

EXTENSION SERVICE OF THE COLLEGE OF AGRICULTURE  
THE UNIVERSITY OF WISCONSIN

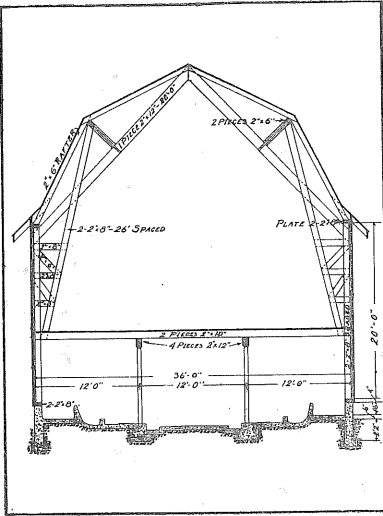
## Farm Building Plans

Convenient and well-planned farm buildings are as necessary to a good farm as are good tools and machinery. In fact,

buildings really are tools—part of the farm equipment; and like tools, they must be well planned, well made and well kept to be of the greatest use to the owner.

Poor buildings mean waste of time, waste of machinery, and loss in livestock. A badly built, poorly planned, ill-kept set of farm buildings is a sign of a poor farm and a poor farmer.

Well-built and well-arranged buildings, on the other hand, besides marking a good farm, makes chores easier and expenses less. The farmer saves time and labor in his work if the buildings are well arranged; and the



PLAN SHOWING DETAILS OF CONSTRUCTION

Here is a cross section of a barn giving the needed directions and specifications. The plans include complete drawings and directions. The bill of the materials needed is supplied with the plan.

better housing for his livestock and machinery saves him money.

Not only do well-arranged buildings provide convenience and economy for the farmer and his family, but in many instances comfort and healthful surroundings as well.

It is not necessary to spend large amounts of money in order to have convenient and comfortable buildings. The main thing is to study the needs of the farm and then to plan accordingly.

It is possible to solve nearly all of the problems connected with building before actual construction begins, by first making a complete set of drawings for the structure. These

drawings should include all the information necessary to enable the builder to erect the structure in such a manner that when completed it will be exactly what was wanted. The Agricultural Engineering Department has prepared a number of plans of different farm structures. These plans have been worked up with the idea of having them suited to average farm conditions, and in many cases they are suggested by buildings already in use by farmers.

In preparing the plans the department has tried to standardize the construction to suit Wisconsin conditions. Thus the barns are planned to accommodate stock in two rows extending lengthwise of the building. With this arrangement and with the barn running north and south it will be possible to get the most sunlight inside. No barns are shown with widths other than 36 or 34 feet. In larger barns it is not possible to secure convenience, economy of construction, or the best of sanitary conditions.

As the modern farm needs other buildings, such as machinery sheds, milk houses, ice houses, and poultry houses, some plans of these have been prepared. Such conveniences for the farmer's wife as an ice box, a hotbed, and a water system may be constructed from other plans listed in the circular. Creamery and cheese factory designs, land clearing apparatus, silo forms, drawings of belt lacings and of 20 different knots and hitches are also among the blueprint drawings which can be furnished.

Plans should be ordered by number and will be furnished upon receipt of the small charge stated, which is intended to cover cost of postage and blueprinting. Address all orders to Agricultural Engineering Department, University of Wisconsin, Madison.

#### LIST OF AVAILABLE BLUEPRINTS

##### BARN PLANS

**No. 14. General Purpose Barn 36' x 84'** .....Price 20 cents  
Accommodates 22 head of cows facing center and 6 head of horses. Two maternity pens 10' x 12' and 8' x 15', one calf pen 10' x 15', and one bull pen 8' x 12' are provided. Basement walls of concrete, and framing details for either vertical or horizontal siding can be furnished. Bill of material included.

**No. 24. General Purpose Barn 36' x 86'** .....Price 20 cents  
This barn has driveway through center and accommodates 22 head of cows and 6 head of horses, all facing out. Two maternity pens 13' x 14', one calf pen 7' x 20', and one bull pen are provided. Framing details for either vertical or horizontal siding can be furnished. Bill of material included.

