic design pattern which characterized I-houses from other forms of farmhouses.

Colonial farmhouses must retain tall, stately columns; small porches; either gambrel or steeply gabled roofs; narrow eaves; and symmetrically placed windows.

Dutch farmhouses must contain certain features such as Dutch gambrel roof, central entrance on a broad side to the front, and broad porches supported by large, simple columns.

Mission farmhouses must possess plain, stucco wall surfaces, high towers, close grouping of windows, and red roofing tile.

The California Bungalow must retain low construction design, low roofs, and broad, overhanging eaves. The traditional bungalow was only one story, but bungalow farmhouses may be one-and-a-half or two stories high.

The Chicago farmhouse must possess low-pitched roofs, wide eaves, and high windows as well as simply designed decorative elements.

All these styles must be free of additions or major alterations which would detract from their historic and architectural integrity. No siding materials should cover original walls.

The farmhouse to meet eligibility requirements must have been occupied by a farm family during the pre-1930 period and must have served as the principal building on a pre-1930 farmstead where agricultural activities were planned and coordinated.

GENERAL PURPOSE BARNS

I. Description

Barns as a property type may be classified in different ways. In shape the barn may be classed under one of the following: square, rectangular, L-, T-, or U-shaped, and round.

The square barn is economical, and if this shape permits the use of a good floor plan there is no problem. For barns longer than 34 to 36 feet there is no advantage in increasing the width to correspond to the length.

The rectangular barn of sufficient width to accommodate two rows of stock is the most common shape. The length can then be made to suit any condition, or existing barns may be extended, if the herds are increased. There is no limit the length of a rectangular barn, 150 feet is common.

The L-shaped barn is desirable because a sheltered yard may be formed in the angle of the two parts. The main part should serve for the principal stock, the ell being used as a feeding area or cattle shed. To avoid interference with light and ventilation, the main barn should be placed with the long axis north and south, and the wing attached at the north end on either side.

The T-shaped barn is the common arrangement for a two-story feed and hay barn, and a one-story stable. One section may be built to meet the requirements for a time, and the other added as the herds are increased.

The U-shaped barn usually consists of two separate barn units, parallel to each other, and connected by a feed storage, passage, or shelter wall. The sheltered yard so formed is valuable.

The round barn encloses the most area with a given length of wall, for the same reason that a circle encloses the most area. Since there is less exposure than in other shapes, the barn is warmer. Round construction is the strongest type and there are no corners for the carpenter or mason to construct, so there is time saved in the construction. The usual plan includes a silo in the center of the barn, which makes feeding convenient when the stock faces the center. A floor plan for a 60′ round barn is given in Figure 9.

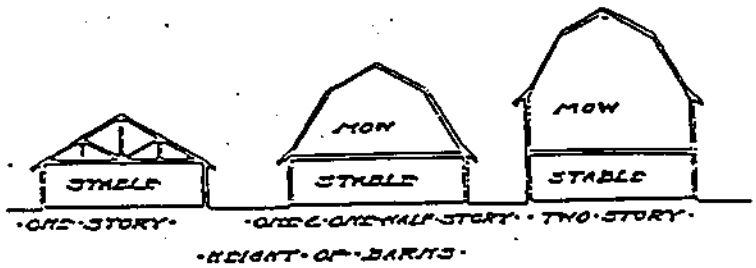
Barns may also be classified by number of stories and by roof type. The one-story barn in simply a stable, without feed storage above, and may be used as a wing in connection with a storage barn, or as a separate building. The one-story barn is usually the lowest in cost of any of the heights, but not necessarily the most economical, as the same roof and foundation might be utilized in building additional hay space. The one-story barn is usually of the gable or shed roof type.

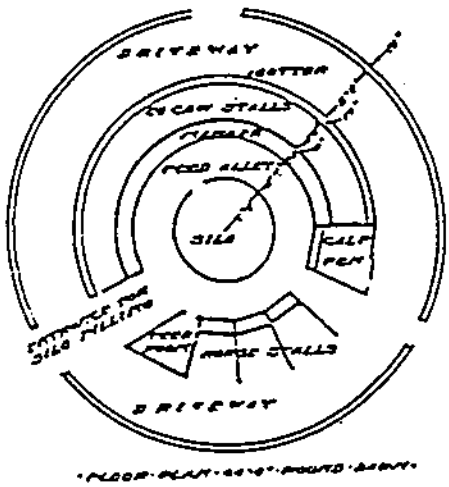
The story and a half barn provides a certain amount of hay space, the side walls above the stable being not more than 6 feet high. If a gambrel roof is used, the low rafters may come just over the loft-floor joists.

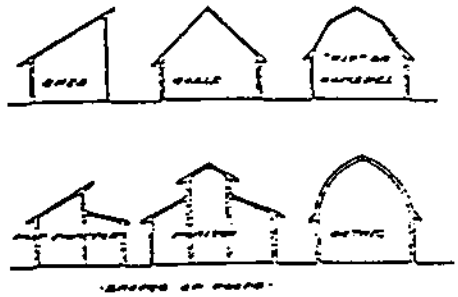
The two-story barn is the most economical and the most common general purpose barn. The walls are from 8 to 18 feet above the first story. The self-supporting plank frame roof is recommended for best results in hay storage.

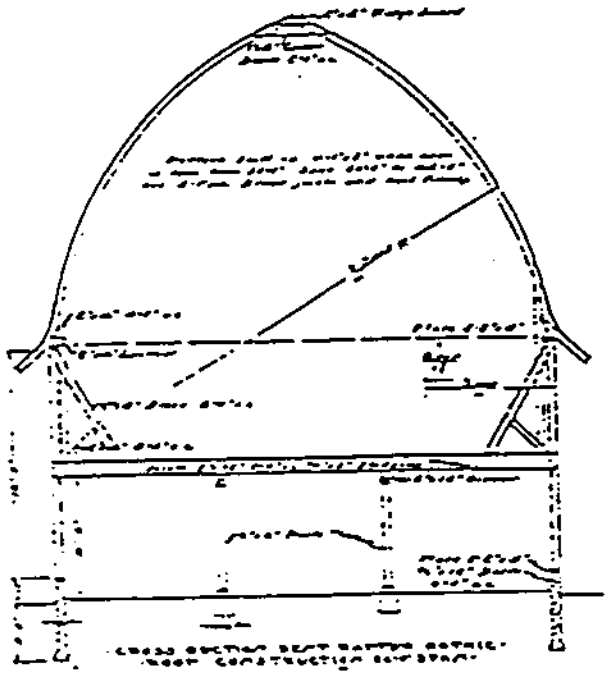
The most common roof shapes for barns are: (1) shed, (2) gable, (3) gambrel or "hip", (4) monitor, (5) half-monitor, and (6) Gothic or arched. The shed roof is a single-slope and simply constructed type used principally for a "lean-to" in connection with another building. The pitch is low, usually not over one-third pitch is used. The gable roof is the most common two-slope roof. The common pitches range from one-fourth to one-half. The gambrel roof which has two slopes on each side is undoubtedly the most practical for the farm barn. The lower set of rafters is set at 60° with the horizontal and the upper slope at about 30°. The gambrel roof is easily made self-supporting, affording an unobstructed loft. The Gothic, vaulted, or arched roof has become popular because there are not obstructions in the loft. The shape of the roof may vary from nearly flat up to a height equal to about 2/3 the width of the barn. The higher shapes afford the most hay storage and are easier to construct. The monitor barn results from the higher roof on the center or main part of the barn, and sheds on either side (See Figure 12 for height of barns and roof shapes).

Barn foundations should be extended below the frost line and down into firm soil. The foundation wall should be not less than 10" thick if of concrete. Stone walls are made abut 2′ thick. The foundation of masonry should be carried at least 1′ above the ground to keep the framing from the damp ground.









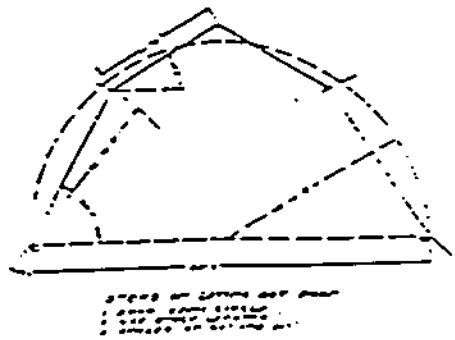


Figure 12
Barn Types By
Roof Shapes and Stories

Barn floors are made 4 1/2 or 5 inches thick of two-course concrete. Anchors and bolts are placed when the concrete is poured. Floors should be given sufficient slope to carry all water to the drains.

The types of permanent materials used in barn walls are concrete, hollow tile, brick, stone and concrete blocks. Concrete walls are made 10 to 12" thick. Two inch plank frames around the openings are necessary.

Hollow tile walls should be 8 to 12" thick. The mortar joints average 5/8" thick. Portland cement mortar, either white or colored, may be used.

Cement blocks are laid up in much the same matter as the hollow tile, and form an 8 to 12" wall.

Brick and stone are used only to a limited extent. Brick walls should be at least 9" thick. The average brick is 2 1/2 " x 4" x 8" in size, and requires a mortar joint 1/4 to 3/8" thick. Stone walls are 20 to 24" thick, laid up with cement mortar.

If the foundation is made continuous, the sill usually consists of two pieces of 2" lumber, 6, 8, or 10" wide, according to the thickness of the wall. The sill should be laid in a bed or mortar, on the foundation, and made level. If bolts have been placed in the foundation, the sill may be bolted fast. The double thickness sill can be spliced by breaking joints, and the strength is not harmed. In barns built on piers, the sill is of the heavy timber type, perhaps 10" square. The wall plate is of the same material and construction as the sill; it is fastened to the studding and serves as a seat for the rafters. The vertical wall members vary from 2" x 4" material to 2" x 10". The usuals spacing in barns is 2′ apart on centers. Studs are doubled at each side of the openings, and are double or triple at the corners. The columns or posts may be of solid timber, built-up lumber, or of iron or steel. The common sizes are 6" x 6" wood, or 4 and 4 1/2" iron or steel. The length of the column and the load to be supported should be considered for best economy. In "face-out" floor plans the posts should come at the rear of the stall partitions, and in the "face-in" plan the posts are placed just behind the stall frame. Steel posts, concrete filled, are preferred to any other type. The built-up girder, made from several thicknesses of 2" lumber, is preferred. The joists can be distributed so the girder is not weakened at any one point; the continuous beam is somewhat stronger than the simple beam that is broken at each support. The girder

should be supported by a post at intervals not greater than 14 feet. The floor joists are 2" thick, and vary according to the load, from 8 to 12" deep. The joists should run crosswise of the barn, and be lapped above the girder. The total length of the joists across the barn should exceed the barn width by about 2', to allow for lapping. The usual spacing is 2' apart on centers. Joists should be bridged once in 8 feet, and twice in a 14' span. Barn rafters are almost without exception made of 2" x 6" material, and spaced 2' on centers. Long rafter lengths are sometimes supported between the plate and ridge with a purlin. In the self-supporting roof, the rafters are usually braced in pairs, to form trusses. Wall sheathing is often omitted in barns, and the siding nailed directly on the studding. If sheathing is used, the usual material is either shiplap, or inch boards, No. 2 grade being generally used. Some sheeting is put on diagonally for the bracing effect, though usually it is placed horizontally. Roof sheathing for prepared roofing or slate or asphalt shingles is put on solid. For wood shingles, the sheeting consists of 1" x 4" boards laid with a 2' space between them. The most common forms of siding for barns are bevel siding, drop siding, matched boards, and plain boards with batten. Either horizontal or vertical siding may be used, and the kind depends on the type of framing. The plank truss frame usually takes vertical siding and the braced rafter frame the horizontal siding. Weather-resistant woods such as white pine, cypress, cedar, and redwood are preferable for siding. Ceiling lumber is matched, dressed, and beaded, and is used in place of sheathing on the projecting ends of the rafter, if the open cornice is used. Clear pine or fir is the most common material used, the 5/8" thickness being most widely used. Loft floors should be made of dressed and matched lumber, the most suitable material being pine or fir, 1" x 6" flooring.

Barns may also be classified by the type of framing. There are several types including: (1) timber frame, (2) plank frame, (3) braced rafter, (4) plank truss, (5) gambrel roof framing, (6) wide barn framing, (7) Gothic roof framing, and (8) round barn framing.

The timber frame consists of sills, posts, girders, and braces of large timbers, ranging up to 12" x 12" pieces, the heavy pieces being usually mortised together.

The plank-frame barn is built without the use of any material larger than 2" x 12". The greatest length necessary is about 24 feet for a few braces or

supports, and these pieces may be spliced from shorter lengths. Girders or posts requiring more strength than is given by one piece are built up from two or more 2" pieces. The sizes of material used in the plank frame are figured for spans of from 32 to 40 feet.

Gable roof framing is commonly used for one-story barns. The roof pitch varies from 1/4 to 1/2. The building should be tied together at the plate either by ceiling joists or cross ties, to prevent spreading. Rafters are 2" x 4" in size for spans under 20 feet, and 2" x 6" for all spans greater than 20 feet. A purlin plate, intermediate between the plate and ridge and supported by posts from the floor, is needed.

Gambrel roof framing should follow these three principles:

(1) Since the arch is one of the strongest forms of construction, the gambrel roof is probably strongest when it forms an arch. The ridge should fall above the curve and the break within the semicircle. To secure a truss approaching the lines of this arch, construct a semicircle with a radius equal to one-half the width of the building. Place the center of the semicircle on a level with the plates and midway between.

(2) The use of stock lengths of lumber is economical, and the roof should be designed to use stock-length materials. The upper and lower rafters may be about the same length, or the upper pair 2′ shorter than the lower ones. Lengths or 16 and 12 feet work out well for the 36 foot barn.

(3) The lower slope of the gambrel roof should be approximately 60° with the horizontal, and the upper slope about 30°.

Braced rafter framing consists of studding spaced 2 feet apart on centers. The floor joists are set crosswise of the barn with the same spacing as the studs. The distinguishing feature of the braced rafter frame is the fact that each set of four rafters is braced at all angles, to form a light truss, which supports the roof through a length of 2 feet, which is the spacing of the rafters, no purlins or extra framing is necessary. Each truss consists of two lower rafters, two upper rafters, a collar beam, or tie, and upper and lower braces. The upper braces are made approximately the same length as the upper rafters, and extend from the center of the upper

rafters to a point about 7 feet below the angle of the roof on the lower rafter. The lower brace is about the same length as the lower rafter, and extends from just above the second floor to the point where the upper brace attaches. The braced rafter barn framing should be made from 2" x 6" lumber. The braces are sometimes made of 2 pieces of 1" x 6" or 1" x 8" material. The studding for this type should be 2" x 6" or 2" x 8".

In the plank truss frame, the trusses are placed 10 to 16 feet apart. These trusses support the entire roof load. The space between the trusses is filled in with braces and rafters. In the first story of the plank truss barn, the wall studding are not spaced at regular intervals, but according to the openings. Diagonal braces are placed at frequent intervals between the openings to strengthen the frame. The plate under the joists serves as the header for the top of the openings. At the truss intervals, several pieces of studding are set together to form a post on which the truss is supported. Each truss is made up of the following parts: a cross tie extends across the building at the truss, which consists of three pieces, the same size as the joists. The pieces are set with short blocks between them, for splicing, which gives a three-ply piece, with two 2" spaces. Purlin supports extend from the joist line to the purlin. They are made up of two pieces of 2" x 10" or 2" x 12" material, with a 2" space between the pieces. Roof or purlin supports extend from just below the plate to the ridge of the roof. The wall post consists of two pieces of 2" x 8", with a 2" space between. A 2" x 4" brace extends from the purlin to the ridge. These pieces, together with the short braces, form the truss.

In Gothic roof framing, the shape of the roof is a pointed arch and is secured by taking a radius equal to three-fourths the width of the barn to find the curve of the rafters. The center is taken at a point of 3 or 4 feet below the level of the plate, and an arc is described through the plate and the center of the barn at the ridge. The point of meeting of the two arcs drawn determines the ridge and the shape of the entire roof. The lookout is a reverse curve, on a 5-foot radius, and fits smoothly into the rafter curve. The most common method of building the rafters is to lay out the shape of the rafter on a smooth surface, and to fit 1" x 4" pieces to the form. Five or six pieces are bent to shape and nailed to form a rafter of the correct shape and strength. The rafters are spaced 2 feet apart in the building, and tied at the ridge.

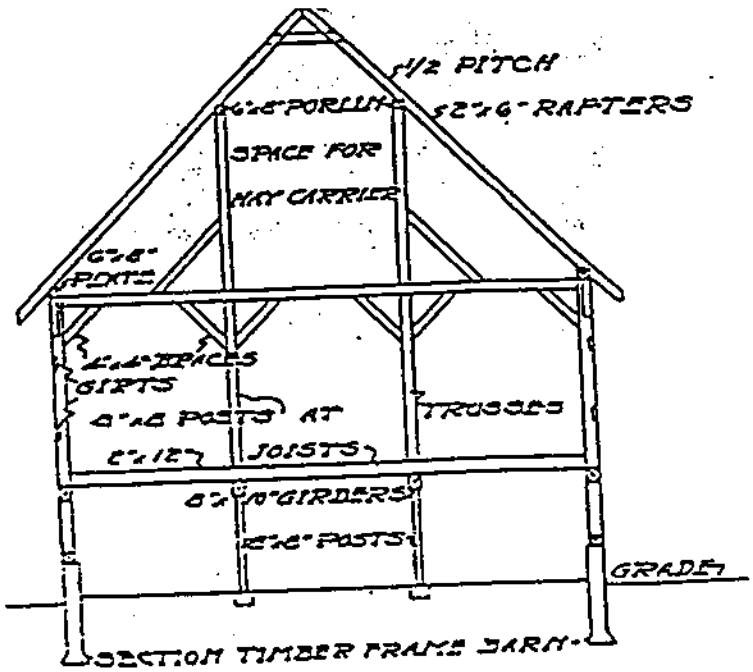
The framing of the round barn is similar to that for the braced rafter barn. The members of the frame converge to the center, making the round frame very strong. The two slope gambrel roof is most often used. Since the round barn will be about 60 feet or more in diameter, longer length lumber is required in the roof frame. Since the framing parts become closer together as they approach the center, there is more material in the round barn frame than is necessary for strength (see Figure 13 for some types of barn framing).

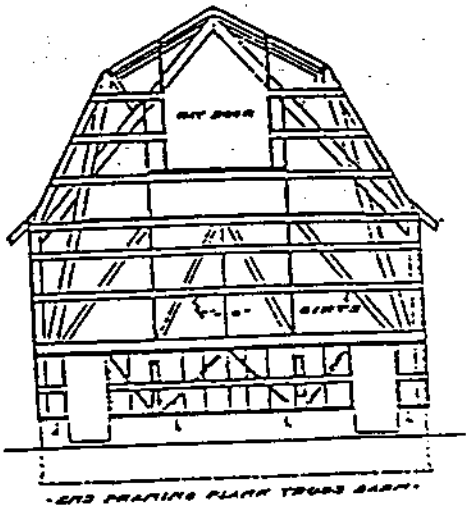
The USDA Bulletins of the early 20th century give two designs for small barns for the farmer who has but small capital to expend. The first is called the $450 barn. It is 37′ x 34′ and 12′ high at the eaves and 29 1/2′ to the peak. The loft is supported by sixteen 8′ x 8′ post (round) while the roof is supported by eight 6′ x 6′ purline posts. The first floor provides for 4 horse stalls and 3 double cow stalls, while a shed opening into a small yard affords additional room for stock. A clear space, 12′ x 37′, is left down the center, which would accommodate several implements and leave room for a considerable amount of forage at the rear end. The loft would accommodate from 20 to 25 tons of hay. The granary is 7 1/2′ x 8 1/2′. The design calls for flooring the driveway at the height of 12′ above the ground, and the side spaces over stalls and shed at a height of 8′. In the center a space 10′ x 12′ should be left for pitching hay into the loft. The timbers should be mortised and pinned with hard wood pins. Attached figures illustrate the floor plan, end bents, and elevations of the $450 barn.

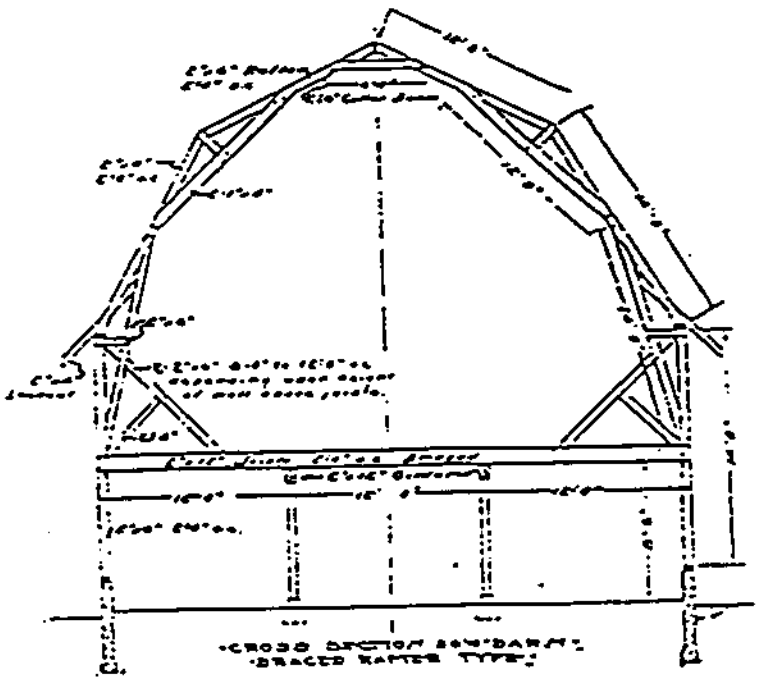
Design No. 2 provides for the $275 barn. It is 24′ x 24′ and 16′ high at the eaves. It is divided into stable and wagon and carriage rooms. The stable affords room for three head of cattle and two horses. The loft will hold approximately 10 tons of hay. The design permits the erection of sheds on each side of the main building which would increase the capacity of the barn to 15 head of stock or more (see Figures 14 and 15).

