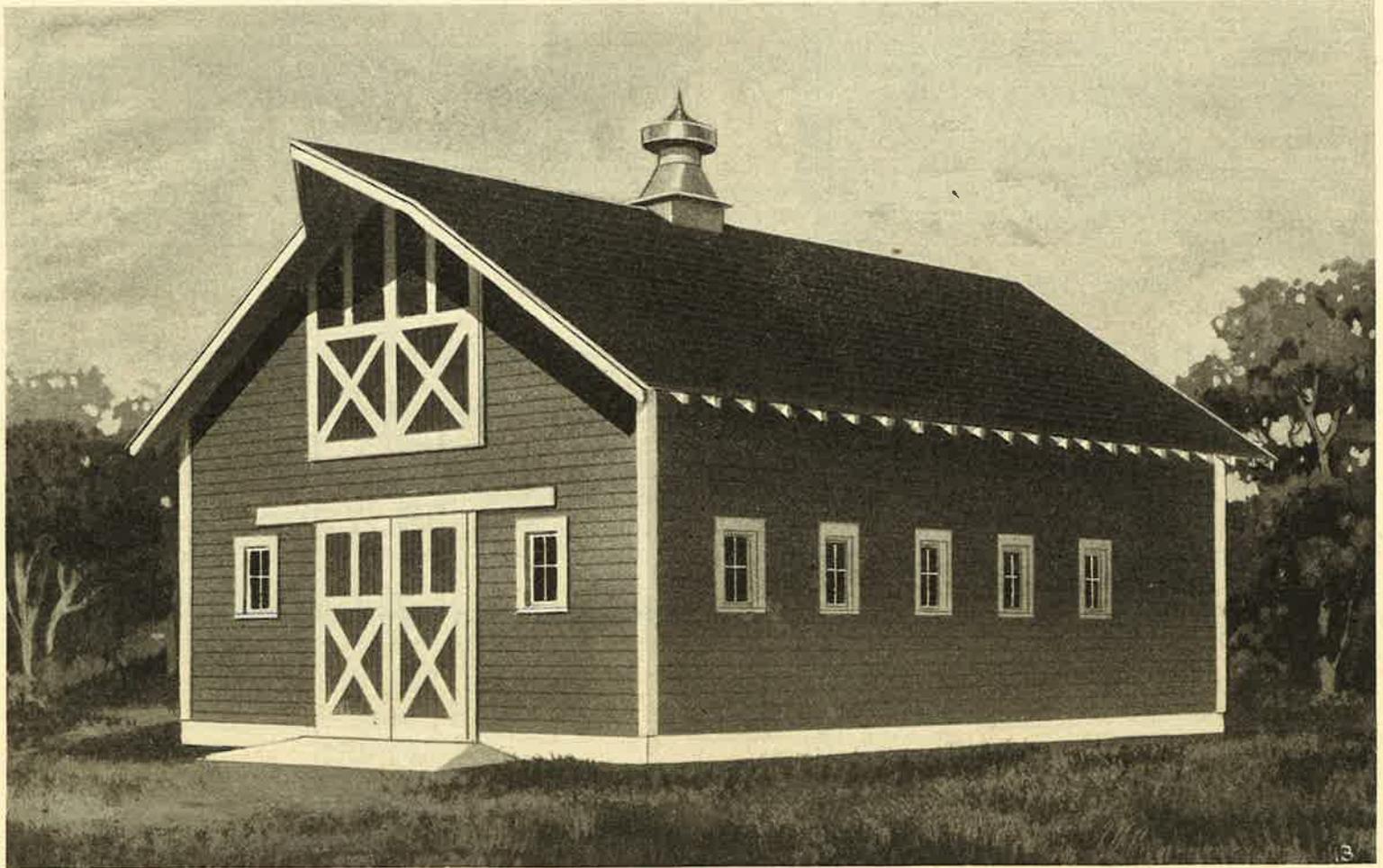


Southern Pine Barns

Complete Plans and Instructions Showing How to Build
Your Own Barn



Gable Roof Barn — 26 Feet Wide

THE barn design shown on this page illustrates what is known as a Gable Roof type of barn and is a very popular method of construction. It has the advantage that short lengths of lumber can be used and no large or heavy timbers are required as nothing thicker than two-inch lumber is used, which makes it easy for the farmer to build with the least possible amount of assistance.

There are no difficult or complicated joints to make, which is another feature that is appreciated by the farmer who has to be his own carpenter.