**No. 34. General Purpose Barn 34' x 56'** .....Price 20 cents  
Accommodates 14 head of cows facing center and 4 horses. One maternity pen 10' x 10', one calf pen 10' x 14' and one bull pen are provided. Framed for horizontal siding. Bill of material included.

**Note:** Barns 14, 24 and 34 have 9' ceiling, haymow 12' from floor to plate and 28' to hay track. All have self-supporting plank truss roof.

**No. 42. L-Shaped Dairy Barn** .....Price 20 cents  
One-story dairy barn 36' x 84' running north and south, with hayshed 34' x 84' running east and west along north end. Stalls for 44 cows facing center. Bill of material included.

**No. 52. Pioneer Barn 18' x 54'** .....Price 10 cents  
Accommodates 8 head of cows and 3 horses. One box stall 8' x 9' is provided. Barn is planned so that an addition can be built, making a barn 36' x 54' to accommodate 8 additional head of cows facing center, with a calf pen 8½' x 10', a bull pen and a box stall 7½' x 8½'. Bill of material included.

**No. 62. Round Barn** .....Price 20 cents  
A round barn 60' in diameter to accommodate 34 head of cows, 16' silo at center of barn. Dairy room and engine room under the driveways are provided.

**No. 71. Concrete Basement** .....Price 10 cents  
Concrete basement walls and reinforced concrete hay mow floor for a barn 36' x 72'. Details of slabs, beams, girders, and columns are given, also a bill of bars for one bent.

**Note:** Send also for Bulletin 266, "Barns for Wisconsin Dairy Farms." Free.

**No. 194. Sheep Barn 24' x 72'** .....Price 20 cents  
Two stories high with gambrel roof. Lean-to 38' x 12' for lambing pens, feed room and shepherd's room. Bill of material included.

**No. 201. Sheep Barn 22' x 34'** .....Price 10 cents  
Tamarack poles for posts and girts. Straw roof. Bill of material included.

##### CREAMERIES AND CHEESE FACTORIES

**Note:** The creamery and cheese factory plans show only the general plan of the building and arrangement of equipment. No detailed drawings included.

**No. 211. Creamery** .....Price 10 cents  
Main building 50' x 76' with 24' x 40' power wing. Work room 30' x 30'.

**No. 221. Brick and Limburger Factory 30' x 86'** .....Price 5 cents  
Two curing rooms are provided, one 29' x 35', the other 25' x 29'. Work room is 24' x 29' with a boiler room 8' x 12' in one corner.

**No. 231. Swiss Cheese Factory 30' x 86'** .....Price 5 cents  
Two curing rooms are provided, one 29' x 35', the other 29' x 25'.  
The work room is 29' x 24' with boiler room 8' x 12' in corner.

**No. 241. Combined Creamery and Cheese Factory** Price 5 cents  
Size 48' x 62'. Churn room is 28' x 34' and cheese room is 19' x 24'.

**No. 251 Cheese Factory** .....Price 10 cents  
Main building 30' x 48' with work room 30' x 30' and curing room 18' x 30'. Power wing 16' x 30'.

**No. 261. Creamery Refrigerator 12' x 12'** .....Price 10 cents  
Ice bunker above. Storage space 12' x 12' x 7'.

#### HOG HOUSES

**No. 311. Portable Hog House 7' x 8'** .....Price 5 cents  
A-shaped portable hog cot with a sliding door in each end.

**No. 321. Gambrel Roof Hog House 24' x 48'** .....Price 10 cents  
Fifteen pens 6' x 10' are provided and a 4' feed alley extending down center of the building. Second story has an approximate capacity of 18 tons of hay.

**No. 331. Half Monitor Roof Hog House** .....Price 10 cents  
Size 24' x 48'. Sixteen pens 6' x 9' are provided and a 6' feed alley extending down center of the building.