Three-Portal Barn

The most common barn type found in the heartland of America during the late nineteenth and early twentieth century was the Midwest three-portal barn. It is believed they were introduced to the United States directly from Europe by German settlers. They are sometimes locally referred to as feeder barns







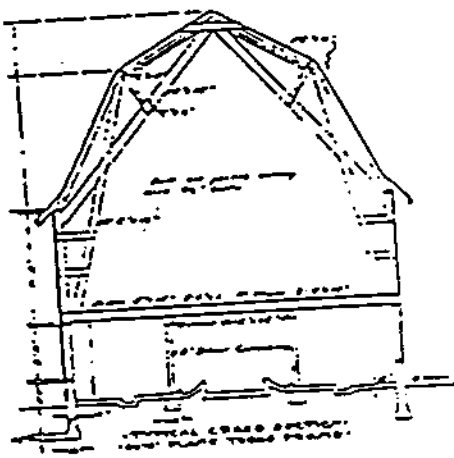
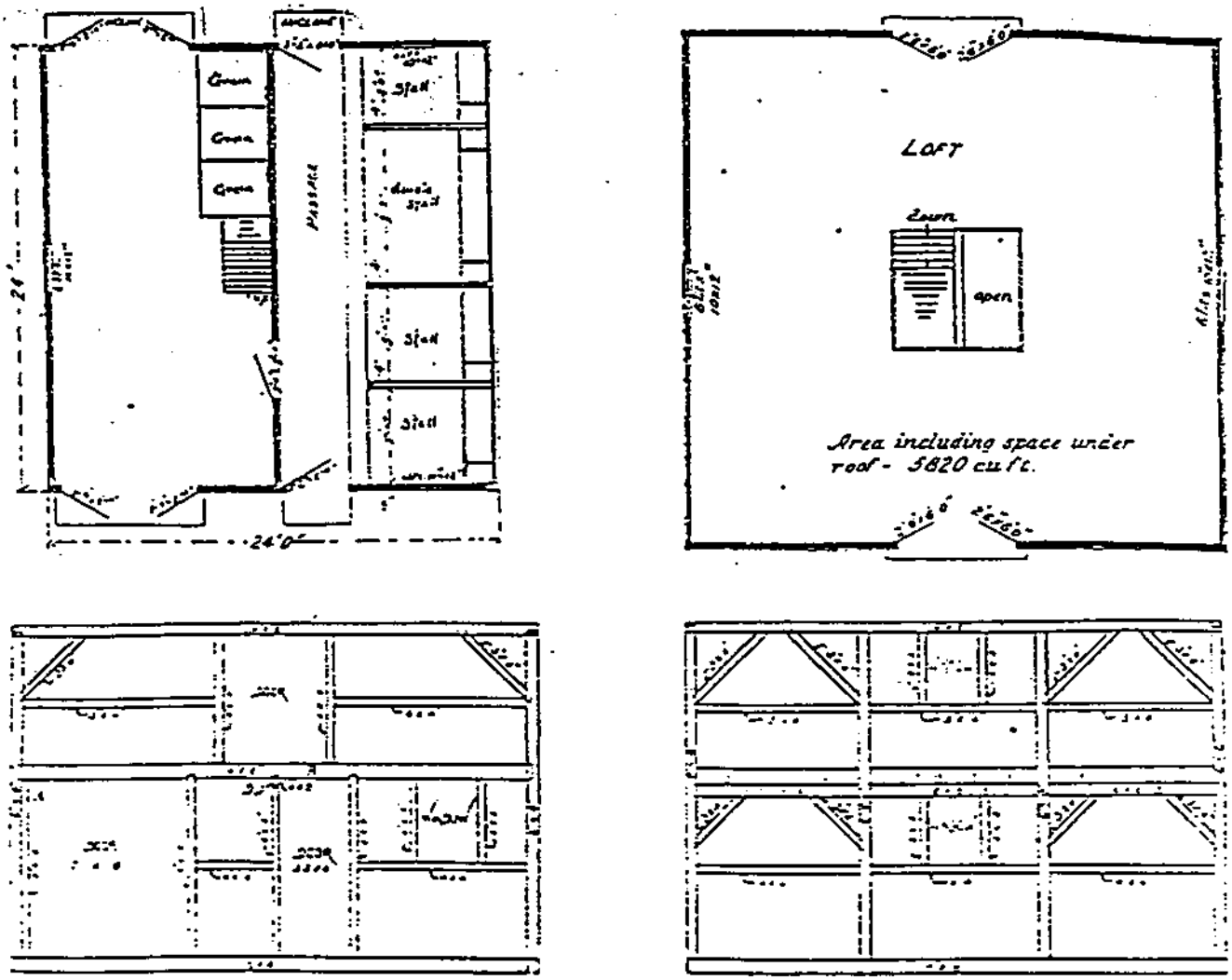


Figure 13
Barn Framing



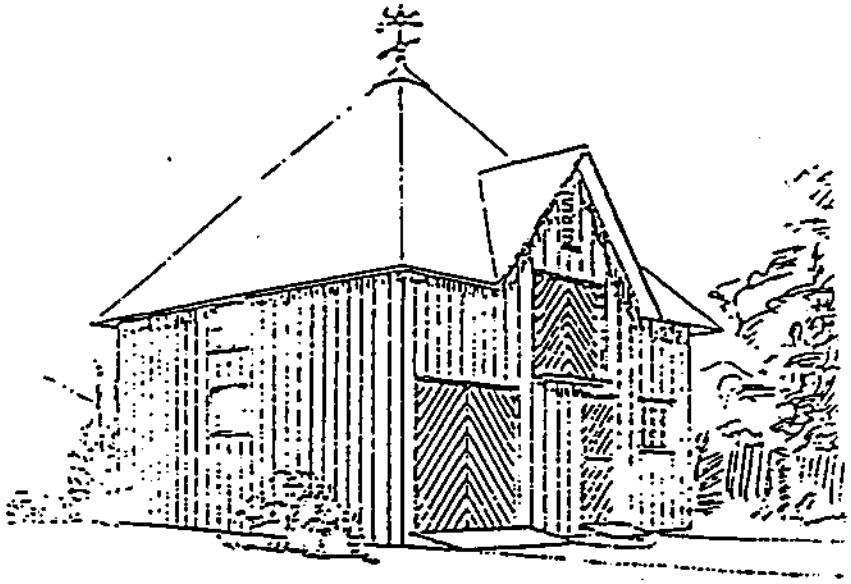
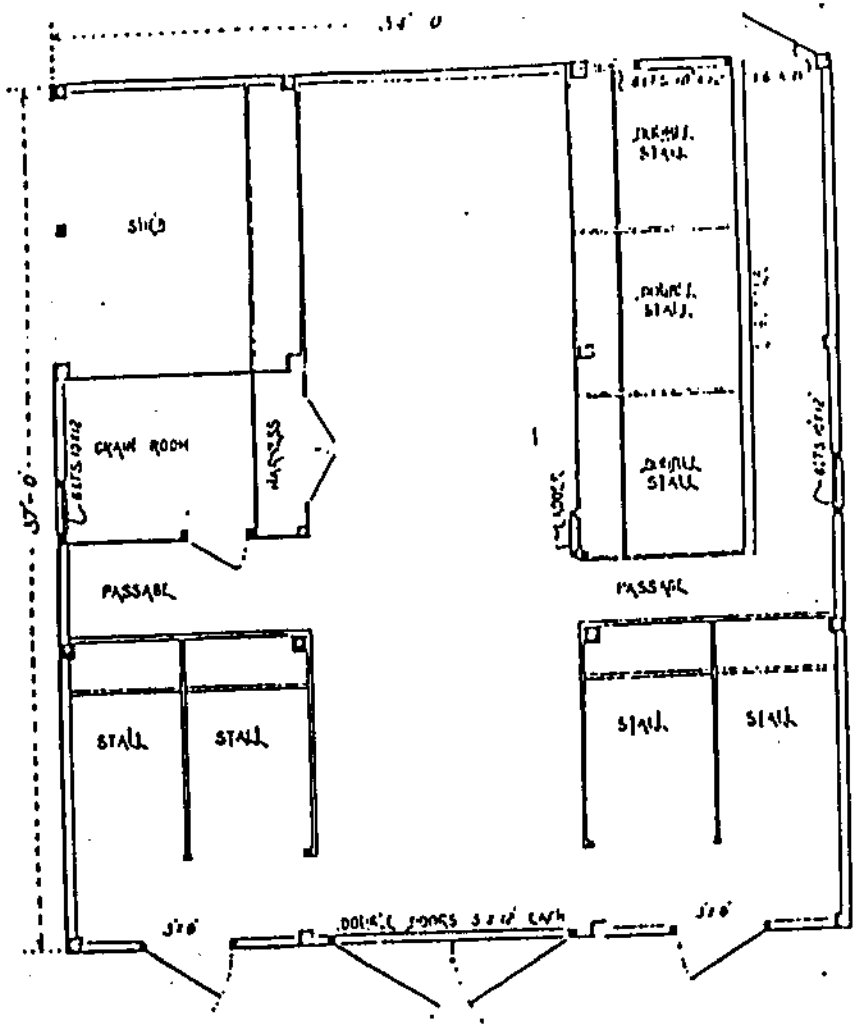


Figure 14
Floor Plan, End and Side,
and Perspective
$275 Barn



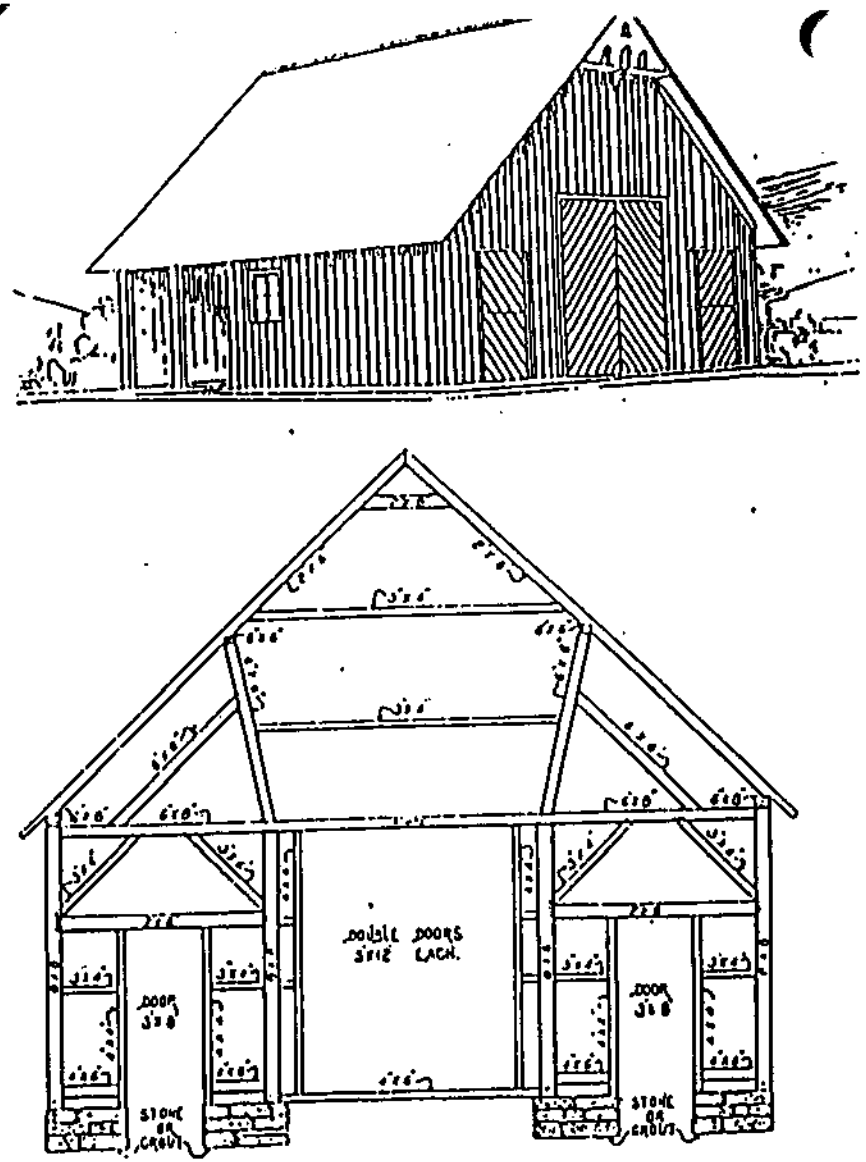


Figure 15
Floor Plan, End Construction,
and Perspective $450 Barn

because they were used in housing livestock. Two variations can be identified, primarily on the basis of plan. The first type is merely an expanded barn achieved by adding enclosed side aisles. In some instances such additions are clearly an afterthought and the roof line is broken, indicating the addition of a later roof to cover the added aisle. Such an aisle is sometimes used to stable livestock. Early gable roofs in many cases have been replaced by gambrel roofs, but the addition of the aisle roof is still easy to identify. In the twentieth century, barns were built with original gambrel roofs spread to cover the side aisles. The second type of the Midwest three portal barn represents the culmination of this line of evolutionary development. The central aisle has been reduced to a narrow walkway, but flanking cribs or stables have been added. The dimensions of this barn are between 36′ and 42′ on a side, and often the gable wall is longer than the side wall. The roof line may or may not be broken, depending upon whether or not the barn was fully conceived or simply grew by accretion. In addition to providing hay storage, these barns were used to house livestock and machinery, and often grain as well (see Figure 16).

The German Bank Barn

Although there are many variants of the German barns, the type most likely to be encountered in Region 3, is the Sweitzer barn. It is basically a 2 1/2 story building. The lower floor, devoted primarily to cattle stalls, stables, and other space for animals, is normally partially excavated. Such a situation in which the structure is built into the hillside helps conserve heat in the winter season and, conversely, provides a cooler environment in summer. The lower story is constructed of stone or concrete. The upper floor is conventionally divided into three units -- either two cribs and a drive-space or three bays. Entry to the upper floor is by double wagon doors centered on the upslope side of the barn. The center area of this level was designed originally for use as a threshing floor. This use is verified by the occurrence of threshing doors in an opposing position, opening out over the feeding lot. These doors have no entry or access function, but serve only to promote the winnowing associated with grain threshing by hand. Side bays permitted storage of farm machinery and tools as well as unthreshed grain. Often a bay was used as a hay mow. Threshed grain usually was stored in granary bins built into the forebay of the barn. The most distinctive structural feature of the Sweitzer barn is this forebay, the second-story projection or overhand on the downslope side of the

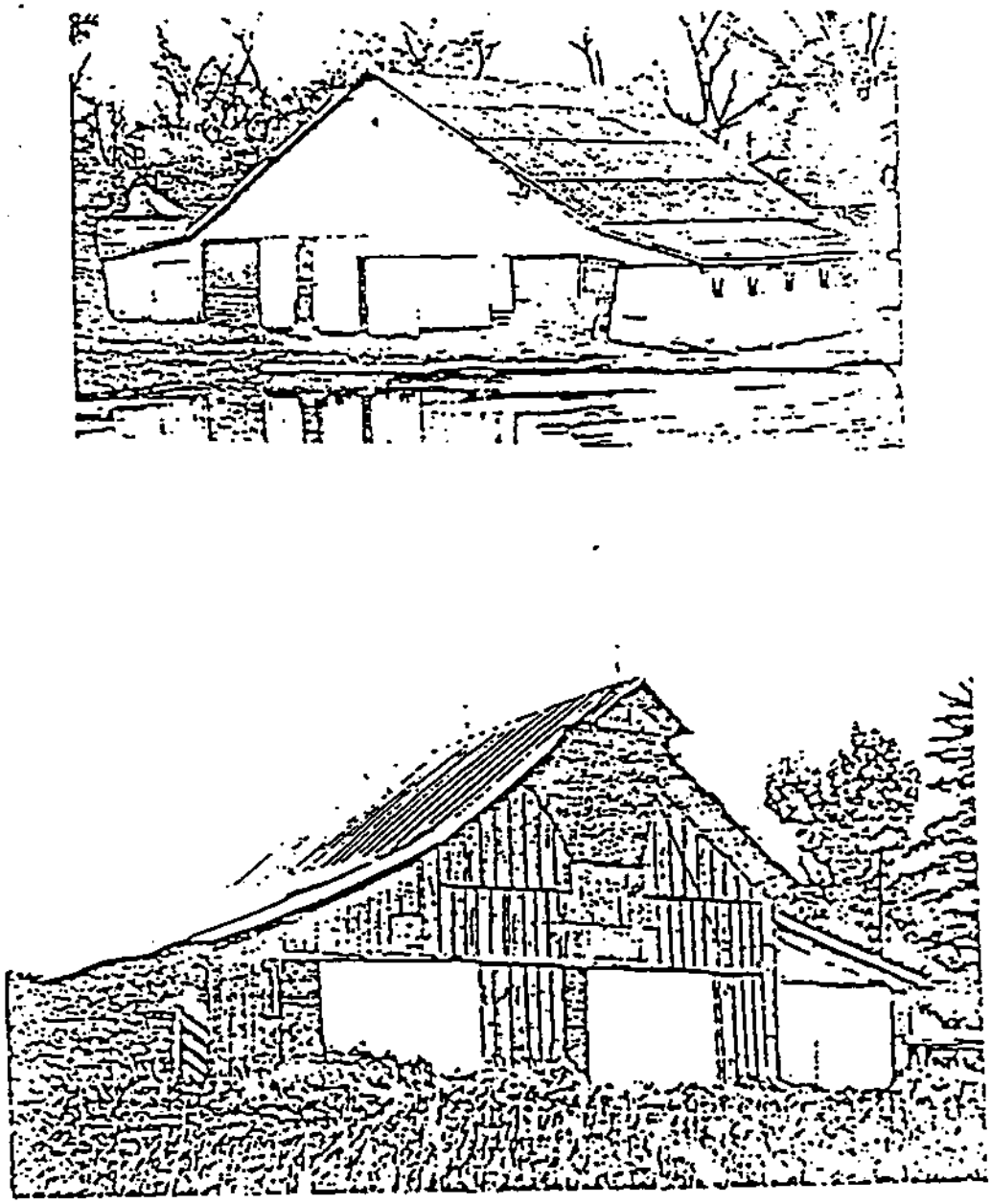


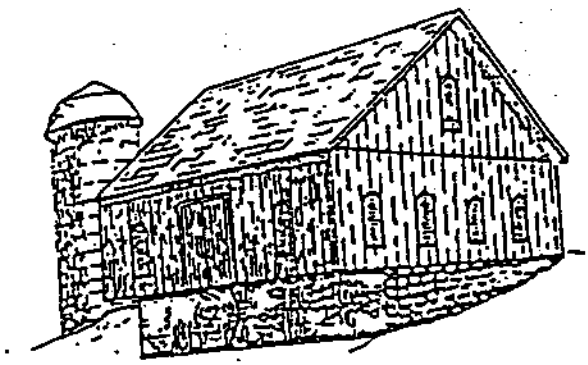
Figure 16
Midwest Three-Portal Barn

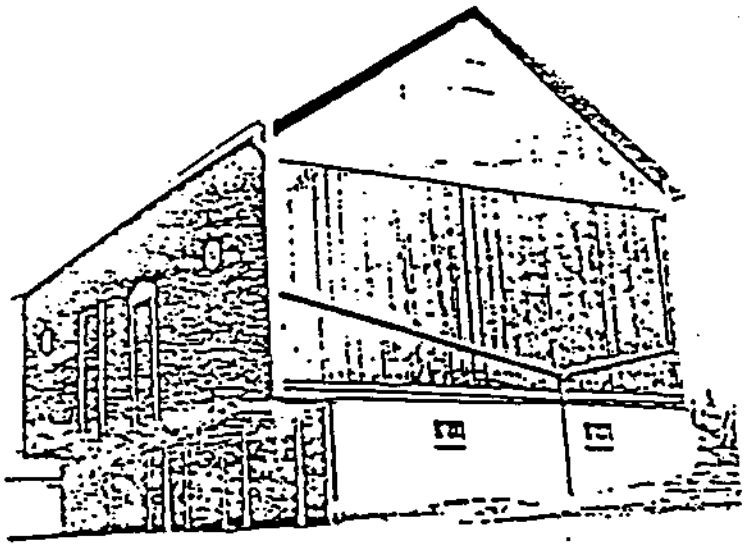
barn. The forebay offers several advantages. First, because it extends out over the feed lot, it affords projection for stock in inclement weather. Second, the projection obviates the necessity of shoveling snow away from the basement doors. Third, chutes cut into its floor provide a means by which feed, straw, and hay can be dropped directly to the stock in the feed lot below. Finally, the forebay permits a larger second story than is provided by the foundation walls. The forebay is supported by cantilevered beams. Posts or columns are not normally used for support of the forebay. The barn may be constructed of logs, timber frame, birch, or stone, but the forebay is invariably of timber framing covered with plank siding. In early designs, the gable roof of the barn is asymmetrical, with the forebay continuing the roof line, but in later designs a symmetrical roof line appears. The Sweitzer barn is crowned by a commodious loft used for hay storage. The interval plan of the barn s simple. There are usually three units on the second floor and rows of cow stalls and stables separated by aisles on the lower level. Access to the lower level is provided by a number of Dutch doors positioned on the wall under the forebay. Barn proportions are usually three or two, i.e., three bays wide and two bays deep, although barns four to seven bays are not unknown. Furthermore, the width and depth of a bay may not be equal in size (see Figure 17).