The length of the rafters is properly proportioned so as to give the greatest amount of loft space and at the same time present the most attractive and pleasing appearance from the outside.

The Southern Pine method of barn construction is entirely new and illustrates the most modern and approved methods of building construction in a way that enables the farmer to select for himself a barn that will exactly suit his own requirements, and of any width or length that he desires. Never before has barn building been made possible or explained in such a simple, unique, or practical manner.

The only thing that the farmer must decide for himself is what width he wants to make his barn. Having decided on the width, then he can take the Southern Pine Design sheet for that particular width of barn and build the barn any length that he wants to. There is absolutely no hard and fast rule as between the width and length of any barn.

The farmer can build any width or length that he chooses. Certain lengths have been shown for the different barns but they are merely average lengths and the farmer can make the barn any length or twice or three times as long or add an extension onto his barn any time he needs to.

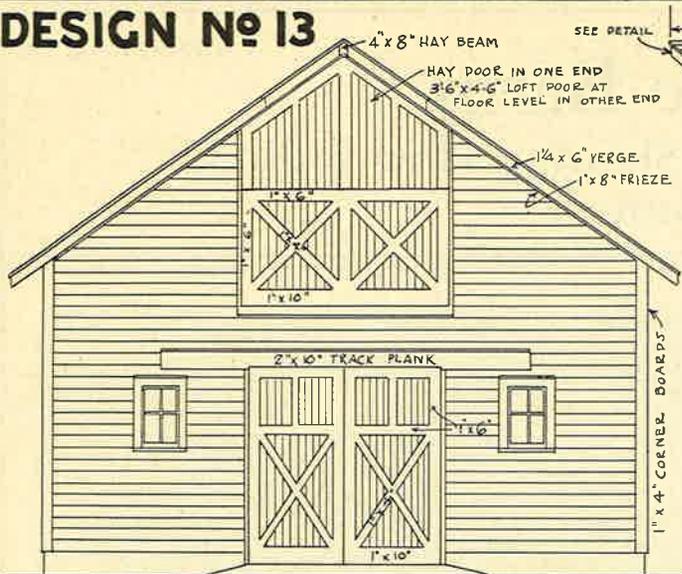
As before stated, however, the farmer must decide the width that he wants to make his barn, and in so doing he will be guided by what he considers the least width he can use, so as to arrange his stock and work his barn in the method that his experience has taught him will best suit his particular requirements.

Every farmer has different requirements and we have adopted this interchangeable system which allows the farmer to build a barn of any width or any length that he needs.

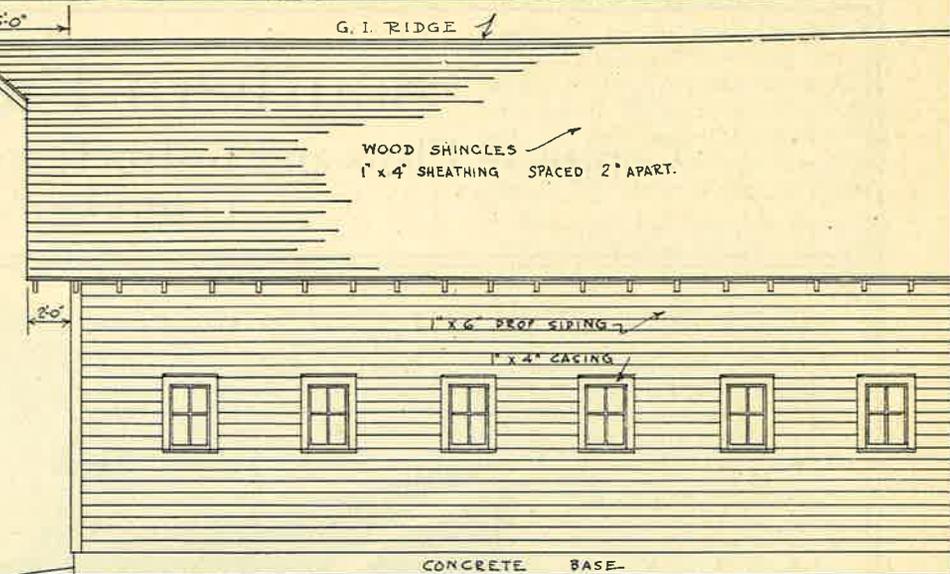
Therefore we have made no reference on this sheet to the interior floor arrangement of the barn. He can lay out the floor for a dairy barn, horse barn, general purpose barn, or beef cattle barn according to his requirements, but still using exactly the same type of barn construction as shown on this sheet. The drawings show details of windows, doors, wall and roof construction and the farmer can locate the doors and windows to suit his floor plan arrangement.