#### ICE HOUSES

**No. 411. Ice House 16' x 18'** .....Price 10 cents  
For storage only, with a storage space 14' x 16' x 14' high. Frame construction.

**No. 421. Ice House 14' x 14'** .....Price 10 cents  
For storage only with storage space 12' x 12' x 12' high. Frame construction.

**No. 431. Ice House 14' x 20'** .....Price 10 cents  
Ice storage space 12' x 12' x 12' high and cold storage room 6' x 8' with vestibule 6' x 3'. Frame construction.

**No. 441. Ice Box** .....Price 5 cents  
Home-made ice box 5'4" x 3'4" x 3'8" high.

#### MACHINERY SHEDS

**No. 511. Gambrel Roof Machinery Shed 24' x 60'** ....Price 10 cents  
A shop 12' x 24' is provided in one end.

**No. 521. Gable Roof Machinery Shed 26' x 60'** .....Price 10 cents  
A shop 9' x 26' is provided in one end. Details and bill of material are furnished.

#### MILK HOUSES

**No. 6 11. Milk House 10' x 12'** .....Price 5 cents  
Has attached engine room and sunning rack. Space is provided for a pump, separator, tester, table, and a cooling tank.

**No. 621. Milk House Under Driveway** .....Price 10 cents  
Reinforced concrete milk house under driveway to barn. Dimensions inside 9' x 12', space for a separator, can rack, and a cooling tank. Bill of bars is included.

**No. 632. Round Milk House** .....Price 10 cents  
Size 14' in diameter, with attached engine room and sunning rack. To be constructed with concrete silo forms. Space is provided for churn, separator, cooling tank, sink and drain shelves.

#### POULTRY HOUSES

**No. 711. Two Pen Poultry House 16' x 32'** .....Price 5 cents  
Combination pitched roof two pen poultry house to accommodate 125 hens.

**No. 721. Colony Brooder House 8' x 12'** .....Price 5 cents  
Shed roof, large enough for two brooders.

#### MISCELLANEOUS STRUCTURES

**No. 811. Corn Curing House 18' x 22'** .....Price 10 cents  
Has 10 foot studs and one-fourth pitch gable roof.

**No. 821. Hot Bed** .....Price 5 cents  
Size 6' wide and any length. Drawing shows method of construction for either plank or concrete.

**No. 831. Manure Pit 24' x 36'** .....Price 5 cents  
Concrete manure pit with walls 4' high.

#### Septic Tanks.

Send for Circular 60, "Sewage Disposal for Country Homes." Free.

#### Silos.

Send for Circular 87, "Silos, Questions and Answers." Free.

**No. 851. Silo Forms, Steel** .....Price 10 cents  
Steel forms for 12', 14' or 16' silos. Sections made up 3'6" high. Details and bill of materials given.

**No. 862. Silo Forms, Wood** .....Price 10 cents  
Wooden forms for 12' or 14' silos. Sections made up 2'6" high. State diameter of silo for which forms are wanted.

**No. 871. Vegetable Storage Cellar** .....Price 5 cents  
Underground storage cellar 14' x 16' built with 6" poles.

**DRAINAGE**

Send for Bulletin 284, "Tile Drainage on the Farm." Free.

**LAND CLEARING APPARATUS**

- No. 1011. **Blasting Cap Case** .....Price 5 cents  
Home-made safety blasting cap case that will hold a day's supply of caps.
- No. 1021. **Conrath Stump Piler** .....Price 10 cents  
Has 24' boom and will pile any stump a team can handle in stacks 20 feet high.
- No. 1031. **Dynamite Thawer** .....Price 5 cents  
Cheap, safe and efficient homemade dynamite thawer. Capacity 30 to 35 pounds.
- No. 1041. **Mallet Stump Puller** .....Price 5 cents  
A cheap, yet efficient way of pulling old and decaped stumps. Method of making and its use are shown.
- No. 1051. **Frost Trip** .....Price 5 cents  
To be used in connection with the Conrath Piler. Enables operator to drop stump after it has been elevated above desired spot in the pile.
- No. 1061. **Stone Boat** .....Price 5 cents  
Easily constructed, and does not require lifting of stones when loading on boat.