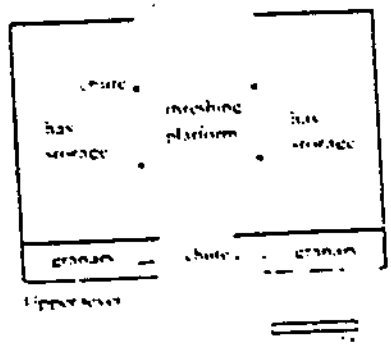
The general purpose barn should be located on a pre-1930 farmstead about 150 to 200 feet from the farmhouse and, if possible, in the direction away from the prevailing summer winds. The general purpose barn should stand on its original site.

II. Significance

General purpose barns were significant historic resources in Management Region 5 prior to 1930 because the region was an important agricultural part of Oklahoma's economy. Census data indicate that farms in the region by 1900 averaged approximately 140 acres and were fairly diversified in terms of producing crops and livestock. Therefore, general purpose barns which provided a variety of functions were common. General purpose barns usually housed two or more classes of livestock (horses, dairy cows, or beef cattle) and the barn was designed to combine facilities for feeding and housing several animals and that the different classes of livestock be separated. If milk was produced, housing of dairy cattle had to meet certain legal requirements for the production of graded milk including ample light, ventilation, and sanitation. In most cases, horses and cows should be







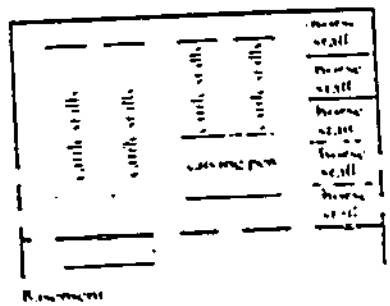


Figure 17
Sweitzer Barn
and Floor Plan

separated by a tight wall and it was not a good practice for cattle and horses to share a common feed or litter alley.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, general purpose barns must retain integrity of setting, materials, and design. The general purpose barn should be located on a pre-1930 farmstead and should be set with the long axis to the north and south for best lighting and to form a protection for a sheltered yard. The general purpose barn should be 150 to 200 feet from the farmhouse, and if possible, in the direction away from the prevailing summer winds. The general purpose barn should be located on its original site and not been moved to another location on the farm acreage, or to a nearby farm or town.

General purpose barns to be eligible must retain one of the basic floor plans. For rectangular style, it should be approximately 30′ x 150′ and should be able to accommodate two rows of stock. The square barn should be approximately 36′ x 36′. The L-shaped barn should be placed with the long axis north and south with the ell, or wing, attached to at the north end on either side. The U-shaped barn should consist of two separate barn units, parallel to each other, and connected by a passage or shelter wall. The round barn should be approximately 60′ in diameter.

The general purpose barn should retain the original walls of either wood or stone, both the most common materials in Region 5. It should not have any additions or other major alterations such as synthetic siding or other materials which would detract from its architectural integrity. The roof design must be intact and follow any one of several shapes including shed, gable, gambrel, monitor, or Gothic. Although roofing materials may have been replaced over time, it must retain the original roof lines.

The three-portal barn must posses certain features to be eligible. It should have a broadly-pitched gable roof with three openings, or aisles, through the barn. One of these aisles is placed in the main section and the other two are located in the shed type sections on either side of the main part. Construction materials were milled lumber and roofs were originally shake shingles. Original siding should remain intact, however, wood shake shingles may have been replaced with corrugated metal materials.

The German bank barn to be eligible must contain certain features. The most distinctive design element, which must be present, is the forebay, a

second-story projection or overhang on the downslope side of the barn. It should be a 2 1/2 story barn with the lower floor partially excavated into a hillside. This lower floor must be designed to accommodate cattle stalls and stables. The second floor should be divided into three units--either two cribs and a drive-space or three bays. The upper half story should be used as a hay loft. The construction materials may vary from timber frame to stone, but the forebay should be of timber framing with plank siding. The roof shape should be an asymmetrical gable with the forebay continuing the roof line.

The general purpose barn must have been associated with a pre-1930 farming operation and used for shelter for farm animals and storage for grain, hay, and other farm produce.

DAIRY BARNS

I. Description

Dairy barns as an agricultural property type require greater care in design than any other farm building except the farmhouse. It is not possible to standardize complete dairy barn descriptions because each farm furnishes an individual problem. The items of stalls, manger, gutters, alleys, and pens pose problems of standardization, however, the following paragraphs present several features found in dairy barns during the pre-1930 period.

In terms of ceiling heights, 8 1/2′ is the best. Ceilings below 8′ afford too little headroom, and interfere with correct lighting. The height is measured from the alley at the rear of the stalls to the under side of the joists.

The best width for the dairy barn is between 32 and 38 feet, providing for two rows of stalls lengthwise of the barn. A width of 34 to 36 feet works out to the best advantage in affording correct widths of alleys and stalls.

The length of the dairy barn depends entirely on the amount of stock to be housed. Barns of 150′ or more are not uncommon.

Cows in stalls may face the outer wall, with a single cleaning alley in the center, or they may face on a center feeding alley. Cow stalls are of varying widths of from 3′2" to 3′6". An average length of stall platform from curb to gutter is 4′8" as this length will care for the average dairy animal.

The dairy manager should follow the recommended U.S.D.A. standard measurements:

Width (Inches)	Height of Front (Inches)
20	6
24	12
28	18
32	24

The shape of the bottom of the manger is formed by the arc of a circle between the front of the curb and the manger front. The radius of the ar is 18", and is centered at a point 7" in front of the stall frame. Concrete is the recommended material for the manger.

The curb forms the rear of the manger, and serves to hold the stanchions and stall frame. Bolts,

plates, or anchors are placed in the curb at the time the concrete is poured, and the equipment is bolted fast later. The curb is 6" high, and 4 to 6" wide.

The gutter is usually 16" wide. On the stall side the depth is 7 to 8 inches, and on the alley side about 4 inches. The bottom of the gutter should be made level crosswise rather than sloping and the litter alley made about 3" lower then the platform.

The feed alley should be from 5 to 6 feet wide if the cows face the center of the barn. In the face-out arrangement the minimum width should be 3'6", and 4' is considered the best width. A center litter alley should be from 6 to 8 feet, and at least 4 feet 6 inches when the stock face the center. In case a driveway through the barn is desired, 8 feet is the minimum width between gutters or mangers. The best alley widths, in connection with the widths given above for stall, manger, curb, and gutter, can readily be secured in the common widths of 34 to 36 feet for the entire barn.

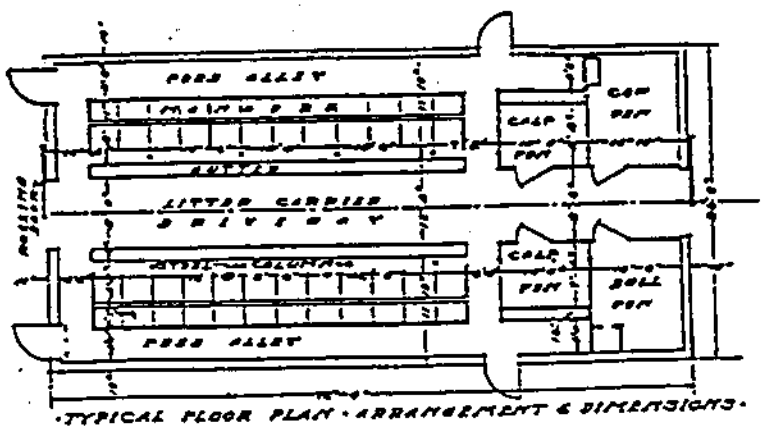
Concrete is the most desirable material for the dairy barn floor. For the standing platform, wood blocks or cork brick are commonly used. The latter materials are laid on a concrete base (see sketches of typical dairy barn floor plan in Figure 18).

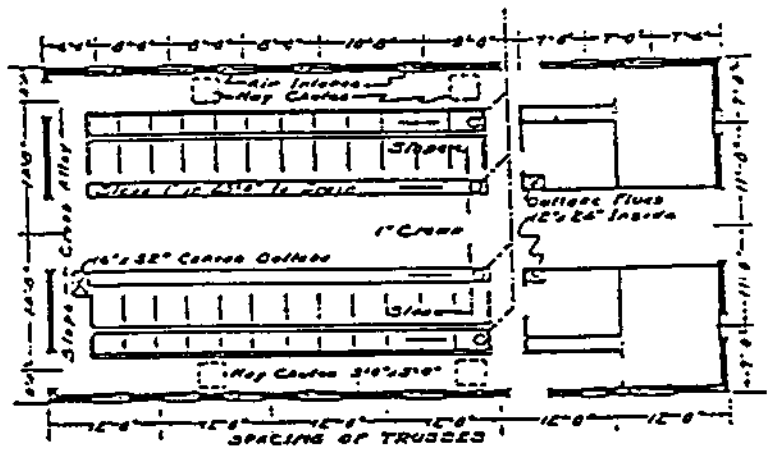
The dairy barn should be located on a pre-1930 farmstead usually about 150 to 200 feet from the farm house and in the direction away from the prevailing summer winds. It should be located on its original site.

During the last quarter of the nineteenth century, the Agricultural Experiment Station at the University of Wisconsin developed a type of barn suited to the dairy industry. It became popular throughout the Midwest and Great Plains and would likely be the style found on dairy farms in Region 5.

Wisconsin Dairy Barn

The combination of lumber-truss construction and the gambrel roof was followed. The Wisconsin dairy barn is normally only about 36' wide, but often a hundred feet or more in length. Because of the narrow width the Wisconsin dairy barn prototype provides excellent interior light, one of its most important advantages. Rows of small windows are designed to maximize light penetration. The interior is arranged to accommodate two rows of stanchions, with horse stalls at one end. The main central aisle runs from





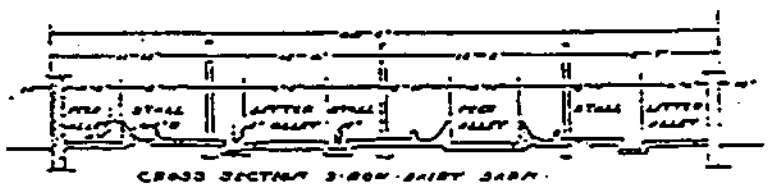


Figure 18
Floor Plan and Cross Section
Typical Dairy Barn

gable to gable and a short transverse aisle may connect doors midway on the sides of the structure. Ceiling heights are rarely more than 8 to 9 feet, to conserve the heat generated by the animals in the winter. The Wisconsin dairy barn incorporates a system of ventilator chutes in its interior design in order to provide sufficient ventilation for cooling. Conspicuous roof ventilators are thus usually an exterior feature of Wisconsin dairy barns. The very large loft, created in part by the gambrel roof, provides maximum storage area for the hay and feed requirement of large dairy herds (see Figure 19).

II. Significance

Dairy barns were a significant property type in Management Region 5 prior to 1930 because milk production averaged over 1 million gallons per county by the year 1910. During the next 20 years, milk output increased to over 2.5 million gallons per county per annum. Dairy barns as a separate farmstead unit became increasingly necessary because of the type of commodity produced in them--milk. Because it was used for human consumption, sanitary requirements of light, ventilation, drainage, and cleanliness became important factors. In most cases, the dairy barn became the second most important building in the farmstead and was kept as clean as the farmhouse kitchen. Another important consideration was convenience and the floor plan of the dairy barn had to be arranged to meet certain specifications if the producer was to market graded milk. The dairy barn was also significant because of the daily demands in the production of milk. Morning and evening the cows had to be milked each day of the year so proper arrangement of equipment was also necessary in order to reduce the amount of labor needed.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, dairy barns should retain integrity of setting, materials, and design. The dairy barn should be located on a pre-1930 farmstead usually about 150 to 200 feet from the farmhouse and in the direction away from the prevailing summer winds. The dairy barn should be placed with the long axis north and south in order to secure direct sunlight on the stalls for as much of the day as possible.

Original construction materials of either wood or stone must be present. Lumber-truss construction and a gambrel roof should be retained to be eligible. The

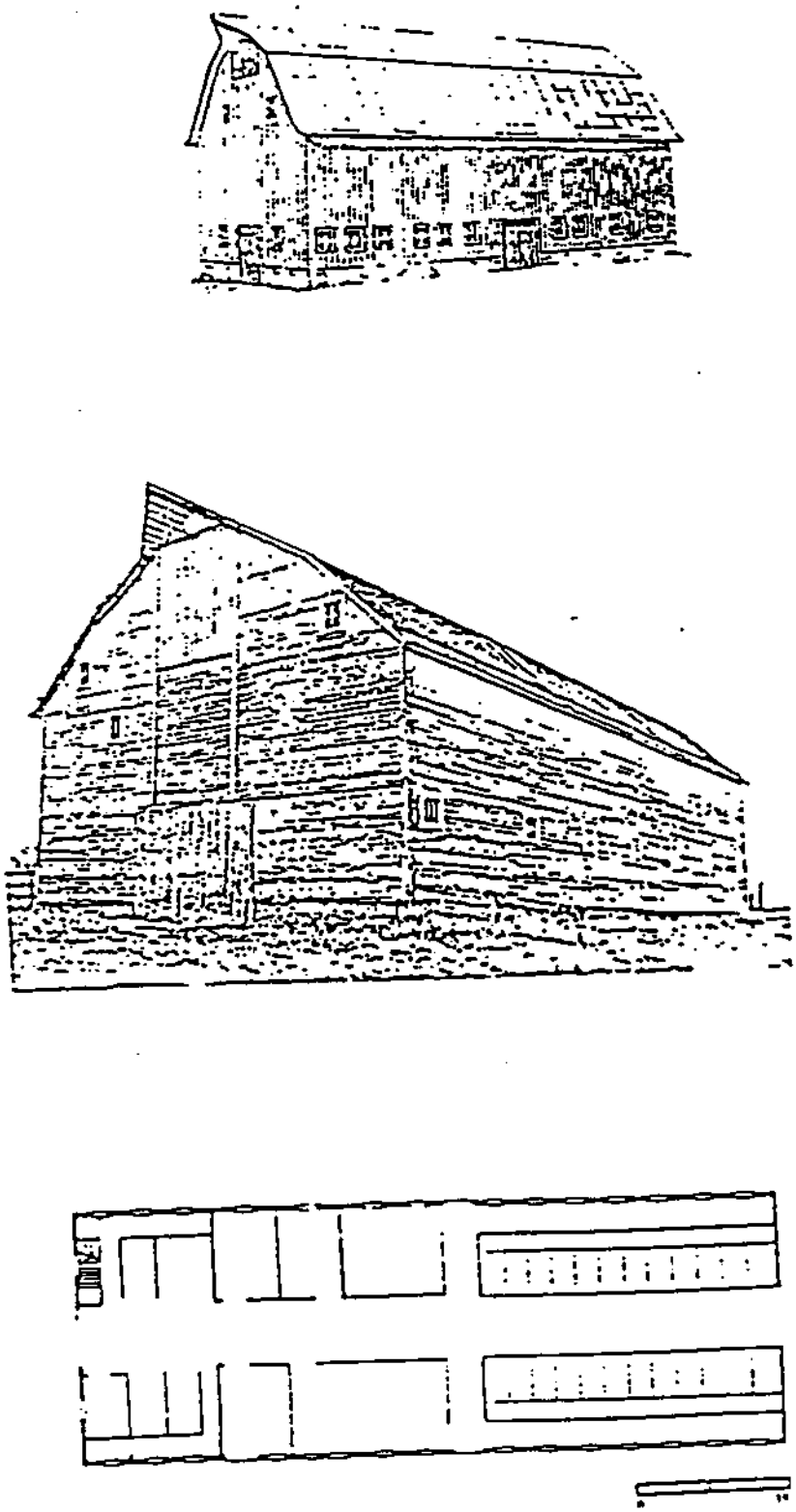


Figure 19
Wisconsin Type Dairy Barn

dimensions may vary, but should be approximately 32′ x 100′ and about 8-10′ high. Dairy barns should contain certain exterior features including rows of small windows and several metal cupolas on the gambrel roof ridge to provide ventilation. Roofing materials may have been replaced over time due to weathering, however, the basic roof lines must remain intact.

The dairy barn should not have any additions and be free of new siding or any materials that would affect its historic and architectural integrity.

The dairy barn's eligibility should also be based on the fact that it was a working dairy barn on a pre-1930 farmstead and was a building located within a pre-1930 farmstead which was considered a working farm operation.

FARM ANIMAL STRUCTURES

Hog Houses

I. Description

There are two types of hog houses: movable and community. The most common type of movable hog houses are the gable-roof, combination, and A-shaped. The gable-roof hog house has a vertical side wall of about 2 1/2′, and utilized the full area of the floor. The roof is of two equal pitches. End doors are provided for entrance, and large doors are placed in one slope of the roof, for airing and sunlight. The side walls may be nailed tightly to the studding, or they may be hinged at the top to open outward, to provide shade in the summer. The object of the combination-roof hog house with unequal pitches is to afford more headroom and more direct sunlight when the house is faced to the south. The construction is not essentially different from the gable-roof house. The A-shaped house does not have side walls, but the A-shaped roof is carried to the floor. This simplifies the framing, and reduces the amount of material needed. The angle of the roof with the floor affords a space which protects the little pigs from being crushed by the mother. The sides may be hinged at the side or top, forming doors. The door hinged at the top provides shade, while the doors hinged at the side permit better airing and direct sunlight.

Construction of the movable house types is practically the same. The size found most satisfactory is 6′ x 8′. The runners or the sills of the house should be made of 4" x 4" fir, cypress, or other moisture-resistant wood, beveled at the ends for easy moving. For the floor 2" x 12" lumber is necessary, the planks being nailed directly to the runners. Framing is entirely of 2" x 4" material, usually yellow pine. One thickness of covering of 8" or 10" shiplap is all usually needed.

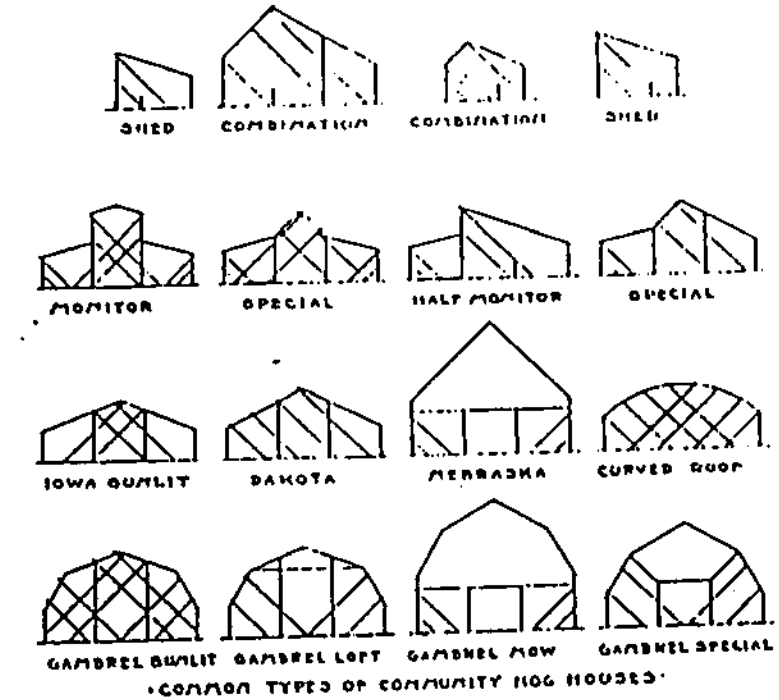
There are several types of community hog houses which are categorized by roof type: shed roof, combination-roof, monitor, half-monitor, gambrel, and gable roof. The shed roof type is usually a one-row house, 12 to 14 feet wide. The roof consists of a single pitch, and the windows are in the front wall. The rear wall is about 5′ high, and the front wall is 6 to 9 feet in height. It is used for the one-row or small two-row house. The monitor roof house is set north and south and has no windows in the roof. The monitor or center portion is made higher, and a row of windows placed on each side of the monitor, for the

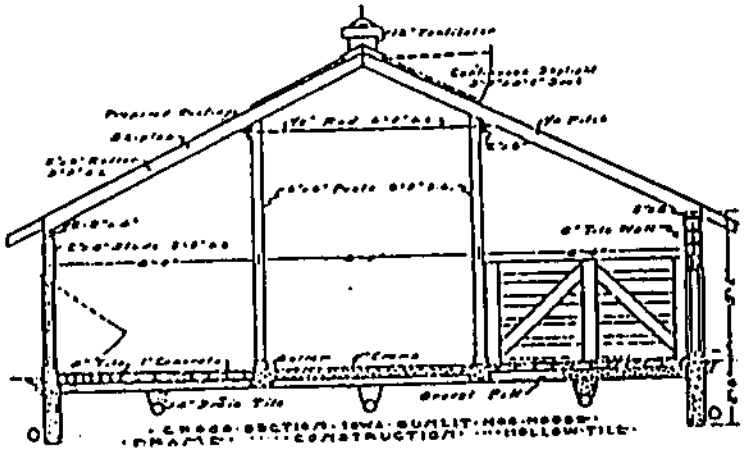
purpose of getting direct sunlight. The half-monitor roof house is popular as a south-front house. The side walls are 4 to 5 feet high, and the total height of the house is 12 to 14 feet. There are two rows of windows, one row in the upper and one row in the lower south wall. The gambrel roof with two slopes on each side affords good lighting arrangements. There are four rows of windows in the roof, providing light in the pens throughout the day. The gable-roof house has three variations: Iowa Sunlit, the Nebraska, and the Dakota. The Iowa Sunlit is set with the long axis north and south, a continuous row of windows being placed in each slope. The Nebraska house is set north and south, but the walls are made 6 to 7 feet high, with all windows in the side walls. The roof is made at a half pitch, and feed and bedding storage is provided in a loft. The Dakota type has the long axis to the east and west, and has two rows of windows in the south slope. The doors may be omitted from the north wall, and the wall banked for warmth (see accompanying sketches of movable and community hog house types in Figure 20).