The standard widths of barns are 24, 26, 28, 30, 32, 34 and 36 feet, and for every different width we have a different design as we have to use heavier and longer timbers due to the increased span of the roof.

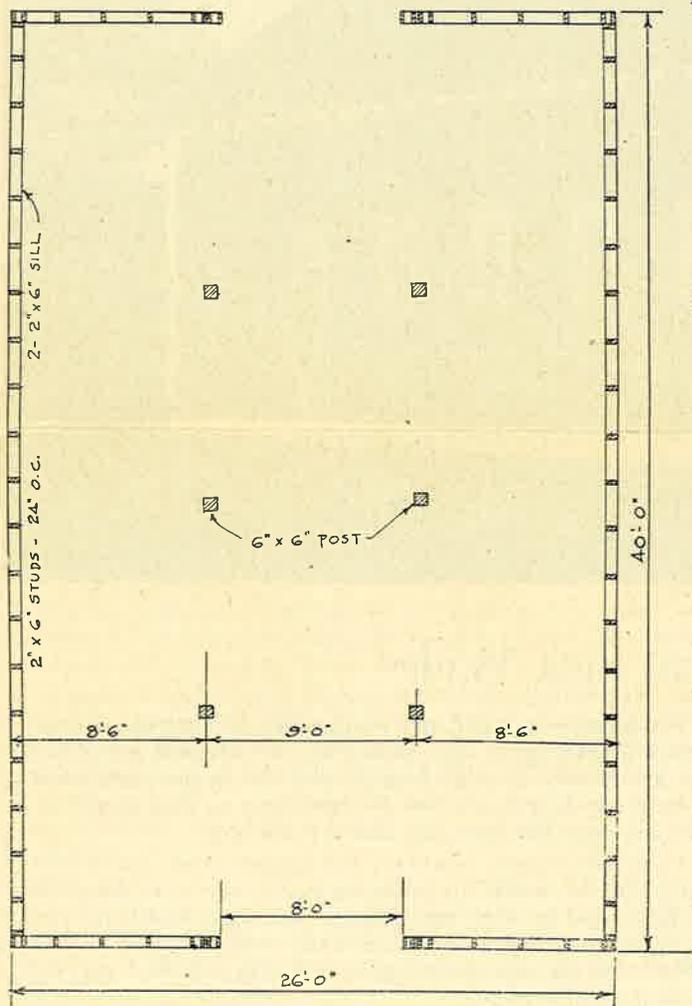
DESIGN No 13



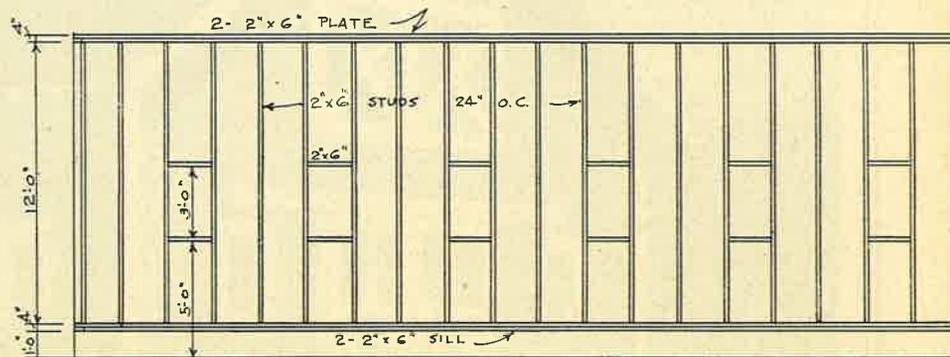
FRONT-ELEVATION



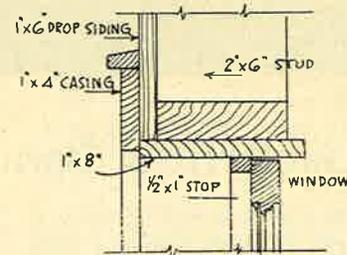
SIDE-ELEVATION



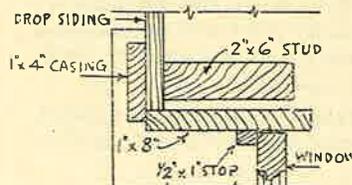
PLAN



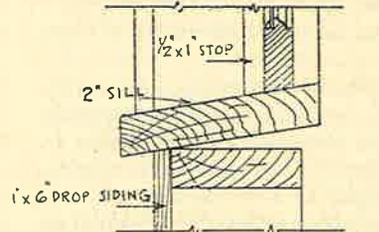
SIDE-WALL-FRAMING



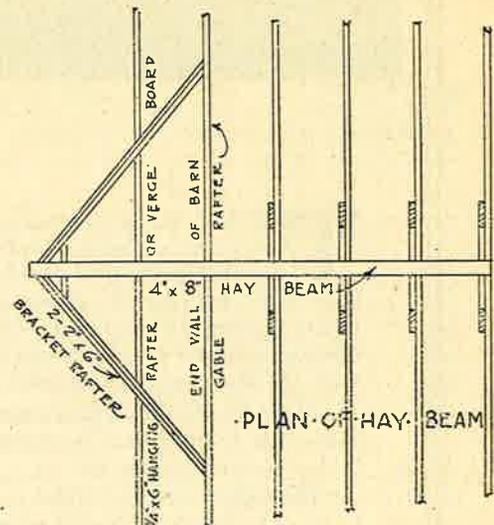
SECTION THRU WINDOW HEAD



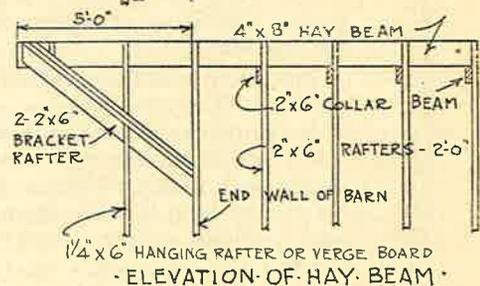
SECTION THRU WINDOW JAMB



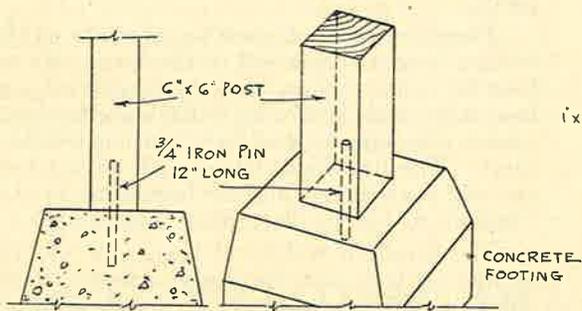
SECTION THRU WINDOW SILL



PLAN OF HAY BEAM

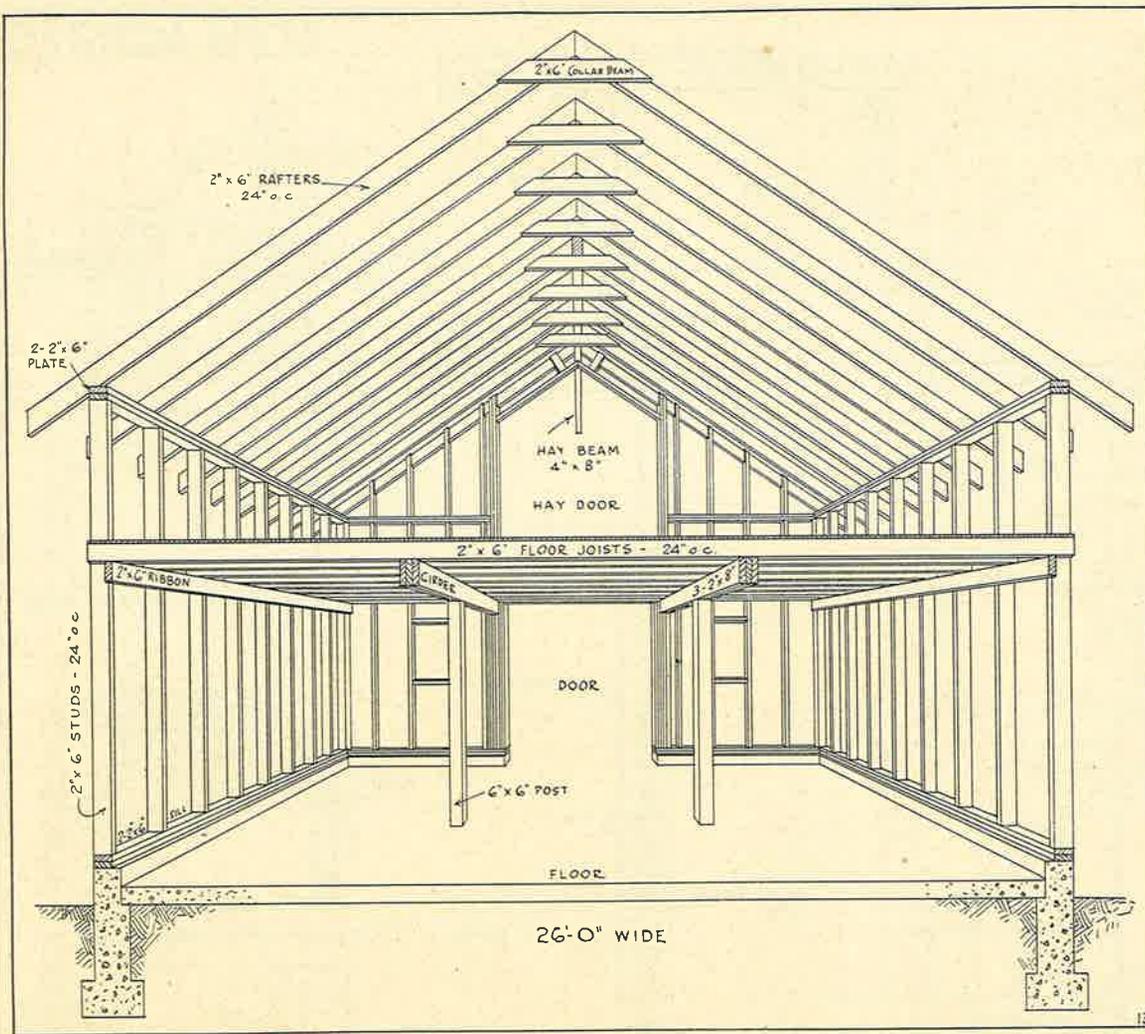


ELEVATION OF HAY BEAM



METHOD FOR FIXING WOOD POSTS TO CONCRETE





**Interior View of Barn
Showing Framing Construction of Walls and Roof**

CONCRETE FOUNDATIONS. The concrete for the foundations and floor should be made in the proportions of one bag of cement, two cubic feet of sand and four cubic feet of clean gravel or broken stone.

If greater economy is desired the mixture may be made in the proportion of one bag of cement, three cubic feet of sand and five cubic feet of clean gravel or broken stone.