**FARM HOUSES**

- No. 121. **House 36' x 30'** .....Price 25 cents  
Basement—laundry, vegetable room, furnace room.  
First floor—living room with fireplace, dining room, kitchen, office, wash room.  
Second floor—four bedrooms, bath room.
- No. 122. **House 40' x 26'** .....Price 25 cents  
Basement—laundry, vegetable room, furnace room.  
First floor—living room with fireplace, dining room, kitchen, bedroom, wash room.  
Second floor—four bedrooms, bath room.
- No. 123. **House 42' x 32'** .....Price 25 cents  
Basement—laundry, vegetable room, furnace room, storage room.  
First floor—living room with fireplace, dining room, kitchen, office, bedroom, lavatory.  
Second floor—five bedrooms, bath room.  
Also has attic.
- No. 124. **9 room Wisconsin Farm House 47' x 22'** .....Price 25 cents  
Basement—Furnace room, coal bin, fruit room, vegetable room, wood storage, utility room.  
First floor—Living room, kitchen, dining room, laundry, office or sewing room, toilet and wash room, hall, vestibule, family porch, service porch.  
Second floor—four bed rooms, bathroom.

Published and distributed under Act of Congress, May 8, 1914, by the Agricultural Extension Service of the College of Agriculture of the University of Wisconsin, K. L. Hatch, assistant director, the United States Department of Agriculture cooperating.

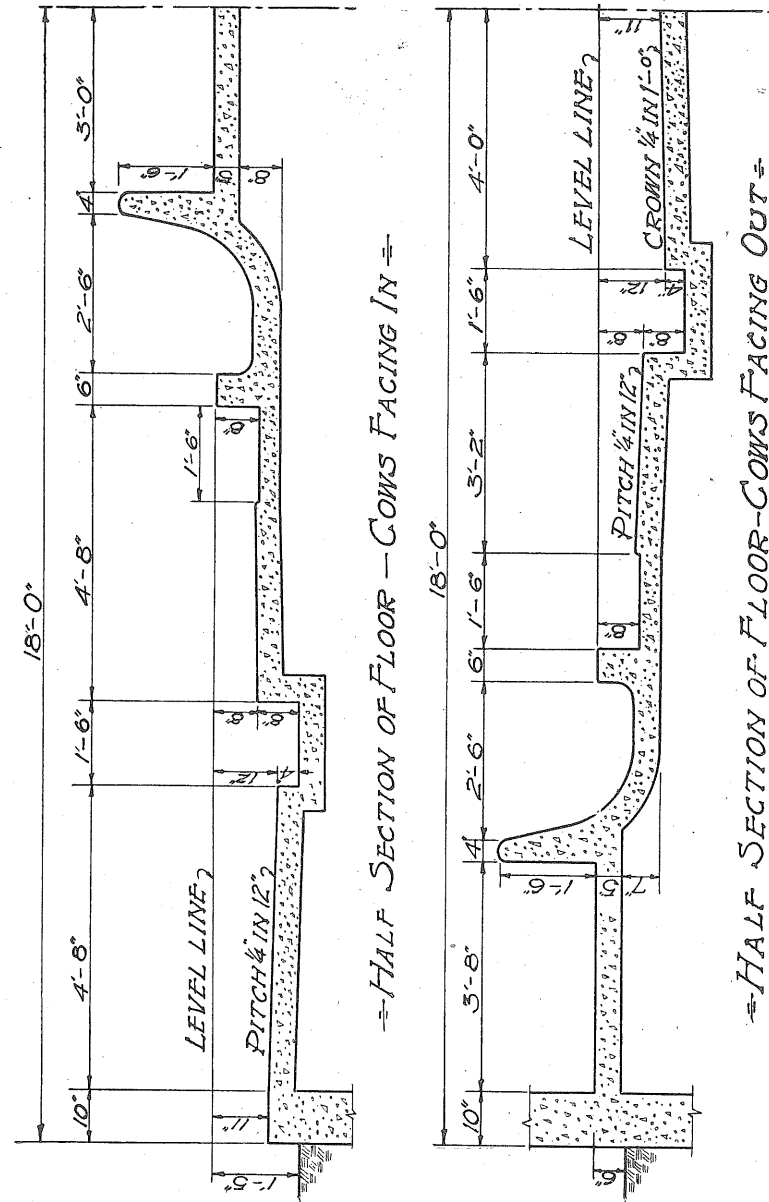
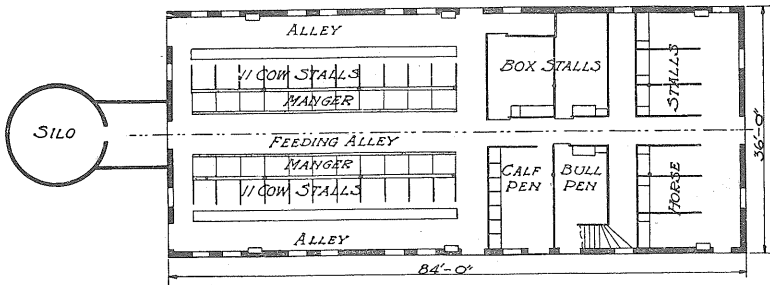
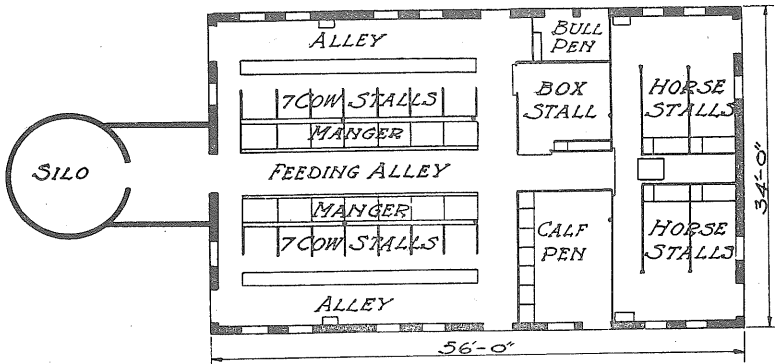