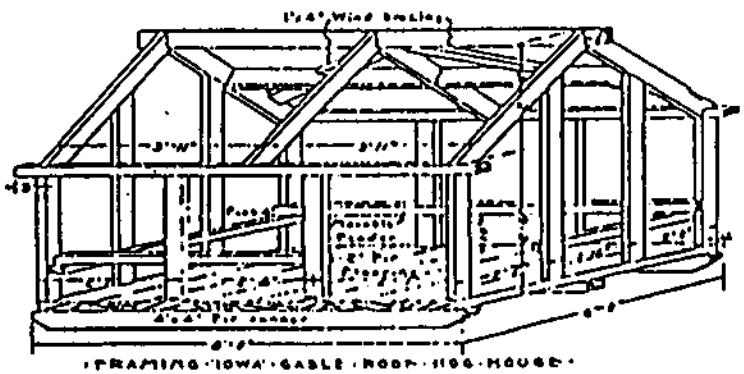
Poultry House

The two types of poultry houses in common use are the colony, or small house, and the community, or permanent house. The colony houses are usually built on sills, which serve as runners so the house can be moved. Four by four-inch wood sills are commonly used in the construction, together with 1" flooring, 2" x 4" framing, and tight boards for the covering. Two types of roofs are used for the colony house. The shed-roof house is 5′ high at the rear and 7′ high in front with a door and window in the south side. A size of 6′ x 8′ is standard for the shed-roof house. The gable-roof house, usually 6′ x 8′, has side walls 5′ high with a door and window in the end.

The community poultry house may be classified by roof type: shed, gable, combination, or half-monitor. The shed-roof house is usually 14 feet wide. The roof is a single slope, and the house should face south. The north wall is made 5′ high, and the front is about 8′ high. The walls may be either of hollow tile or frame. This type house is frequently built with an open front. The gable-roof house has two-slopes, low walls, and a steep-pitch roof. The windows are placed in the gable ends. The combination roof house has a short rafter in the south slope, giving more headroom than the shed type. The south wall will accommodate full-size windows, and the doors are placed in the ends. The half-monitor, or "sawtooth" house has a front wall covered with screened openings, and







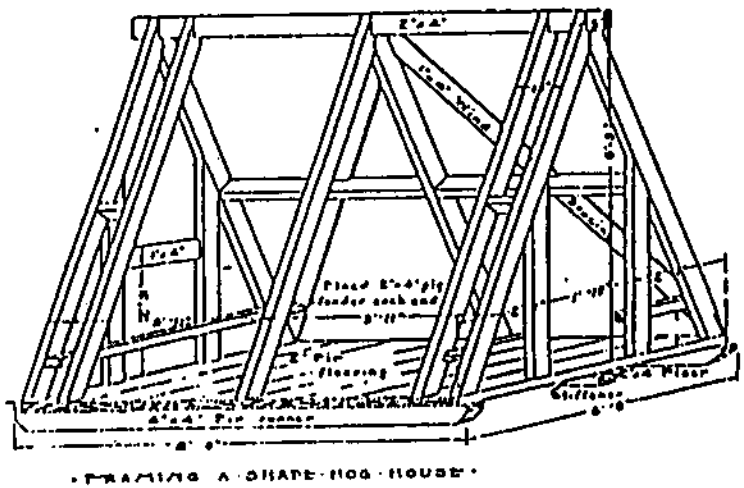


Figure 20
Types of Hog Houses

adjustable windows in the monitor, or center of the house. The front part provides a scratching shed 8 or more feet wide, and the usual width of 10 feet is available for equipment (see Figure 21).

Feeding Barns for Beef Cattle and Sheep

Although there are various shapes and kinds of structures used for feeding livestock, the common ones may be classed as either open-shed barn, monitor barns, or closed barns. The open-shed barn may be a single shed, closed on three sides, and open to the south, or it may be L- or U-shaped, open on the yard. One-story sheds with one slope, gable, or combination roof are economical. Two-story shed barns are open along one side, but there is a loft for hay storage. Shed barns are often connected in the form of an L to the general purpose barn.

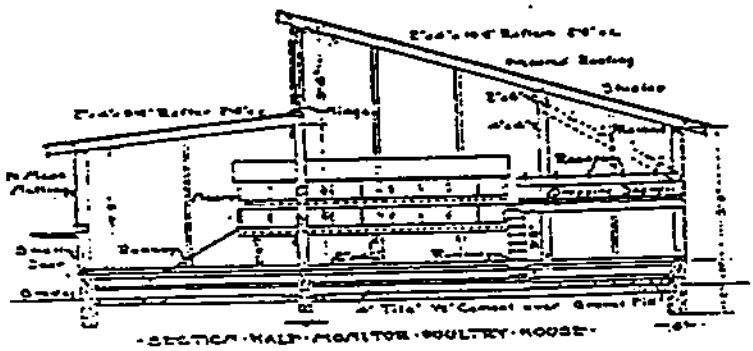
The monitor barn consists of a main part, 16 to 24 feet wide, for hay storage, and the hay space extends to the ground. On two or three sides of the barn are sheds for the stock, each 14 to 20 feet wide. Hay is fed into racks from the loft, and wide doors are provided at the ends of each shed.

The two-story closed barn harmonizes well with the other barns on a farmstead, affords ample hay storage overhead, and can be built with a self-supporting roof. The hay can be fed through chutes. The feed alley is usually built higher than the pen floors (see attached sketches for beef and sheep barns in Figure 22).

Farm animal structures should be located on a pre-1930 farmstead and must stand on their original sites. Hog houses should be located on a site farthest away from the farmhouse, poultry houses should be located closer to the farmhouse than other farm buildings, and sheep and beef cattle barns should be located near silos, cribs, or main barn.

II. Significance

Farm animal structures were significant resources in Management Region 5 because all ten counties were raising cattle, sheep, swine, horses, mules, goats, and poultry by 1910. The number of swine in 1910 ranged from 8,743 in Murray County to 28,478 in Garvin County. Horse population ranged from 3,604 in Love to 12,083 in Pottawatomie. Poultry figures indicate a range of 40,569 in Murray to 193,530 in Pottawatomie. Finally, sheep production ranged from 11 in Marshall to 416 in Johnston. The number of mules ranged from



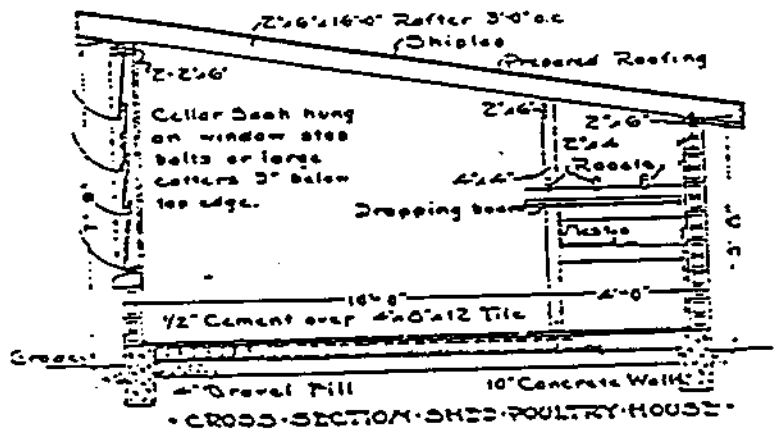
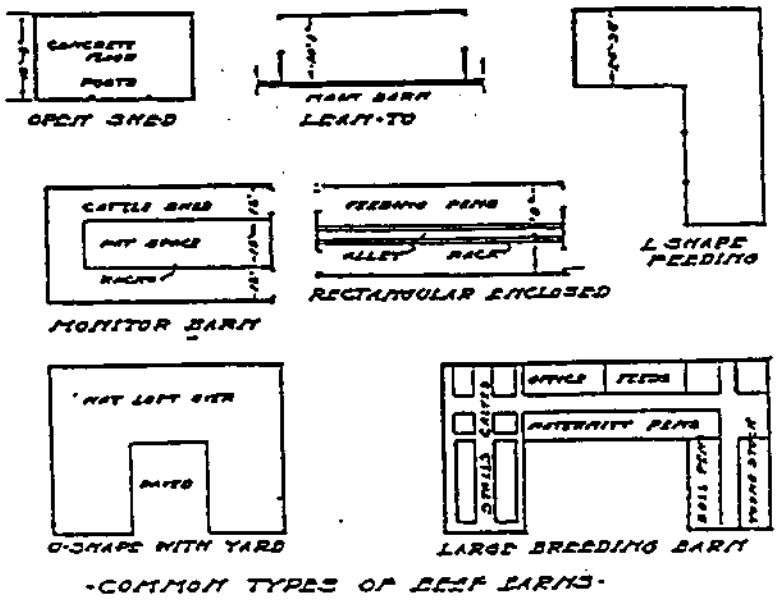
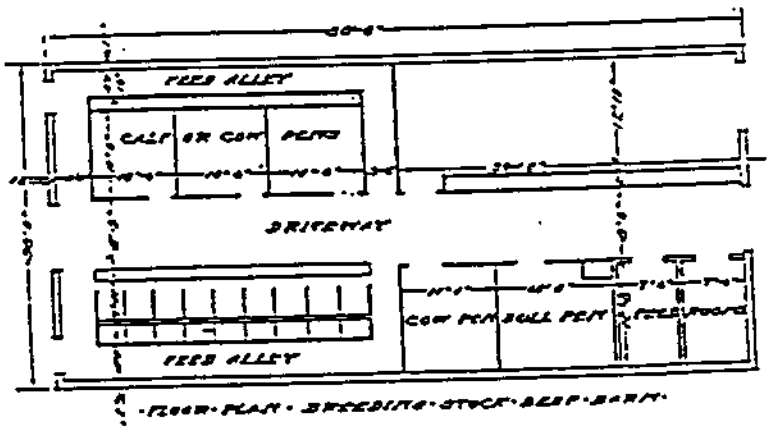


Figure 21
Types of Poultry Houses





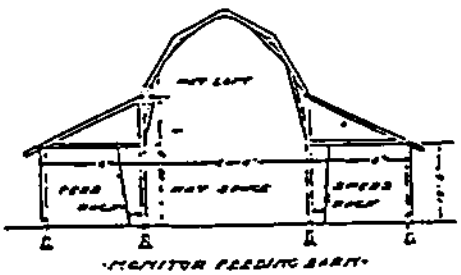


Figure 22
Beef and Sheep Barns

1,506 in Murray to over 5,500 in Garvin. Goat production ranged from 38 in McClain to 312 in Carter. By 1930, swine production was over 10,000 in all counties except one. Sheep and goat production had increased in all ten counties, horses and mules numbered more than 2,000 in each county, and poultry had reached to over 50,000 in each county. Proper housing for farm animals resulted in a more sanitary farmstead and a more healthful place for the animals. Fewer losses resulted from disease and more animals per herd or flock were raised. Better housing also helped in reducing labor. Furthermore, it was essential that livestock be handled in good quarters if the farmer was interested in development of pure-bred breeding.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, farm animal buildings should retain integrity of setting, materials, and design.

Hog houses should be located on a pre-1930 farmstead farthest away from the farmhouse. They should be located on a working farm and should have been used to provide shelter for hogs and their letters. Hog houses should follow one of the basic designs that were in use prior to 1930. These included shed, monitor, half-monitor, gambrel, or gable. Walls of the hog house must include original construction materials of either frame or concrete. Roof framing should consist of 2 X 4 or 2 X 6 material. The design style should be either community or portable, although the latter may have been removed from its original site.

The poultry house should be placed with the long axis east and west, and may be located closer to the farmhouse than other buildings. It must be located on a pre-1930 farmstead and should have been used to house laying hens on a working farm prior to 1930. Construction materials should be timber frame, however, hollow tile walls were also in use prior to 1930. The design should follow either the colony or community style, both were common during the pre-1930 period. Colony type houses should possess a shed roof, whereas the community style houses may be either shed, gable, or half-monitor. Windows should be placed in the south wall of the poultry house to furnish sunlight.

Sheep and beef cattle barns should be located on a pre-1930 farmstead and should be placed near silos,

cribs, or main barn. They should stand on their original construction sites and should have been used for housing and feeding sheep and beef cattle on a working farm operation prior to 1930. These barns should contain original construction materials, either wood or stone, and should follow one of the pre-1930 designs--open-shed, monitor, or closed. The open-shed barn should be a single-shed either closed on three sides and open to the south, or L-or U- shaped open to a yard. The monitor style should be 16 to 24 feet wide with sheds 14-20 feet wide on either side. The closed barn should be two stories with the second floor used for hay storage.

GRANARIES AND CRIBS

I. Description

Grain was a principal crop on a large number of farms in Region 5 prior to 1930. The market value of grains made it essential that care be taken to preserve and market the crop in the best condition. Lack of proper structures to house grain resulted in losses due to weather condition, rodents, and fluctuating prices. Moreover, a good grain storage facility made it possible to hold the crop for favorable prices.

The three types of storage buildings for grain are the corn crib, granary, and combined crib and granary, or farm elevator. If corn is the only product to be stored, the separate crib for ear corn, with possibly a tight bin for shelled corn is all that is required. The separate granary is used for small grains. The building is tightly constructed with strong walls and heavy floors. All granary designs should be figured for wheat storage as it is the heaviest grain.

The width of the corn crib is determined by the condition of the corn when cribbed. In most sections of the country, the corn is cribbed before it is fully dry. To prevent spoiling and allow for thorough drying, the width should be between 8 and 9 feet. Double cribs have a driveway 10 to 14 feet wide. Grain bins should not be more than 10 feet wide for convenience. The double crib and granary will be from 20 to 30 feet wide. A length of 36 feet will accommodate the grain on most farms. Ten feet is about the maximum height of bin or crib for hand shoveling. With elevating machinery, the height may be made as desired. The best height is from 16 to 20 feet from foundation to eaves. The capacity of the building is determined by the yields, acreage, kind of grain, and type of farming. The total yield should be calculated, and the grain storage designed to hold the crop.

The most common shape for the combined crib and granary is square or rectangular. Frame construction is easiest to handle in the rectangular building. Hollow tile and concrete were especially adapted to round buildings, and for this reason the round crib and granary have been used.

Individual granaries are characterized by a block of windows and its elevation on several short piers of wood, stone, or cement block. Both of these features

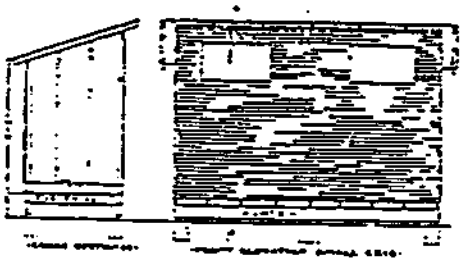
are to make the structure as animal proof as possible and to raise the structure above the damp ground. The interior of the granary was usually divided into a series of bins or compartment for ease of grain holding and to permit storage of more than one grain (see Figure 23).

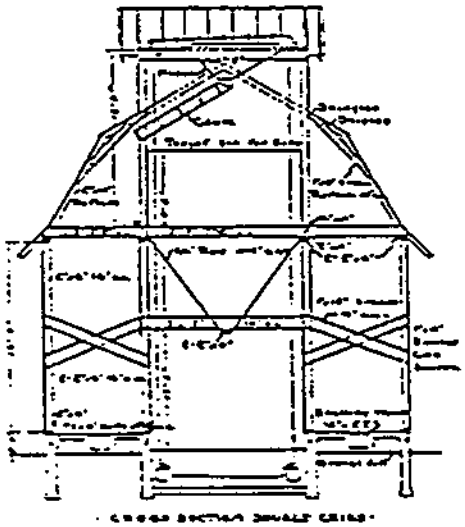
Individual corn cribs were constructed of logs, timber frame, masonry, or metal. One of the functions of the corn crib was to permit the slow drying of the corn in order to reduce losses from mold and mildew. To accomplish this, the crib must possess certain basic design features, which can be used to identify the structure. First, the walls must contain a high proportion of open area, usually attained by use of widely spaced, narrow slats. Second the structure must be narrow in order to ensure adequate circulation of air. Widths ranged from 6 to 10 feet in the Great Plains. The earliest corncribs used unhewn or split logs of small diameter, usually laid up with saddle notching. The bottom most logs were placed on log or stone piers. Although many often were left open, the best cribs had wood-shingle, gable roofs. At a second stage of development, in order to provide the maximum weather protection and, at the same time, to assist in gravity unloading, the sides were constructed to slant outward toward the top, giving the crib a coffinlike gable profile (see attached photo in Figure 24). The largest opening is usually a man-size door in the gable wall. A final diagnostic element of the early corncrib design was the use of an overhanging skirt of lumber or metal, about a foot or two above the ground. This was a device to reduce as far as possible the depredations of rats, mice, and other small animals.

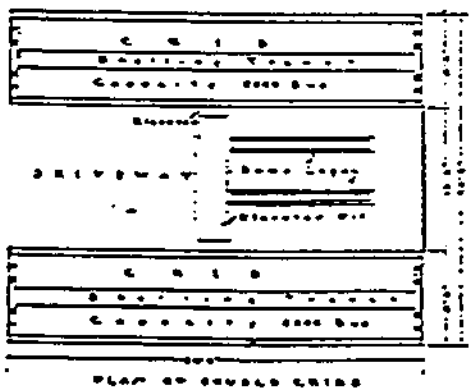
Granaries and cribs should be located on a pre-1930 farmstead in a rural setting and should stand on their original construction sites. They should be located near the feeding barns, hog house, and poultry house in the farmstead plan. They should be located so that a wagon may be driven through it, or pass alongside.

II. Significance

Granaries and cribs as agricultural structures were an important class of resources because corn, wheat, and oats were principal crops raised on farms in Region 5 before 1930. By 1930, two counties (McClain and Garvin) produced more than 1 million bushels of corn each year and three counties (Garvin, McClain, and Marshall) produced more than 200,000 bushels of oats. The market value of these crops made it imperative to preserve and market them in the best







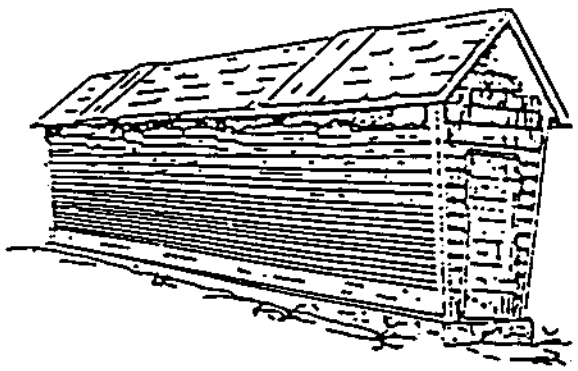


Figure 23
Single and Double Corn Cribs

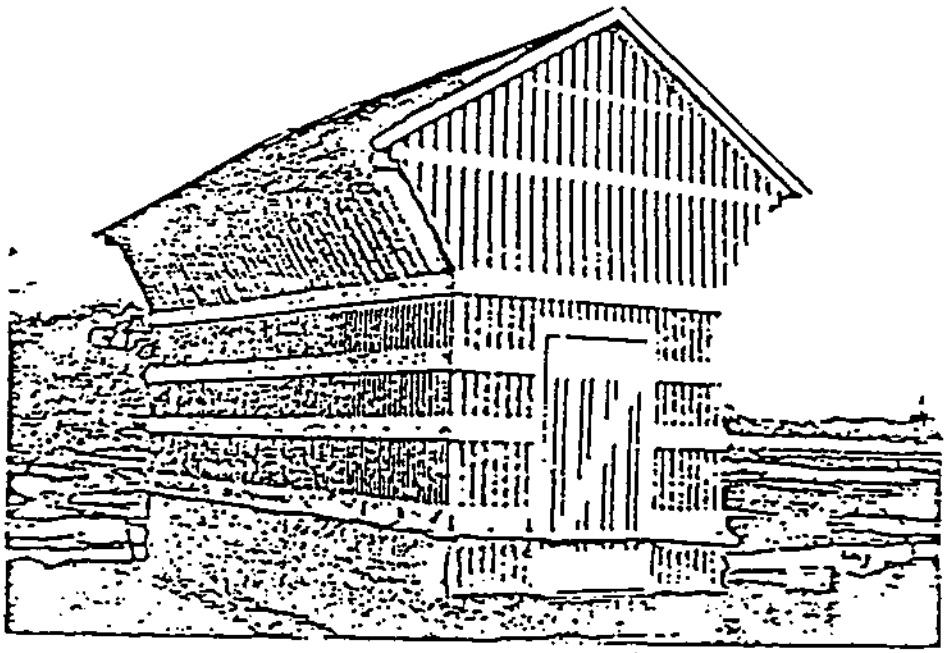


Figure 24
Corn Crib of Unusual Design

condition. Lack of storage facilities resulted in losses due to weather conditions, rodents, and fluctuating prices.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, granaries and cribs should be located on a pre-1930 farmstead near the feeding barns, hog house, and poultry house. The buildings should be located so that a wagon may be driven through it, or pass alongside. Granaries and cribs should be located on a working farm of the pre-1930 period and they should stand on their original sites. Original construction materials must remain intact. Either timber frame construction for square or rectangular plans, or hollow tile for round plans, must be present to be eligible. Dimensions should be approximately 8-9 feet wide, 36-40 feet long, and 10 feet high. Corn cribs must possess certain design features to be eligible including widely spaced, narrow slats or sides; narrow in width in order to enhance air circulation; and an overhanging skirt of metal or lumber to protect against rodents.

IMPLEMENT AND MACHINE SHEDS

I. Description

Farm equipment storage facilities were necessary on the farms in Region 5 in the 1920s. The necessary qualifications for machinery sheds were to give protection, afford convenience in storage, and provide plenty of space. To meet the requirements of protection, the machine shed should be tightly enclosed on all sides and have a tight roof. Continuous doors along one side are preferable to the open shed. Windows at intervals will supply light by which to work. A concrete or plank floor is desirable as an added protection. In terms of convenience, correct width, proper location of doors, and large openings are needed. The grouping of machinery according to seasonal use is recommended. Sufficient space dictates taking an inventory of machines, and measurements made to determine the size of the building. A sample inventory of the 1920s is shown in Figure 25. An even width between 18 and 30 feet is customary. The length should be made in units of 10 or 12 feet for best results in storing. Ten feet is the maximum height to accommodate the usual farm machines.

The open-shed building afforded a cheap protection from rain and snow, but was not as desirable as the closed type. The shed was open to the east for best results. The closed building with doors along one side afforded full protection, and was recommended as the best. Two-story buildings had loft space for small machines and tools.

Frame construction was most commonly used. Hollow tile or cement products may be used in the wall construction as in any other building.

The roof shape is usually of the shed, gable, gambrel, or combination type. The combination roof has two unequal slopes with the object of securing greater headroom with the least material.

In terms of construction, the frame walls are made of 1" siding or boarding on 2" x 6" studding spaced 2′ apart, with nailing strips and braces between. The walls should be carried to a height of 10′ to the plate. The roof frame must be cross braced and trussed for strength. The kind of framing will depend on the width.

The floor may be of plank or concrete. Doors should be strongly built, and set on a good type of

Implement	Width	Length
Walking plow	2'	7'
Gang plow	5'	9'
Engine plow, 4 gang	7' 6"	12'
Harrow, per section	1' 6"	5
Disk harrow	8'	4'
Land roller	5'	3'
Grain drill, 8 hoe	5'	10' 6"
Corn planter	6'	5'
1-row cultivator	5'	7'
2-row cultivator	7' 6"	7'
Sulky rake	5'	11'
Side delivery rake	10' 6"	12'
Sweep rake	10'	12'
Hay loader	9'	10' 6" 10' high
Mower	6'	6'
Binder, 7' cut	9'	14'
Silage cutter	7'	12'
26-inch thresher	5'	26'
Wagon	7'	14'
Buggy	6'	9'
Tractor	7'	12'
Automobile		12'

Figure 25
Inventory of Machines
ca. 1925

track and rollers. For the continuous door it is possible to secure a parallel track outfit which makes it possible to open up any part of the building (see attached sketches of implement shed in Figure 26).

Implement and machine sheds should be located on a pre-1930 farmstead and should stand on their original construction sites.

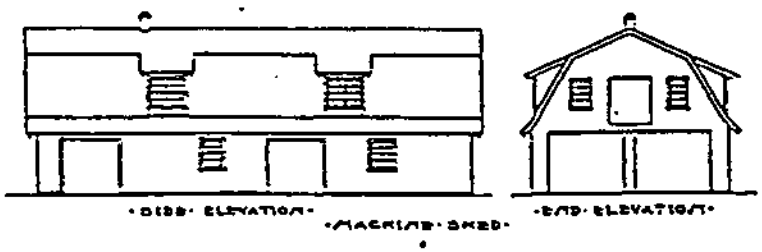
II. Significance

Implement and machine sheds were significant structures in Management Region 5 in the pre-1930 era because farm machines needed care and housing. When farm equipment was simple in construction and low in cost, the loss was not serious and a small space in the barn or crib was sufficient to house the more important implements. However, by the 1920s, farm machinery was becoming expensive and the equipment lost value rapidly when constantly exposed to the weather. U.S.D.A. reports in 1922 placed the annual loss, depreciation due to lack of shelter, at more than 100 million dollars. The value of shelter for machinery was estimated at increasing the life of farm implements by five years or more, a savings which paid for the cost of shelter in a short time. Sheltered machinery, therefore, proved to last longer, retained better appearance, and was more efficient than neglected equipment. The necessary qualifications for machine and implement sheds were that they provided protection, afforded convenience in storage, and allowed for plenty of space.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, implement and machine shed should retain integrity in setting, design, and materials. The machine and implement sheds should be easily accessible from the fields and horse barn. A location on the lane or drive to the fields is desirable. The shed must be located on a pre-1930 farmstead and must have been used to store farm implements and machinery prior to 1930. To be eligible, the shed must be located on its original site.

Construction should consist of original timber frame materials with no major additions or alterations. It should be free of any synthetic siding or other materials which would detract from its architectural integrity. Original roofing materials may have been replaced with corrugated metal, however, the original roof lines should remain intact.



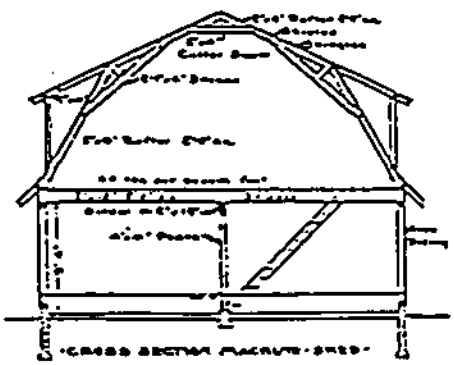


Figure 26
Machine Shed Construction

The design of the machine shed should be about 18 to 30 feet wide, length should be in units of 10 or 12 feet, and height should be 10 feet. The roof shape should either be shed, gable, or gambrel, all were used in the pre-1930 period. Interior space should be arranged with the idea of storing machinery by groups according to seasonal usage. Doors should be located on each side of building in order that wagons, spreaders, and tractors may be driven in and out of the shelter without hand labor.

To be eligible, the machine and implement shed must be associated with a farming operation that existed prior to 1930.

SILOS

I. Description

The silo as a property type is one of the most important buildings on the farm for the preservation of green forage. Construction materials are of either wood or masonry. There are five types of wood silos: (1) wood-stave, 92) panel, (3) triple-wall, (4) wood-hoop, and (5) creosoted-stave. Masonry silo types include: (1) brick, (2) hollow tile, and (3) concrete. Concrete silos may be concrete block, cement staves, or monolithic concrete.

The most common wood silo is the wood-stave type. The staves are made from a high grade of cypress, white pine, redwood, fir, or hemlock. The size of the stave is about 2" x 6", and each one is beveled to fit the curve of the silo, and tongued and grooved to give a tight fit. Bracing by means of stay wires is necessary to prevent the silo from blowing down.

The panel silo consist of ribs or uprights set 20-24" apart, and matched boards set horizontally between the ribs. Steel hoops are placed around the silo and hold the boards in place. This silo is not round, but is in the form of a many-sided polygon, each panel being straight.

The triple wall silo is the ordinary stave type with a layer of insulating material over the staves, and a thin drop siding bent to form, and nailed over the outside. The siding serves as hooping, and protects the staves.

The wood-hoop silo is made by building large wooden hoops, from four to five thicknesses of thin wood, bent to the circle. They are spaced 24 to 30 inches apart, and matched flooring is placed inside and outside the hoops. This affords a double wall with dead air space.

The creosoted-stave silo is the wood stave type treated with creosote preservative to lengthen the life of the wood. The three methods of creosoting are painting, dipping, and immersing under pressure. The latter method is preferable as the creosote is forced into the pores of the wood.

The brick silo is the most common of the masonry group. Paving brick are used in the construction of the brick silo. The chief difficulty is to secure proper horizontal reinforcing in a 4-inch wall, with a narrow mortar joint. A flat bar, crimped on the inner

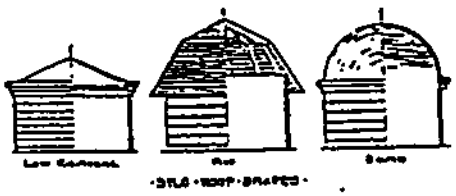
edge to form a curve, is used. The bar is about 1/8" x 1 1/2" in size, and bonds well into the joint. The wall should be laid up carefully as it is not porous. The interior is plastered with a cement mortar to insure a smooth, tight wall.

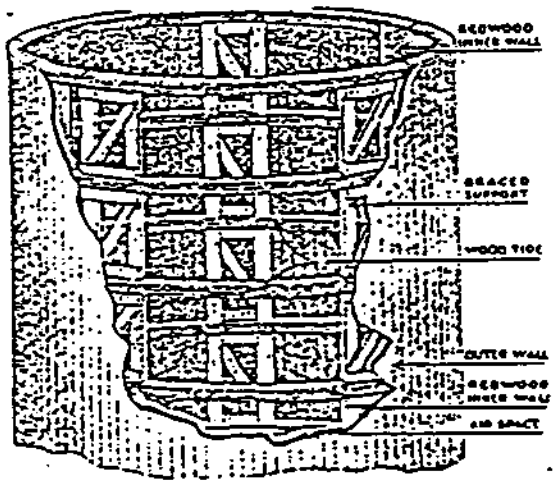
The use of hollow tile or clay blocks was first used in 1908. The blocks used are 4" to 6" thick. One or more air spaces are formed in the block. Some blocks have special grooves to receive the reinforcing. The silo blocks are curved to the form of the silo wall. The reinforcing consists of heavy steel wire embedded in the mortar joints. Reinforced concrete jambs are used, and these are tied across at intervals, to prevent spreading. The continuous door is used. The mortar joints should be pointed both on the inside and outside wall as a precaution against leakage. Since the vertical joints are the weakest part of a tile silo, care must be taken to fill the joint and secure a good bond. As an additional safeguard the silo should be given a wash of pure cement and water inside to fill the pores. Either the conical or gambrel roof may be used (see Figure 27).

For the concrete block silo, any number of patented blocks may be used for construction. Some are curved, and have imitation rock faces. Others are made in various forms, and named from the form. Reinforcing is either embedded in the block or placed in the mortar joint. Stucco is sometimes applied to the surface for appearance and to fill up the pores. A pure cement wash is applied to the interior.

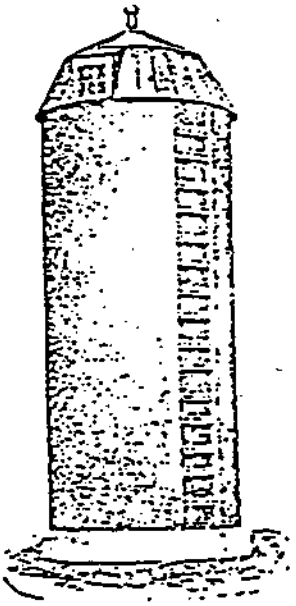
The cement-stave silo was first used in 1904. The Playford cement stave is book-shaped, 2 1/2" thick, 10" wide, and 28" long. The Interlocking patent has an interlocking end joint. The Caldwell block has an end step joint and reinforcing in the block. The Perfection block has a hollow side joint which is filled with mortar. The staves are set with the end joints broken, or interlocked, and the silo staves bound with steel hoops, similar to the wood staves. In medium or large silos, it is advisable to place a hoop at the middle and end of the stave, or about 15" apart. This requires special door spreaders for the hoops. The hoops are 9/16 to 5/8 inch in diameter, and threaded at the ends. After the silo is erected, the hoops are tightened, and the interior given a cement wash.

Monolithic concrete silos are of solid concrete. Standard forms are used, and the entire work is done on the building site. The walls are usually built of a rich mixture of concrete in the proportion of 1:2:4.

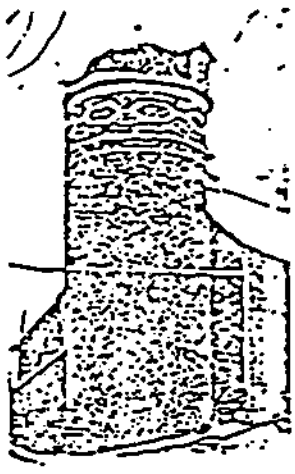




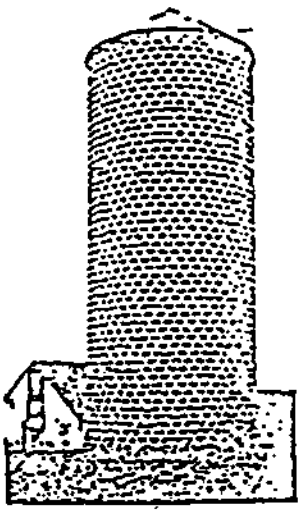
Wood Hoop Silo
Construction



Wood Hoop
Silo



Brick Silo



Hollow Clay Silo

Figure 27

It should be well spaded to give a smooth wall, and prevent the aggregates from separating. The reinforcing is embedded in the wall (see Figure 28).

The solid concrete foundation is the most common of all silo types. It should be made 10" wide, and extend from below the frost line to a point several inches above grade. A 1:2:4 wet mixture of concrete should be used. The trench should be laid out to the diameter of the silo. The foundation should be 3 1/2 to 4 feet deep.

Doors for the silo may be of individual or continuous type. The individual doors are spaced at intervals of about 4 feet on centers, each door set in a separate frame. The continuous door has sides, or jambs of masonry or steel, and cross-ties prevent the jambs from spreading, the ties serving as a ladder in many silos.

Chutes are used to cover the doors, and afford a means of throwing down silage without trouble from the wind. Chutes may be of wood, metal, or concrete.

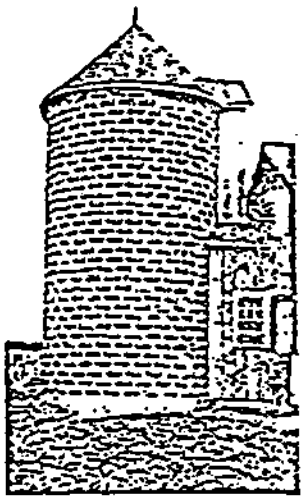
Roof types of silos vary and in many localities no roof is used. The two roof types commonly found are the low conical and the round gambrel, sometimes know locally as the "hip" roof. The conical roof may be made of wood, concrete, or metal. The wood roof is of ordinary frame construction , using 2" x 4" rafters, sheathing, and shingles. The gambrel roof is made of frame construction. The metal roof is a commercial product. Concrete roofs must be reinforced and supported until concrete has set.

During the pre-1930 period, silos ranged in diameter from 10-20 feet and were 28 to 40 feet high.

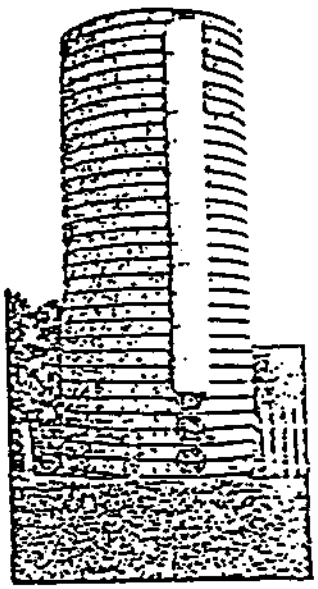
Silos should be located on a pre-1930 farmstead near the dairy barn or beef-feeding structure. They should be located on their original construction site.

II. Significance

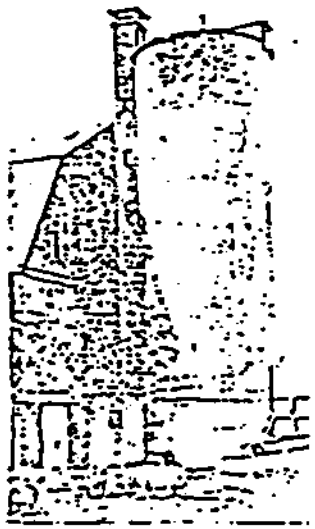
Silos played an important role in the agricultural history of Management Region 5 because they allowed farmers to preserve green forage. The silo afforded an economical storage, preserved the corn or forage crop in a succulent, palatable condition, and utilized the crop completely as a feed. A silo must possess several features essential to insure good, sweet silage.



Concrete Block Silo



Concrete Stave Silo



Monolithic Concrete Silo

Figure 28
Concrete Block Silo
Concrete Stave Silo
Monolithic Concrete Silo

Essential features include strong, smooth, and tight walls. Walls should be made sufficiently strong, by reinforcement, to resist the bursting pressure of the silage. During settlement of silage, the silage slides down the wall. Projections or rough joints hinder free and easy settlement, and air pockets are formed, which causes spoilage. Silo walls must be air and water tight--retention of moisture inside the silo and exclusion of air.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, silos should retain integrity of setting, materials, and design. The silo should be located on a pre-1930 farmstead near the dairy barn or beef-feeding structure. It must stand on the original site of construction and should have been used to store silage.

Original construction materials must be present. The wood-stave type should be constructed of cypress, white pine, fir, or hemlock. The size of the stave should be approximately 2" x 6", and each one should be beveled to fit the curve of the silo, and should be tongued and grooved to give a tight fit. The panel silo should consist of wood ribs or uprights set 20-24" apart with matched boards set horizontally between the boards. Steel hoops should be placed around the silo to hold boards in place. The wood-hoop silo should be made of large wooden hoops, from 4-5 thicknesses of wood, bent to the circle and spaced 24-30" apart. The brick silo materials should include paving brick walls, usually 4" thick, with a narrow mortar joint. It should also contain a flat bar, crimped on the inner edge, to form a curve. The bar should be 7 1/8" x 1 1/2" in size and bonded into the joint. The interior should be plastered with a cement mortar. The hollow tile or clay block silo should consist of blocks approximately 4-6" thick. Reinforcing should consist of heavy steel wire embedded in the mortar joints. The mortar joints should be pointed on both the inside and outside walls.

In terms of design, silos should range in diameter from 10-20 feet and 28-40 feet high. Roof types should be either low conical or round gambrel, both were common in the pre-1930 period. The conical roof should be constructed of wood, concrete, or metal. The wood roof should be made of frame construction using 2" x 4" rafters.

The silo to be considered for eligibility must be associated with a farming operation in Region 5 prior to 1930.

FARMSTEADS

I. Description

The farmstead is defined as the individual locations of buildings, arrangement of buildings in relation to one another, and the location of driveways, trees, and other features which comprise the total picture. There were two types of farmstead in use prior to 1930: concentrated and distributed.

The concentrated group includes all of the buildings under one roof, or all of the buildings connected, that is the structures are connected to form a sheltered yard or court. The advantage of this type is in economy of construction and the convenience of handling the work. The disadvantages are that fire risk is great, animal odors are objectionable in the house, and the year space for stock is restricted. Few farmsteads of the concentrated type were used in Oklahoma prior to 1930.

The distributed system of farmstead was the type most commonly found in Oklahoma prior to 1930. The buildings are far enough apart to avoid stable odors in the house, fire risk is decreased, and better sanitary conditions exist. The buildings should, however, be located closely enough together to reduce to a minimum the labor required.

The best farmsteads usually arrange the out-buildings around a rectangle, somewhat to the rear of the house, and on one side. The house is the most prominent building with the main barn next in importance. The object in the grouping is to plan the buildings in such as manner that all may be entered without passing through gates. The feed lots should be located to the rear of the barns and away from the house.

Aside from the main grouping of buildings, others should be located near each other according to their uses. The tool shed, machine shelter, and garage should be near each other because of similarity of uses. The corn crib, hog houses, and cattle-feeding shed should be near together for convenience feeding.

The farmhouse should be nearer to the public road than other buildings with the object of showing the house to the best advantage. The barn, public road, and part of the fields should be visible from the farmhouse. The best distance from the road to the house is between 100 and 150 feet. This location affords a reasonable large lawn, and places the house

away from the dust of the road. The facing of the house is usually made with respect to the road, and an east or south front is usually preferred. The lawn should be fenced in order to keep poultry and small animals away.

The stock barns should be set with the long axis to the north and south, for best lighting, and to form a protection for a sheltered yard. The barn should be 150 to 200 feet from the house, and if possible, in the direction away from the prevailing summer winds.

If hogs are raised, the hog house should be farther from the house than the barns, on account of the odors, but near the cribs, for ease in feeding.

The granary and corn crib should be located for convenience in filling from the fields, and convenient for the shelter and grinder. For feeding work, the grain buildings should be near the feeding lots and hoghouse. There should be a driveway leading to and from the grain buildings. A location between the main barn and the hog house is most desirable.

Machinery shed should be loaded for convenience in getting the equipment in and out of shelter. These buildings may be nearer the house than the barns, while the garage should be near the house.

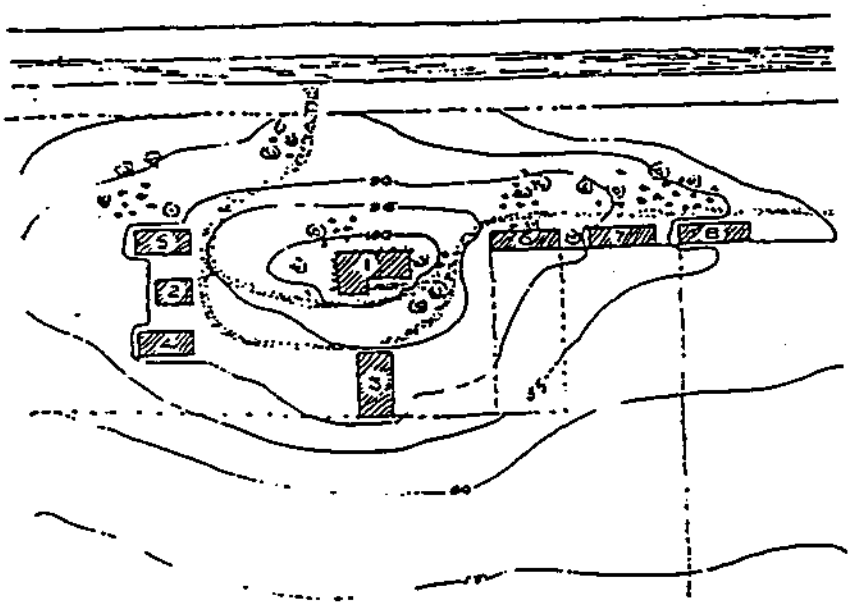
The poultry house may be nearer the dwelling than other buildings, but should be kept away from the barns and grains storage buildings. It should face the south and be located on porous, well-drained soil. The ice house, milk house, and pump house may be located between the house and the dairy barn.