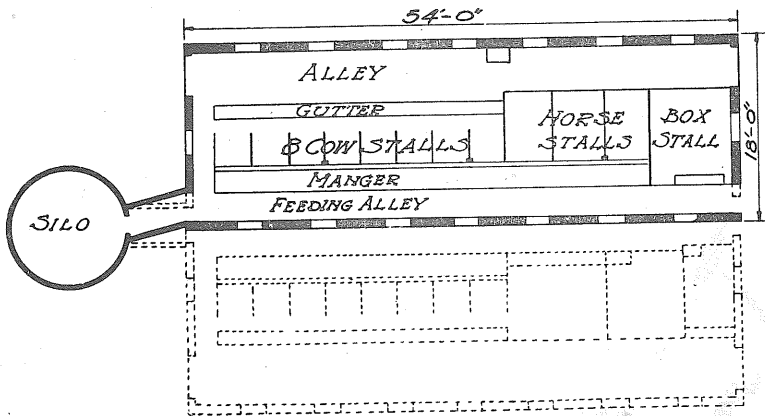
FIG. 2.—CAREFUL PLANNING IMPROVES COW STALL  
The cow stall should be properly built. These drawings illustrate two of the methods suggested by our sets of building plans.



PLAN NO. 14—GENERAL PURPOSE BARN



PLAN NO. 34—GENERAL PURPOSE BARN



PLAN NO. 52—PIONEER BARN

FIG. 3.—SAMPLE BARN PLANS

Small scale drawings showing the arrangement of three of the barn plans. The blue prints are much larger (scale  $\frac{1}{4}$ " to 1") and show more detail.