In regard to landscaping, an evergreen windbreak to the north and west of the buildings is desirable. The south side of the buildings should be nearly free of trees in order to take advantage of the summer winds. Fruit trees, shade trees, and flowering plants and shrubs are desirable additions to every farmstead. The farm home should have an orchard and a garden. Most of the planting should be along the side and in back of the lawn rather than in front of the house.

The garden should be near the house, and not closer to the road than the house. The use of a show pasture in the front, or to the side of the farmstead will serve a dual role of displaying the best animals, and providing a clean, permanent pasture near the house, instead of cultivated, dusty fields (see Figure 29).

Figure 29

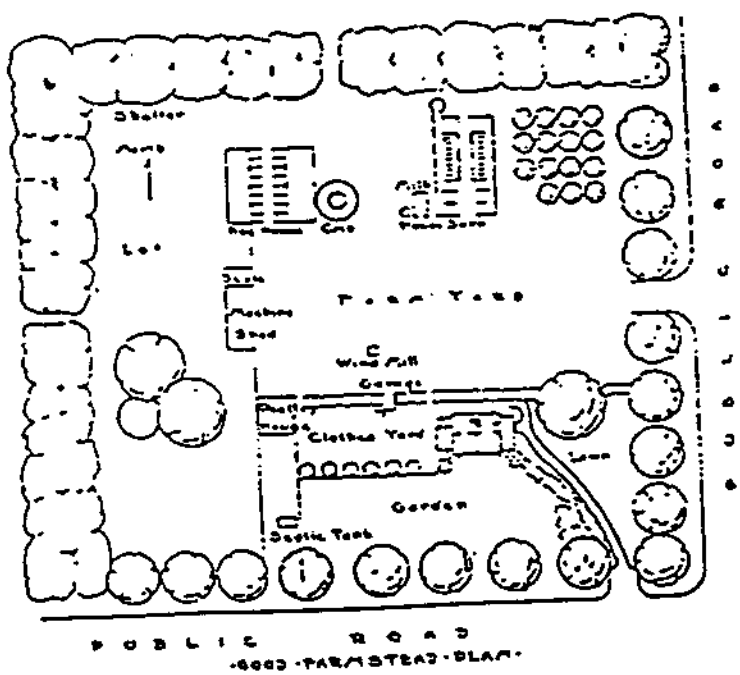
The Oklahoma Farmstead



A North Frontage is Desirable in Oklahoma

If we have a close south of a highway the opportunity for attractive lawn plantings is increased because of protection from south wind; our best shrubs and trees develop on the north side of a building.

1. Residence on the crest of the knoll and protected by conifers from the northwest wind, with deciduous trees to break the hot afternoon sun.
2. Haybarn between the stables.
3. Machinery shed south of the house.
4. Horsebarn close enough to encourage leaving implements at the shed.
5. Dairy barn on well drained soil; a basement barn can be readily built
6. Poultry close enough to be seen from the kitchen.
7. Sheep on the southeast slope.
8. Swine near land level enough for corn and alfalfa.



-6663 -FARMSTEAD-PLAN-

The farmstead should be located on a pre-1930 farm and must be on its original site.

II. Significance

Farmsteads as a property type were significant resources in Management Region 5 in the pre-1930 period because by 1910 all the counties contained between 1,000 and 3,500 farms. By 1930 the total acreage in farmland in Region 5 had reached to more than 4,000,000. The development of a good farmstead plan was advantageous to the farm family because of efficiency, appearance, and sanitation. Efficiency was gained in grouping the buildings in order to reduce the amount of farm labor. Planning of the location of gates and fences as well as distance to the field had a noticeable effect on the efficiency of the worker. Appearance of the farmstead played an important role in the value of the farm and affected the farmer's standing in the community. Sanitation was affected by the contour of the land, drainage, and soil texture. The relationship of the stock barns to the dwelling was also an important factor in sanitation.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, farmsteads should retain integrity in setting and design. Farmsteads should be located with three factors under consideration: outside concerns, natural conditions, and relations of the buildings within the group. Outside concerns should focus on transportation and access to schools, churches, and neighbors. In terms of natural conditions, a water supply source was necessary as well as proper drainage. The farmstead should be located so that surface water is carried away from the buildings. The barnyard should not drain toward the house, or toward a well. A light porous soil is desirable over heavy clay. A timbered area or hill in the direction of prevailing winds in winter affords an excellent windbreak. The distributed system of farmsteads, the most common in Region 5 prior to 1930, should have the outbuildings arranged around a rectangular, somewhat to the rear of the farm house, and to one side. The house should be the most prominent building with the main barn next in importance. The buildings should be arranged so that all may be entered without passing through gates. The feed lots should be located to the rear of the barns and away from the house. The machine shed and garage should be located near each other because of similarity of uses. The corn crib, hog house, and

feeding barns should be grouped together for convenience in feeding.

The farmstead should be associated with a pre-1930 farming operation and should have been used as the focal point in coordinating farm activities, providing shelter for the farm family and farm animals, and storage for farm produce and machinery. The farmstead should stand on its original site.

GRAIN ELEVATORS

I. Description

Grain elevators as a property type may be divided into two classes according to the arrangement of the bins and elevating machinery: (1) elevators which are self-contained, with all the storage bins in the main elevator or working house, and (2) elevators having a working house containing the elevating machinery, while the storage is in bins connected with the working house by conveyors. The working house is usually rectangular in shape, with square or circular bins; while the independent storage bins are usually circular.

With reference to construction materials, grain elevators may be divided into (1) timber, (2) steel, (3) concrete, (4) tile, and (5) brick. Timber was the earliest material used in building grain elevators, and was still extensively used for small county elevators in the early twentieth century in Oklahoma. The working house is a plank and frame structure usually about 70′ x 120′. The first story is built of heavy post and girder work; on top of this are the bins, 45′ deep, and made of 2" laminated planking, and the bins are surmounted by a cupola five stories in height. The walls are covered with galvanized corrugated steel, and the roof is covered with a tar and gravel roofing. The foundation of the working house is a monolithic concrete slab reinforced with steel rods. All timber shall be of yellow pine, furnished rough. The bins shall be constructed of planking in courses laid as follows: all walls shall be laid up plumb and true, forming square corners in the bins. Each course of planking shall be securely nailed with 30-d wire nails 4 1/2" long. At all interior crossings two nails shall be driven in each end of each piece of plank in the 4" and 6" walls. The floors shall consist of two thicknesses, the first to be 7/8" shiplap, the second layer to be a 2" x 6" dressed on one side and matched through the tracks, and the second layer over the balance of the floor shall be a 1" x 6" flooring. All flooring should be thoroughly dry yellow pine. The floor of the engine house shall have the bottom thickness of 7/8" shiplap and the top thickness of 1" x 2" dressed and matched hard maple flooring (see Figure 30).

During the early part of the twentieth century, steel became the principal material for grain elevators. In designing steel grain elevators, particular attention should be given to the horizontal joints of the bin, and to the strength of the bin to

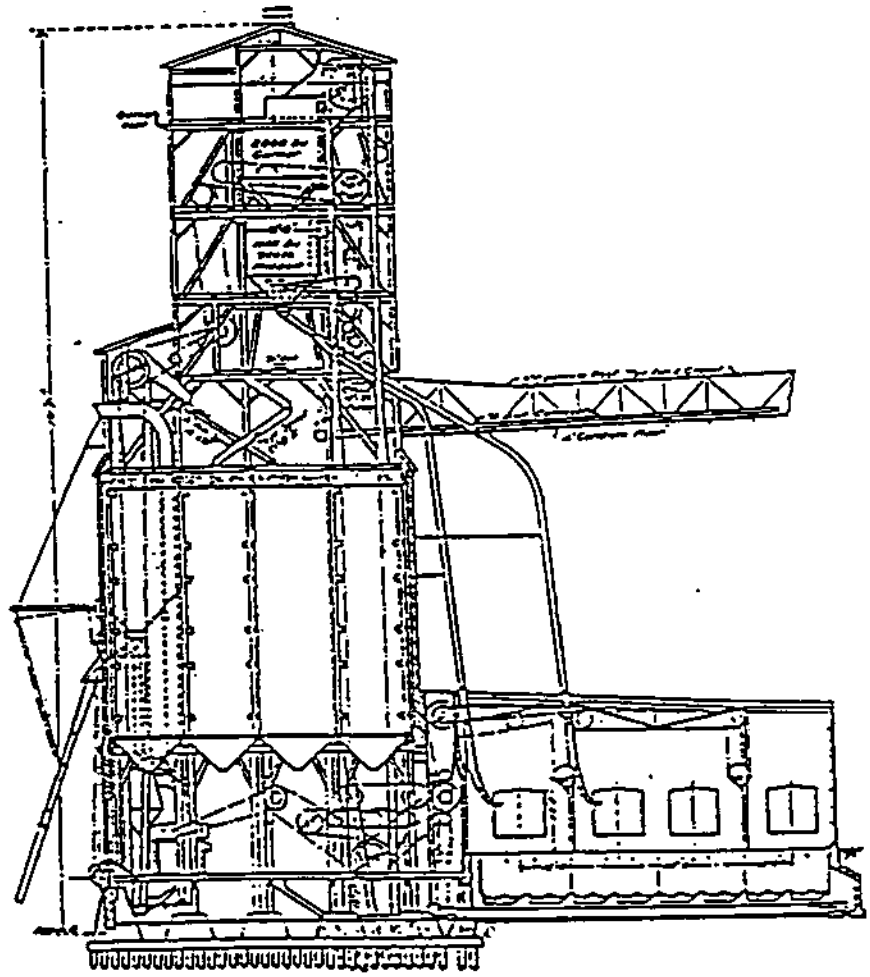


Figure 30
Transverse Section of
Timber Working House

act as a column to support the grain. These elevators generally consisted of a steel working house having a bin capacity of approximately 240,000 bushels and eight steel storage bins having a storage capacity of around 100,000 bushels each, making a total storage capacity of over 1 million bushels. The steel working house is approximately 64′ x 70′ with 14′ sheds on two ends and one side. The sub-story of the building is 26′. The bins are approximately 65′ high and are supported by steel columns. The spouting story is 24′ approximately high; the garner and scale story is 26 1/2′ high; and the machinery story is 13′ high. The walls below and above the bins are covered with No. 24 corrugated steel laid with 1 1/2 corrugations side lap and 3" end lap. The roof is covered with No. 22 corrugated steel laid directly on the steel purlins and 2 corrugations side lap and 6" end lap. The eight steel storage bins are 44′ in diameter and 80′ high and rest on separate concrete foundations. The bins are constructed of steel plates stiffened with Z-bars. The bins are covered with a steel plate roof supported on roof trusses. A conveyor gallery 10′ wide and 8′ high extends from the working house over the bins (see Figure 31).

Reinforced concrete elevators were in use by the time of statehood in Oklahoma in 1907. They were commonly built following Type 2, i.e., elevators having a working house, which contained the elevating machinery, connected to the storage bins by conveyors. The working house was usually built of steel or timber, and the bins of reinforced concrete. The circular concrete bins were approximately 42′ outside diameter and 80′ high with walls of concrete 9" thick reinforced with steel rods. Horizontal reinforcing rods were 3/4" in diameter and vertical rods were 5/8" in diameter. The lapped portions of the horizontal rods and the crossings of the horizontal and vertical rods were to be fastened together with No. 14 annealed wire, or steel clips. The roofs of the tanks are to be made of 3" book tile supported by steel purlins, covered with a tar and gravel roofing. The floor of the conveyor gallery is to be made of 3" book tile, supported on a steel framework , and covered with a top dressing composed of one part Portland cement and two parts sand.

In the tile grain elevators, the working house is constructed of steel or timber and the bins of tile. The storage tank walls will consist of special semi-porous hollow tile made to conform to the circular nature of the tank. The main wall tile shall by 12" x 12" x 6", the channel tile 12" x 4" x 5", the outside facing tile made of similar material, but semi-glazed

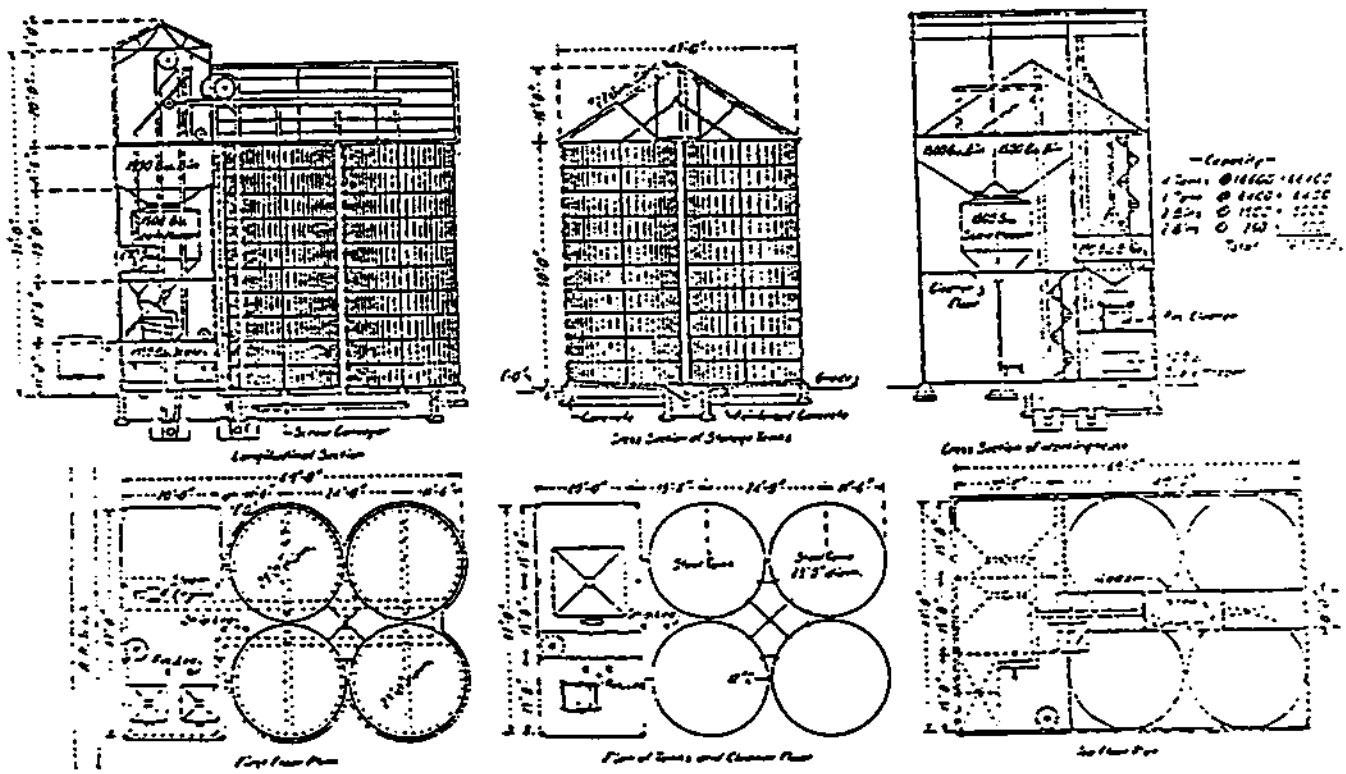


Figure 31
Steel Country Elevator

and 12" x 12" x 1 1/4". The wall tile shall be set in the wall with cells running vertically and all set with full flush mortar joints sides and bottoms. The channel tile shall be set to break joints with the wall tile. Each course of channel tile shall contain at least two complete steel bands. The facing tile are laid in courses with a full mortar bed and are tied to the main wall of tanks by wire fabric (see Figure 32).

In the brick circular storage bins, the wall is a three course wall, the two inner courses being laid solid, a space of 3" being left between the two inner courses and the outer course, making a wall 16" thick. The outer course is bonded to the two inner courses by wire bonds, passing through the air space. A channel is formed every 12" in height in the inner wall by splitting a course of brick, making the channel about 2 1/2" wide and a brick high, and a brick from the inner surface. The steel reinforcement is placed in this channel, and is grouted with one to two Portland cement grout. Rectangular storage bins of brick were made as follows: the bins are made rectangular in sets, with brick pilasters at the outside corners, and columns at the interior corners of the bins. Bars passing through the walls are made of brick arches, with the concave side of the arch outside.

Grain elevators should be located in a small town and along a railroad track used prior to 1930, and should stand on their original site.

II. Significance

Grain elevators were an important cultural resource associated with the agricultural history of Management Region 5 because of the large quantities of grain (wheat, corn, and oats) being produced in the area prior to 1930. Farmers needed storage facilities in order to handle these quantities before shipping to market beyond the local elevator. Traditionally, the surplus grain, i.e., that amount produced above the farmer's need for feeding his own livestock, was hauled to the country/small town elevator in wagons. The small town elevator was always located at or near the railroad station. The wagon was weighed and driven up an incline onto the dump; here the back end of the wagon was dropped and the front end raised so that the grain ran into the dump hopper, the empty wagon was then weighed and the amount of grain determined. If the grain in the country elevator was to be stored for some time, it was conveyed to storage bins outside the main elevator. It was usually run through a cleaner where the dust and defective grains

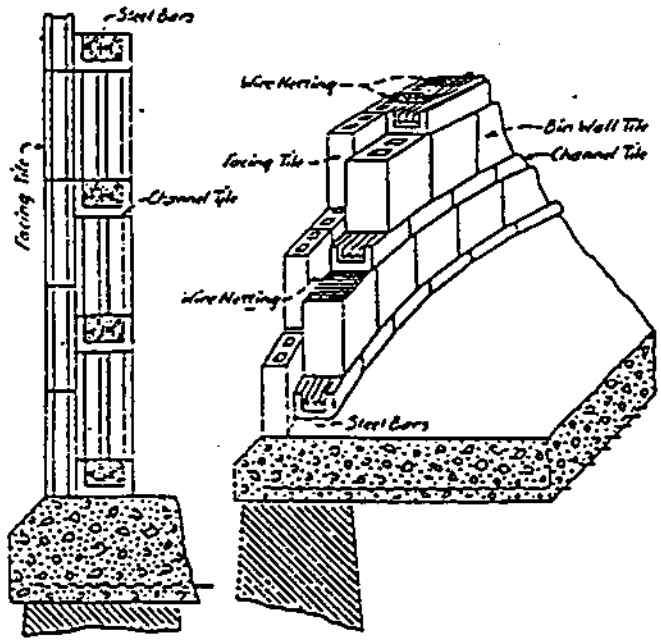


Figure 32
Details of Tile Grain Bin

were removed. Country elevators allowed farmers to hold their grain for a better price, provided adequate storage of grain to prevent waste and spoilage, and were able to accommodate large amounts of grain during harvest season. Railroad cars would transport grain from the country elevator to a larger terminal elevator where it was reshipped by rail to milling facilities in the Midwest such as Kansas City or Minneapolis.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, grain elevators should retain integrity of setting, materials, and design. The grain elevator in Region 5 must be situated in a small town, and along a railroad track used prior to 1930. The grain elevator should stand on its original site to be considered for National Register listing. In terms of materials, the small town elevator, the most common in Region 3, should be constructed of timber frame, yellow pine furnished rough. The timber type elevator should consist of pieces of 2" x 4", 2" x 6", or 2" x 8" laid flatware to break joints and bind the structure together. Original materials must be intact to be considered for eligibility. Design elements should follow the self-contained model where the storage bins were located in the main elevator, or working house. The design of the working house should be rectangular in shape, approximately 70′ wide by 120′ long. The first story should be constructed of heavy post and girder work. The bins should be approximately 45′ deep, made of laminated 2" planking. The total height of the timber elevator should be approximately 70′. The timber elevator to be eligible should be free of any major alterations and should not be covered with any synthetic siding or other materials that would detract from its architectural integrity. The elevator should be associated with a small town elevator operation that existed prior to 1930.

COTTON-GINS AND COTTON-GIN BUILDINGS

I. Description

Cotton ginning includes cleaning and other preliminary processes involved in preparing seed cotton as well as separating the fibers from the seed. When harvested, cotton usually contains dirt, hulls, leaf fragments, and other material which must be removed if the lint is to have the highest market value.

The art of ginning began in India or China. Early attempts to mechanically remove the fiber from the seed was the "Churka" roller gin. The Churka gin jerks the fiber from the seed by pinching it between two smaller rollers. An improved American roller gin, invented in the early 1840s, used a moving knife to jerk the seed from the fiber while the latter was pulled away between the roller and a fixed knife.

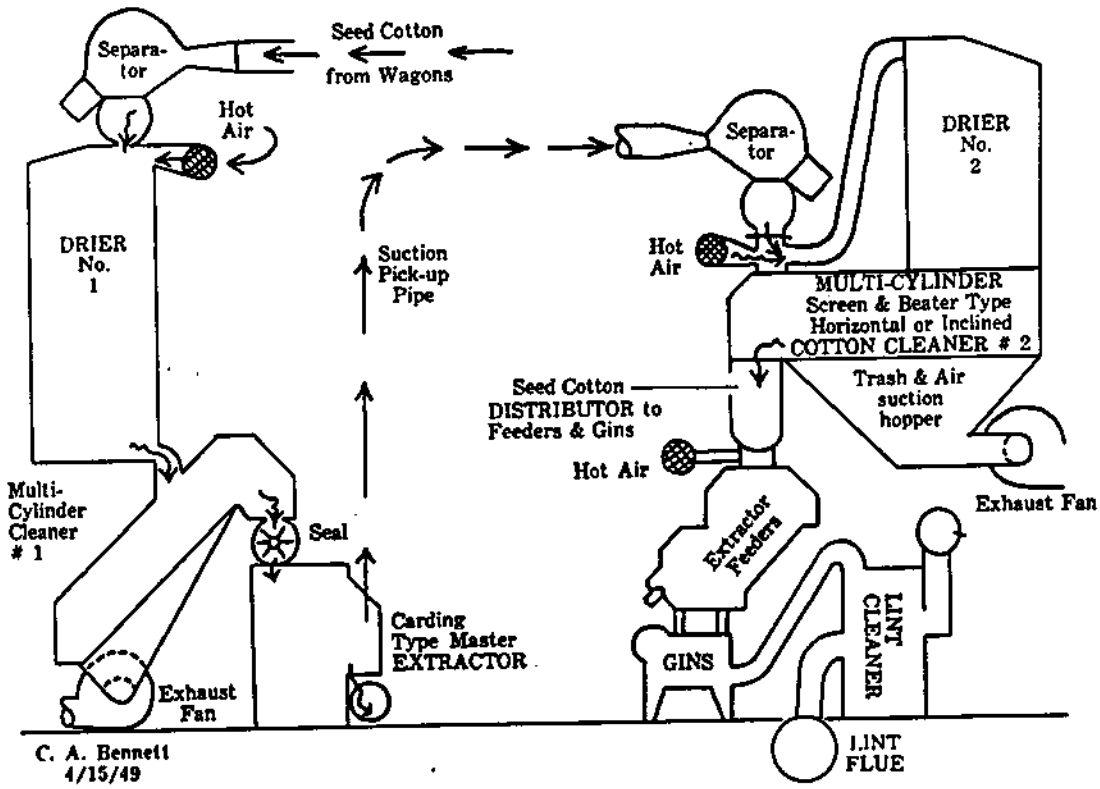
Cotton gins around 1900 were of two types: the roller gin and the saw gin. The former was used in ginning long cottons such as Sea Island and American-Egyptian, while the saw gin was used for American-long and short staple cotton. While the roller gin handled all varieties of cotton in Asian and African countries, they were not commonly used in the United States. In some states of the American South, the roller gin was used where Sea Island or American-Egyptian varieties were grown in limited quantities.

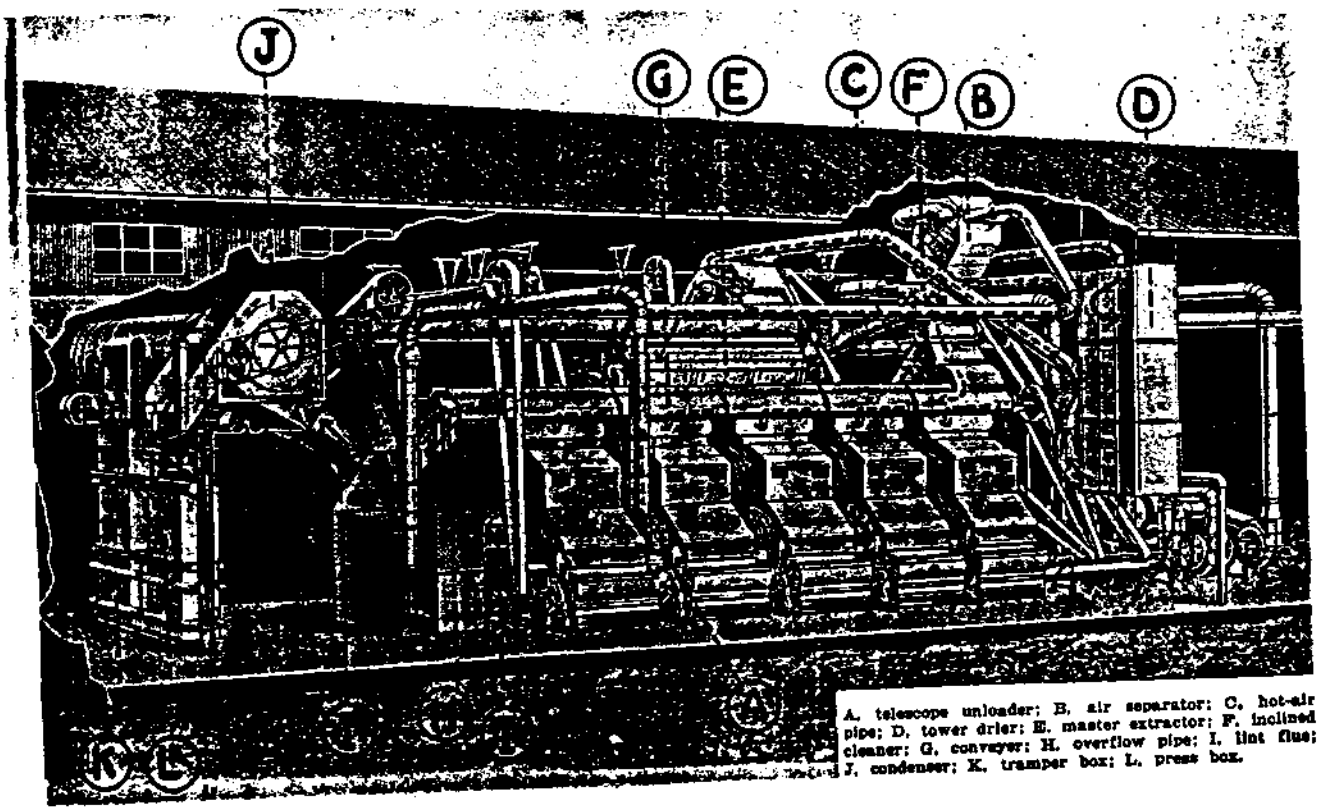
The saw gin, most commonly used in Oklahoma, was composed of four or five gin stands. Most gin stands contain 80 saws which are 12" in diameter. Saw speeds ranged from 600 to 750 revolutions per minute. Saw gins were of two types; brush system and air-blast system. In the brush systems, the brushes and the saws revolved in opposite directions. This caused them to be revolving in the same direction when they met. It is this principle which caused the easy removal of lint from the saws. The air-blast system used the principle of blowing the lint from the saw with air-blast nozzles. Behind the saws was a sheet metal chamber so constructed that the air escaped through a small opening near the saws. This opening was so shaped and adjusted that the jet of air blew the lint from the saws. The pounds of fiber per saw varied greatly, however, satisfactory, samples were usually produced where six to ten pounds of fiber were ginned per saw per hour.

The cotton gin included a variety of intricate parts: (1) telescope unloader, (2) air separator, (3) hot-air pipe, (4) tower drier, (5) master extractor, (6) inclined cleaner, (7) conveyor, (8) overflow pipe, (9) lint flue, (10) condenser, (11) tramper box, and (12) press box (see diagram of parts). Cotton was removed pneumatically from the load by the telescope

unloader and delivered to the gin proper. It was then delivered to the air separator. Here the air was allowed to escape through a screen or grating and carried with it some of the dust and dirt which had collected in the cotton. The cotton then passed through the separator and the tower drier supplied a flow of forced heated air. This air picked up the seed cotton and carried it to the top of the tower and then downward through the various floors of the drier. From here it was taken through a cleaner and a master extractor and then augered to the inclined cleaner or boll-breaker. From the cleaner it traveled along the top of the gin stands by means of a conveyor (distributor). When the seed cotton had passed through the gin stands and the lint and seeds had been separated, the seeds dropped into a conveyor. This device augered the seeds to the end of the gin stands where they were picked up by forced air and blown through tubing into a seed house. The lint, after being ginned from the seeds and removed from the saws, was either recleaned or delivered through the condenser to the press box where it was tramped or packed. The press usually consisted of two press boxes, a tramper and the hydraulic, or screw press. The tramper and the press remained in place, but the two press boxes were so constructed that they could be rotated. This was made possible by use of a pivot which was midway between each of them. The press boxes were perfectly inter changeable and could be aligned with the hydraulic press or the tramper. Some presses were up-pressing while others were down-pressing. After the load had been ginned and the lint tramped in the press box, the box was rotated into position for the ram or screw of the press. Pressure was then applied and the bale pressed to the desired density. This pressure was held during the baling operation. The side of the boxes were swung open, the bagging wrapped about the bales, and the ties were fitted and secured. This completed, the pressure was released. The bale was then removed from the box, trucked to the scales, weighed, tagged, and delivered to the loading platform (Figure 33).

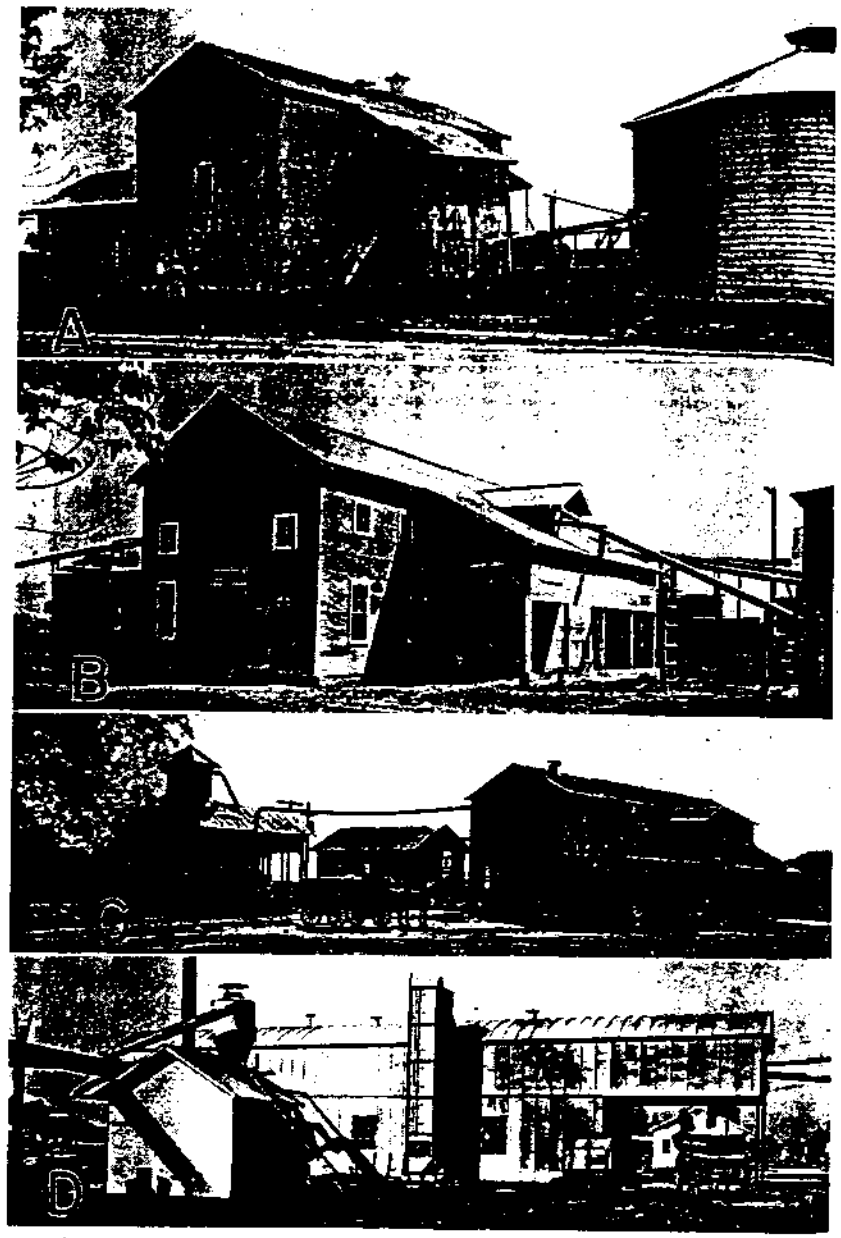
Gin buildings were constructed from a variety of materials. The early structures were two-story, wood frame types, generally covered with sheet iron. Most of the early gin buildings had a gable type roof and were 16′ to 20′ in height and 24′ wide. In the 1940s, gin buildings were constructed 30′ to 40′ wide and 24′ or higher, and steel was used throughout. They also had a bow roof (Photo W).





A, telescope unloader; B, air separator; C, hot-air pipe; D, tower drier; E, master extractor; F, inclined cleaner; G, conveyer; H, overflow pipe; I, lint flue; J, condenser; K, tramper box; L, press box.

Figure 33.



Cotton-gin buildings: A, old-type steel buildings; B, steel with wooden framing; C, all steel, inside and outside; D, all steel inside and outside, with bow roof.

Cotton Gin Building Types
Photo W

II. Significance

Cotton gins and cotton gin buildings played an important role in the agricultural history of Region 5 because cotton was produced in all ten counties prior to 1930. Garvin, McClain, Pottawatomie, Love, and Marshall counties were the leading producers. By 1900, Oklahoma reported 349,000 bales, seven years before statehood. In 1914, Oklahoma produced 1,262,000 bales on 2,847,000 acres. In the 1928-29 period, Oklahoma produced 1,202,000 bales on 2,404,000 acres. By 1946-48, cotton acreage in Oklahoma had decreased to 1,099,000 and production had dropped to 322,000 bales. Droughts and dust storms in the 1930s, intermittent boll weevil damage in some areas, and the migration of Oklahomans to California accounted for the large decline in cotton production. To these causes was the added factor of the competitive position of wheat and livestock during the war, and the further drain of labor to attractive jobs in war plants.

Because of the sizeable production in Region 5 before 1930, cotton farmers and the cotton processing and marketing industry were greatly interested in maintaining good ginning practices in order to ensure the sale of high quality cotton. The market value of cotton was established following the ginning process and, although textile mills may have reprocessed the cotton, they bought the cotton based upon the grade elements in it as it left the gin. Superior ginning was significant because it produced cotton of high value on the market, while inferior ginning caused a loss to all sectors involved in cotton processing as well as the cotton farmer. Improved practices in handling and ginning seed cotton resulted in improved quality, in the ginned lint and better prices for the cotton farmer. Regulation of the moisture content and the cleaning of seed cotton were of utmost importance in the ginning process. Cotton gins with all their intricate parts had to be inspected frequently and kept in good repair. The efficient operation of the gin equipment was of great benefit to the farmers as well as the ginning industry. Ginners were also significant in assisting farmers in securing certified planting seed of varieties which were adapted to their locales. This service was made possible by virtue of the fact that ginners could buy in large quantities. Thus they supplied small farmers with good seed which they, by themselves, would not have been able to secure.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, cotton gins and cotton gin buildings should retain integrity of setting, design,

parts, and materials. The cotton gin and cotton gin building should be located in a town in a cotton growing area. Usually the gin building would be situated near a railroad track used prior to 1930 in order for the bales to be shipped to textile mills. It should stand on its original site to be considered for National Register listing.

In terms of design and parts, the cotton gin in Region 5 should retain the following: a saw type gin with four to five gin stands, turn out approximately five 500-pound bales of lint cotton per hour, and be of either the brush or air-blast system. Original parts should be intact to be considered for eligibility including telescope unloader, air separator, tower drier, extractor, conveyor, lint flue, tramper box, and press box. Historic gin buildings should retain original building materials and design, usually a wood-frame structure covered with sheet iron, two stories high, and a gable roof. Dimensions varied from 15′ to 40′ high and occasionally a bowed roof was used. To be eligible, the gin building should be free of any major alterations and should not be covered with any synthetic siding or other materials that would detract from its architectural integrity.

SEED COTTON STORAGE HOUSES AND COTTON WAREHOUSES

I. Description

Two additional historic properties associated with cotton production and marketing were the seed cotton storage house and cotton warehouse. The advent of the mechanical cotton harvester (patented first in 1850) created storage and drying problems because of the tremendous increase in daily output of picked cotton. The large supply of cotton was not able to be ginned because of inadequate ginning facilities, therefore, space was needed to store surplus cotton after harvesting. Additionally, machine-picked cotton was more moist than hand-picked and seed cotton storage houses served a second function of drying seed cotton.

The oldest type of seed cotton storage house was a rectangular-shaped structure of wood frame and wood siding set on a rock foundation with a gable roof covered with sheet iron and few, if any, unloading facilities. Other types of seed cotton storage houses included: (1) rectangular-shaped structures of wood frame with sheet iron siding set on a concrete foundation. A gable roof and a series of air vents for drying as well as a Rembert-type fan for unloading were also found on these buildings, (2) octagonal-shaped structures of wood frame and sheet iron siding set on a concrete block foundation with a cupola and Rembert-type fan for unloading, and (3) octagonal-shaped structure set on concrete block foundation, two openings per side, a tower drier, and usually of wood frame with sheet iron siding (Photo X).

Cotton warehouses were located throughout cotton producing areas, usually in the immediate vicinity of cotton production. The larger plants, especially those with compress machinery, were strategically positioned with respect to the source of cotton production and transportation routes by rail. The cotton warehouse provided physical protection for the cotton and allowed the orderly and economic marketing, merchandising, and distribution of cotton bales following harvest and ginning.

Cotton warehouses varied in size and holding capacity ranging from 5,000 to 25,000 bales. Building materials also varied from wood frame with metal and composition roofs to brick and steel with metal and composition roofs. Floors were of earth, macadam, wood, or concrete. Fire protection devices were necessary with earliest warehouse using water casks and buckets, and stand pipes and fire hoses. More recently constructed warehouses were equipped with chemical fire extinguishers and automatic sprinkler systems. Most of the large warehouses were equipped with one or more compress machines. The compress reduced the size of



Seed-cotton storage houses: A, rectangular, without unloading facilities; B, rectangular, with Rembert-type fan for unloading; C, octagonal, with Rembert-type fan for unloading; D, octagonal, with pneumatic dropper unloading system.

Seed Cotton Storage House Types
Photo X

cotton bales, as produced at the gin, for more economical transportation. It compressed the typical gin bale having a density of 12 or 13 lbs. per cubic foot to standard density of 22 1/2 to 25 lbs. for movement by rail to domestic mills.

II. Significance

Seed cotton storage houses and cotton warehouses were important cultural resources associated with the agricultural history of Management Region 5 because of the large quantities of cotton being produced in the area prior to 1930. Seed cotton storage houses handled the overabundance of cotton production following harvest. Due to inadequate ginning facilities, storage space was needed to accommodate this surplus cotton. New gins were being constructed at a slow rate because of the large outlay of capital required. Therefore, seed cotton storage houses served a valuable function in the cotton industry. Seed cotton storage also allowed for the machine-picked cotton (high moisture content) to be dried prior to ginning. Drying seed cotton while in storage prevented the seed from developing an increase in undesirable fatty acids which reduced the grade of the seed and resulted in lower prices for the farmer. Storage of cotton provided other benefits for the ginner and the farmer. In storing the seed cotton, the length of the ginning season was increased and furnished employment over a longer period of time during the year. It also resulted in comparatively cheaper ginning prices to the farmer. Surplus seed cotton was also protected from fire and weather elements while in storage.

The cotton warehouse was significant because it performed two basic functions: (1) provided physical shelter for the cotton bale after the ginning process. The structure afforded protection from fire, theft, and damage by weather, and (2) served as a "reservoir" into which the entire cotton crop flowed after harvesting and ginning. This function permitted the cotton to be shipped to consuming spinners in the amounts and at the times when cotton was required for spinning purposes. This allowed for the orderly and economic marketing, merchandising, and distribution of the cotton crop.

III. Registration Requirements

To be eligible for listing in the National Register of Historic Places, seed cotton storage houses and cotton warehouses should retain integrity of setting, materials, design, and equipment. The seed cotton storage house in Region 5 should be located on a cotton farm or near a cotton gin facility used prior to 1930. The seed cotton storage house should stand on

its original site to be considered for National Register listing. In terms of material design, the seed cotton storage house should be constructed of wood frame with either wood or sheet iron siding, maintain a rectangular or octagon shape, be set on some type of rock or concrete block foundation, contain some type of drying device, such as a tower drier, and generally have a series of openings or roof vents also used for drying purposes. Original materials must be intact to be considered for eligibility. The seed cotton storage house should not have any major alterations and should not be covered with any synthetic siding or other materials that would detract from its architectural integrity.

The cotton warehouse should also retain architectural integrity in terms of design, materials, and setting to be eligible. Building materials should consist of either wood, brick, or steel with metal or composition roofs. Floors may be of wood, macadam, earth, or concrete. Fire protection devices of some type should be evident. In the larger warehouses, a compress machine would add to the authenticity of the structure.

Cotton warehouses should be located in cotton producing areas in towns that have rail shipping facilities, or they may be located near ginning plants used prior to 1930. The cotton warehouse should be free of any major alterations and should not be covered with any siding that would detract from its architectural integrity.

Annotated List of Historic Properties
Agriculture: Region #5

I. CARTER COUNTY

A. Ardmore

(1) Old "701" Ranch House

Location: Whittington Park in Ardmore

Date: Early 1880s

Significance: This was one of the first houses on the site of Ardmore in the early 1880's. The Old 701 Ranch House, of which all traces are now gone, was erected in the 1880's when the region was in Pickins County in the Chickasaw Nation. (O.L.I.)

B. Gene Autry

(1) Haney's Store

Location: HWY 53 Block 25 Lot 3

Date: 1904

Significance: This store is the only remaining commercial structure of what was once a thriving community near the Washita River. In 1941, the community renamed itself in honor of the rancher-film actor Gene Autry who had established his ranch headquarters nearby. (O.L.I.)

C. Healdton

(1) Zaneis School:

Location: Sec. 34 T4S R3W 5mi. S of Healdton

Date: 1922-1932

Significance: The historic properties associated with the Zaneis School include: school building (1922), pumphouse (1922), cafeteria (1928), and teachers dormitory (1932). Zaneis School was the largest rural school in the Healdton oil field. Originally housed twelve grades, it still serves the community as an elementary school for eight grades. Land for the school was donated by the Zaneis-Galt families, prominent in the Healdton petroleum business. (National Register of Historic Places)

CARTER COUNTY, continued

4. Poolville

(1) Brady Cabin

Location: Sect 32 Graham Town. 38 miles NW Ardmore

Date: 1892

Significance: The Brady Cabin was built by Jim Evans on a 65 acre site leased from the Chickasaw Indians. The one room cabin (16x16) was made from trees found on the property and had a store and fireplace on the east side. Walnut trees brought from Texas were planted around the back and still shade the cabin. James Evans first entered Indian Territory as a cattle driver on the Chisholm Trail. (National Register of Historic Places)

5. Springer

(1) JJ Eanes House

Location: Sec. 25 T3S R1E

Date: 1913

Significance: J.J. Eanes came to the Chickasaw Nation around the turn of the century. He established successful ranching activities in the vicinity of current day Ardmore-Springer-Poolville. He constructed his large ranch house in 1913. He lived in the house until his death in 1947 and then his daughter and her husband lived in it. Today his grandson, Jimmy Brady, owns the structure. (O.L.I.)

(2) Tussy Site

Location: Sect. 32 T1S R13W

Date: Early 1880s

Significance: Tussy was established in the early 1880s. The post office was established in 1890 in the NW corner of Carter County and was named for a famous cattleman. (O.L.I.)

II. GARVIN COUNTY

1. Erin Springs

(1) Frank Murray Home

Location: Section 22 T4N R4W

Date: 1867

Significance: This was the most substantial dwelling between Pauls Valley and Fort Sill. Murray was a very successful farmer with farm holdings extending twelve miles up and down the Washita River. He was interested in farming and had a large cattle ranch with often ten thousand head of cattle. His market was in Wellington, KS where he took thousands of beef cattle to market. (National Register of Historic Places)

2. Paul's Valley

(1) Kimberlin House

Location: Section 2 T3N R1W

Date: 1896-1898

Significance: W.G. Kimberlin moved to Indian Territory in 1868 to engage in ranching. He moved to Paul's Valley in 1872 and started a general merchandise store. He built a home in Whitebead, just outside of Paul's Valley. This home burned. A second home which still exists today was built at the same location in 1896-1898. (O.L.I.)

3. White Bead Hill

(1) Harlan's Store Site

Location: Section 33 T4N R1W

Date: 1870

Significance: Built at Caddo Springs which was an old farming ranching community. The site now stands one mile north of White Bead Hill. (O.L.I.)

III. JOHNSTON COUNTY

1. Bromide

(1) Bromide Springs

Location: Bromide

Date: Early 1800's

Significance: The area around Bromide has been famous for its springs. The springs were considered healthful and attracted many people to the area. Visitors to the Springs brought in financial success to the area until about the 1920s when the springs began to lose their appeal. Today the springs are no longer in general use, but are still visible. Four of the springs are dated on concrete slabs and the 1905 swimming pool is still in use for watering stock. (O.L.I.)

2. Mill Creek

(1) Cyrus Harris Home

Location: Section 11 T2S R4E

Date: 1856

Significance: Cyrus Harris was the first governor of the Chickasaw Nation in 1856. This noted Indian leader died at his Mill Creek home in 1888 and his grave was located one and a half miles from this marker. (O.L.I.)

3. Tishomingo

(1) "Alfalfa" Bill Murray House

Location: Tishomingo

Date: 1920

Description: The home of William H. Murray known as "Alfalfa Bill" has long been associated with Tishomingo, OK. The house was designed and built by Murray in the early part of 1920 and in 1924 he left for South America. The house itself is unpretentious and reflected Murray's taste for complete functionalism. The lawn is landscaped with several different trees, both native and imported, among them oak, hickory, pecan, and Egyptian cedar. It is set back from the street

JOHNSTON COUNTY, Tishomingo, continued

approximately 100 feet and the setting still appears as rural as when Murray lived here. (National Register of Historic Places).

(2) Washita Farm

Location: Sect 14 T4 R6

Date: 1921

Significance: The buildings of the Washita Farms are unique to Oklahoma because of their singular construction and because they are the only remaining evidence of one of Oklahoma's few attempts at collective farming. Acreage for this farm was purchased prior to 1919 and by that year nearly 10,000 acres made it one of the largest farms in Oklahoma. (O.L.I.)

IV. LOVE COUNTY

1. Marietta

(1) Marietta Monitor Building

Location: 104 Main Street, Marietta

Date: 1895

Significance: The building in which the Monitor now offices was originally a part of a harness and wagon business which occupied most of the block. The Monitor itself started publishing in 1897 at another local location but in 1931 the newspaper office moved to its present location at 104 Main and refurnished the interior. Since its inception the Monitor has been a continuing source of news for Love County residents. (O.L.I.)

(2) Overton Love Homesite and Cemetery

Location: Sect 9 T8S R3E six miles S Marietta

Date: 1845

Significance: The homesite and cemetery of the Love family is significant because of the activities of Judge Overton Love (1823-1903) for whom Love County is named. Overton Love came to Indian Territory in 1845 to Love's Valley to farm.

LOVE COUNTY, Marietta, continued

He leased and eventually owned most of the land in Love's Valley from the Red River back to Marietta. A leader among the Chickasaws, Love represented his district in both houses of the national council. After the Civil War he completed a new two story frame house about fifty feet from the Red River, but the house eventually burned down, leaving only the cemetery. (O.L.I.)

(3) Bill Washington Ranch House

Location: Section 25 T7S R1E

Date: 1898

Significance: William E. Washington who ran thousands of cattle over much of what is today Love County, raised enough cotton to maintain his own scale house, hired enough hands (100 or more much of the time) to maintain a commissary and store on the home ranch. The house was built around 1898 at a cost of $50,000 and was a definite high mark for architectural virtuosity in what was then still pretty largely undeveloped Indian country. (National Register of Historic Places)

2. Thackersville

(1) Brown Springs

Location: Sect 31 T9S R2S

Date: 1820

Significance: Brown Springs is significant because since earliest times people both Indian and Anglo, have used this spring as a source of fresh water. The springs is located 30 yards directly north of Brown's Ferry and was used extensively by early travelers going either north or south at the time before bridges spanned the Red River. (O.L.I.)

(2) Brown's Ferry

Location: Sec. 31 T9S R2S

Date: 1880

LOVE COUNTY, Thackersville, continued

Significance: Brown's Ferry was used extensively by early settlers going either north or south across the border of Texas and Oklahoma. J.C. Brown originally owned the ferry, which was used beginning in the 1880s. The ferry was abandoned in the early 1920s. (O.L.I.)

V. MCCLAIN COUNTY

1. Byars

(1) W.L. Byars Home

Location: Sec 25 T5N R2E

Date: 1850

Significance: The original home of W.L. Byars is a good example of construction from locally available materials and it may be one of the oldest remaining buildings in McClain County. (O.L.I.)

(2) William Chisholm House

Location: Sect 36 T6N R3E

Date: 1863

Significance: Now only a roadside marker on Oklahoma Highway Number 59. (O.L.I.)

(3) T.B. Johnston House:

Location: Sect. 14 T5N R2E

Date: 1874

Significance: A fine double log house, with stone chimney, a large hearth, and a fire place. The home is still in excellent condition and is the home of the Marvin Gwinn family who settled in the area around 1890. (O.L.I.)

VI. MARSHALL COUNTY

1. Kingston

(1) Wood's Grocery

Location: Kingston

Date: 1904

Significance: It was the only grocery in town for a long time, so many oil field workers used it. Today, it is the only surviving grocery building from that era. It is one story and constructed of brick in the running bond pattern. (O.L.I)

2. Madill

(1) Royal Hotel/Texoma Peanut Company

Location: 433 E. Main

Date: 1906

Significance: This two story brick building functioned as a hotel until about 1977 when it was purchased by Clint Williams for his Texoma Peanut Company. (O.L.I.)

VII. MURRAY COUNTY

1. Davis

(1) Price's Chapel and Cemetery:

Location: Section 33 T1S R2E

Date: 1860

Significance: These buildings are significant because they are the only physical remains of a once thriving community of Sorghum Flats. It was the largest community in Murray County until the turn of the century. It had a gin, a grist mill, a sawmill, and an abundance of sorghum cane cultivation. When the track for the Santa Fe railroad was laid, the community was passed by for a depot and began to slowly decline with its population migrating to Davis or Dougherty. The present chapel was built in 1900 and was used until the mid-1920s. The cemetery was used for white and Indian graves from the 1880s until the community was abandoned. (O.L.I.)

MURRAY COUNTY, continued

2. Dougherty

(1) Price's Falls Water Wheel

Location: Sect 32 T1S R2E

Date: 1926

Significance: Water from Price's Falls seems to have powered mills at this site for one hundred years-to grind grain, saw logs, or to operate a sorghum press. The water wheel was built by Ray Childress who used it to power a small generator to provide electricity to a few cabins in the area. (O.L.I.)

3. Sulphur

(1) Pagoda Well House

Location: 814 West 11th Street

Date: 1905

Significance: This was built over an artesian well that provided water for the NW section of Sulphur. The well supplied water to the county court house, the cotton gin and several bath houses. The structure was used as a open pavilion or bandstand in 1917 then was enclosed and used as a confectionery. The building is now used as a poodle grooming shop and the well ceased to flow due to a collapsed pipe casing. (O.L.I.)

(2) Lawrance/Buckhorn Cabin

Location: Section 30 T1S R4E

Date: 1877

Significance: The Buckhorn cabin is the oldest residence left in Murray County. It was built by W.B. Lawrance, who was a Chickasaw rancher. It is one of the very few remaining log structures and is significant because it is representative of a type of housing that was at one time very prevalent. (O.L.I.)

(3) Turner Home\Roos Ranch

Location: Route 2 Sulphur

MURRAY COUNTY, Sulphur, continued

Date: 1936

Significance: Served as headquarters for one of the most successful cattle ranches in the state of Oklahoma and in the nation from its formation in 1932 until the present. The ranch was started by two oilmen including Roy Turner who built the house. The ranch became known as the home of the international champions for the Hereford breed which were raised there. The ranch was also known for its sheep production with as many as 1200 head of sheep on the ranch at one time. (O.L.I.)

VIII. PONTOTOC COUNTY

1. ADA

(1) John Barringer Home

Location: 1319 S. Johnston

Date: No date of construction listed

Significance: Barringer was a pioneer rancher in Ada as well as an important civic leader. He served as town councilman on Ada's second city council. In 1908 he volunteered with other Ada citizens to raise 10,000.00 to pay for administrative costs of the struggling East Central State Normal School. (O.L.I.)

(2) A.K. Thornton Home

Location: 823 S. Broadway

Date: 1929

Significance: A.K. Thornton arrived here in 1900 and was heavily involved in the cotton business. He was active in getting the funds necessary to bring the MK and T railroad to Ada. (O.L.I.)

(3) Byrds Mill Site

Location: Rural Pontotoc County

Date: No date listed

PONTOTOC COUNTY, Ada, continued

Significance: This was one of three grist mills in this part of the country. This mill was first a pole pin thresher where the pole pin would catch the grain as it was separated from the chaff by beating it with a pole. Later the horsepower thresher took the place of the pole pin. (not on a particular list, it was never surveyed)

(4) Kerr Cabin

Location: Sect 15 T3N R6E

Date: Before 1896

Significance: Robert Samuel Kerr was born September 11, 1896 in a rustic log cabin on this small farm leased from the Chickasaw Indian National. The Kerr Cabin stands today after careful restoration. (O.L.I.)

2. Allen

(1) Buseby Cabin

Location: Section 4 T4N R8E

Date: 1926

Significance: The Buseby Cabin was built by Orel Buseby, a rancher-attorney who owned and operated the Buseby 4B Ranch. By buying worn-out cotton farms in what is known as Buffalo Valley, north of Ada, Oklahoma, Buseby accumulated the 5000 acres that became the 4B Ranch. The Buseby Cabin is still significant because it was used as a recreation spot and entertainment center for many local, state, and national leaders from 1926 until 1965. (O.L.I.)

IX. POTTAWATOMIE COUNTY

1. Asher

(1) Sacred Heart Mission

Location: Sect 18 T6N R5E

Date: 1875

POTTAWATOMIE COUNTY, Asher, continued

Significance: Sacred Heart Indian Mission was founded in 1875 by Father Isodore Robot. It served as the first center for Catholic missionaries in Indian Territory during the late 1800s and the early 1900s. Sacred Heart was also the home of the Sacred Heart Industrial School for Indian Boys, St. Mary's Academy for girls, and Sacred Heart College. (National Register of Historic Places)

2. McLoud

(1) Ford Log Cabin and Homestead

Location: 5 miles NE of McLoud Sect 1 T11N R2E

Date: No date listed

Significance: Mr. Joseph A. Ford of Battle Creek, Mich., filed for a homestead consisting of 160 acres located within the so-called "Kickapoo Strip." The farm and log house have never changed ownership but have passed on within the family. (O.L.I.)

3. Shawnee

(1) Cotton Seed Oil Mill (Peanut Factory)

Location: Block 75 Lots 4-9

Date: 1901

Significance: The cotton seed oil mill is in poor condition and is not in use today. However, the structure was very important relative to preserving a sense of Shawnee's connection with its cotton past. In 1902 the Chamber of Commerce reported that it was the largest mill in the Southwest. Owned by James Aydelotte, a leading citizen in the community, the plant continued into a peanut processing factory. Aydelotte owned five gins and compresses in the area. (O.L.I.)

(2) Farmer's Gin

Location: E. Highland Street Block 2 Lot 34

Date: 1924

POTTAWATOMIE COUNTY, Shawnee, continued

Significance: The building was constructed in 1924/1925 as a cotton gin and is reported to be the first electric gin in the state of Oklahoma. Shawnee's early identity was developed primarily around railroads and cotton. By 1902 there were seven cotton gins in Shawnee. The next year 400 railroad cars of cotton products were shipped out of Shawnee along with 26,000 bales of cotton. By 1907 the number of bales increased to 65,000. In 1925 there were 93,000 acres of cotton in production, declining to 54,000 acres by 1930. (O.L.I.)

(3) Harp's Green Valley Farms

Location: Block 8 Lots 17-24

Date: 1917

Significance: The building was built in 1917 and in 1925 was listed as Garrison Milling. The Harp Poultry and Egg Company bought the building in 1931 and added cold storage facilities. Canning capacities were added to increase production in the 1930s. This building reflects Shawnee's agricultural importance in the first part of the 20th century. (O.L.I.)

(4) Keller Feed Store:

Location: Block 16 Lot 18

Date: 1902

Significance: The Clark Keller business dates back to 1902. This was one of the major seed companies in the Southwest. The building is part of Shawnee's best preserved block on Main Street Currently it has an aluminum facade. The building is important because of its location in the block. This block continues to function as it did in the period prior to statehood. Current residences can best recapture life in the early twentieth century in this block. (O.L.I.)

(5) Shawnee Flouring Mill

Location: Block 93 Lot 3-6

POTTAWATOMIE COUNTY, Shawnee, continued

Date: 1935

Significance: The original company was founded in 1906 by J. Lloyd Ford and is a three generation business. On August 11, 1934 a fire destroyed all but one concrete tower. Shortly thereafter, modern facilities were constructed that have allowed the mill to continue as a major employer in the region. It reminds one of the importance of Shawnee as an agricultural center in the early part of the century. (O.L.I.)

(6) West Highland Electric Gin

Location: Block 23 Lot 13-17

Date: 1920

Significance: This building was constructed in the mid-1920s. Shawnee's early identity was developed primarily around railroads and cotton. During its height, the cotton production meant that Shawnee's streets were filled with buyers and sellers of cotton. Local schools adjusted their schedules so that children could be allowed to pick cotton during the season. (O.L.I.)

4. Tecumseh

(1) Samual Hendry Log Cabin

Location: Sect 14 T9N R3E

Date: 1891

Significance: Double log house built by Samual Hendry after making the run of 1891. The house is still of solid construction but needs repairs to restore it to its original form. (O.L.I.)

5. Wanette

(1) Carroll and Mary Paine Homestead

Location: 2.5 miles NW of Wanette

Date: 1894

Significance: A pioneer stockman home built in

POTTAWATOMIE COUNTY, Wanette, continued

1894-95. It is a typical home of a stockman's family that opened the state. The cypress siding and lumber were hauled from Purcell, I.T. by oxen. The Paines came in 1892 and established a church and school. (On Pre-Nomination form for National Register of Historic Places) (O.L.I.)

(2) The Moose Site

Location: Sec 15 T6N R4E

Date: 1882

Significance: A log cabin built in 1882 on land allotted to Mary Moose, a Pottawatomie Indian. Joe Moose built the cabin and the couple lived there until 1903 when the land was sold to the Lowden family. The structure is still standing and is a one room cabin. This cabin is one of a very few still in existence in the area. It has deteriorated somewhat but would be restorable. It has definite significance relating to pre-settlement history in general and Indian Land allotment period in particular. (O.L.I.)

X. SEMINOLE COUNTY

1. Konawa

(1) West Shawnee Cattle Trail

Location: Near Konawa

Date: Mid-1800s

Significance: In the mid-1800s routes for transporting cattle on the hoof from Texas ranches to railroad connections in Missouri and eastern Kansas led across Indian Territory. In 1866 the drives followed the Texas Road. The trail was difficult to follow and many cattle were lost. (O.L.I.)

2. Lima

(1) Secipio Baptist Church

Location: Sect 8 T8N R7E

SEMINOLE COUNTY, Lima, continued

Date: 1920

Significance: This church is one of the oldest remaining rural black churches in Oklahoma. Has been continuously used for over sixty years. The twenty by thirty wood frame building is located next to a newer building used by the congregation for services at present. (O.L.I.)

3. Little

(1) Jarvis Ranch

Location: Two miles NW of Little NW Seminole County

Date: 1898

Significance: The Jarvis Ranch is important because it was one of the largest ranches in northern Seminole County leased from the Seminole Indians which remained in the proprietor's hands after allotment. Will Jarvis came to Indian Territory around 1898 from Nebraska. Jarvis and his associates leased several thousand acres of land from Seminole freedmen until restrictions were removed in 1906. (O.L.I.)

4. Sasakwa

(1) Green Corn Rebellion Site

Location: 5 miles NW of Sasakwa

Date: 1914

Significance: Located on a high rocky hill on John M. Spears farm north of Sasakwa, it was the site of a confrontation between law officers and farmers rebelling against the World War I draft. The farmers were incited to revolt against the draft, the war and the capitalist system. (O.L.I.)

5. Seminole

(1) Harber Barn

Location: 2 miles South of Seminole

Date: 1935

Significance: Unusually large barn with concrete floor, granaries, and hay loft built in 1935. No indication of significance beyond its size, and presumably the fact that it has survived. (O.L.I.)

6. Wewoka

(1) Thomas Baptist Church

Location: 13 miles SW of Wewoka

Date: 1937

Significance: The history of the church goes back to 1867 but the present church was built in 1937. It is the oldest black church in Seminole County. Founded by Thomas Payne for Seminole freedmen. The original church building was a log structure with a dirt floor and hand hewn logs which remained there until it was destroyed in the 1937 tornado. (O.L.I.)

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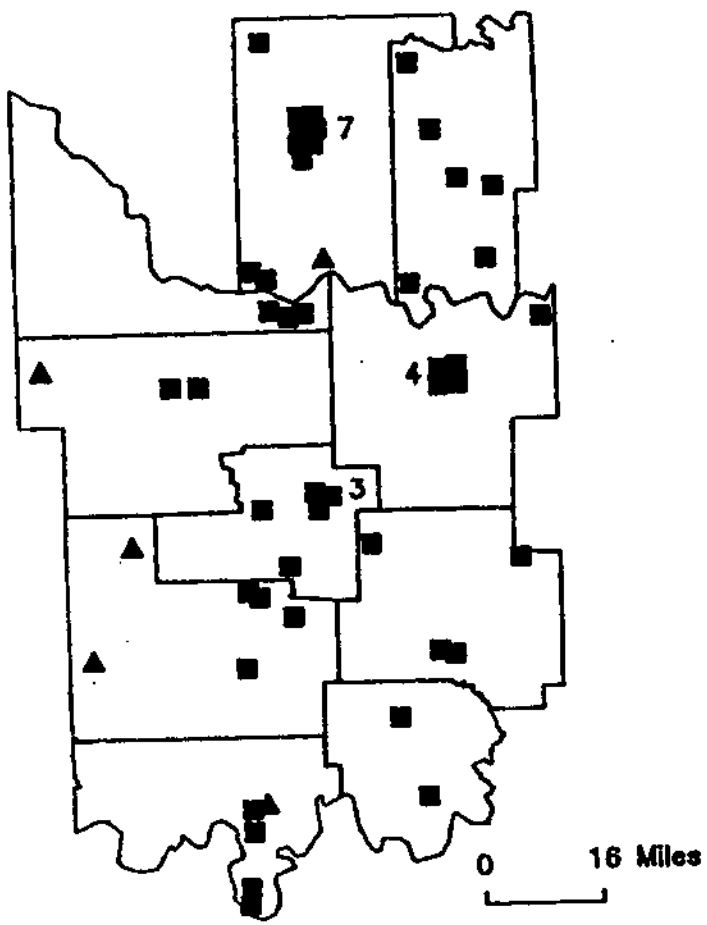
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National Register and O.L.I. Properties

Agriculture Theme: Management Region #5



Types of Properties

▲ National Register

■ O.L.I.

N=50

Source: State Historic
Preservation Office
Oklahoma Historical Society
Oklahoma City, Oklahoma

Map 23