The sand and gravel and cement should be all thoroughly mixed and turned over with a shovel at least twice while still dry and before any water is added. This is to make sure that the cement is thoroughly mixed with the sand and gravel. The mixture should then be sprayed with water from the nose of a watering can or hose and again turned over twice while wet and immediately placed in position.

Before the wet concrete is placed in position the wood forms which hold the concrete should be hosed with water. This will prevent the concrete from sticking to the boards and also prevent the boards, if they were dry, from absorbing all the good and moisture from the concrete.

The cement floor should be finished on top with a layer of cement mortar $\frac{3}{4}$ -inch thick composed of one part of cement to two parts of sand.

When concrete is to be placed on top of concrete that has been laid the previous day, the old concrete should be well sprayed with water. This is to make certain that the new concrete will stick properly to the old concrete and make a perfect joint. This also means that the concrete floor should be well sprayed with water before the final top layer or finishing coat of cement mortar is applied.

The floor plan shows the exact spacing of all the studs for the side and end walls and how they are arranged at the door and window openings and at the corners of the building. It also shows the position of the center posts or columns which support the floor of the hay loft.

The side wall framing elevation shows the height of the side walls and window spacing. The end wall framing shows the height of the studs and the roof and the correct spacing of the studs around the door and window openings. The cross section shows the position of the center posts, the height of the studs, the height of the loft floor joists above the ground floor level, and the height of the roof and the length and sizes of the roof rafters and the length and sizes of the roof braces.

The cross section also shows the thickness and height of the concrete foundation walls and size of concrete piers under the wood posts. The depth of the concrete foundations should be increased if necessary in order to go down and rest on solid ground or below the frost line, according to locality.

At each corner of the barn three corner studs are arranged as shown on plan and provide for nailing space should it be desired to line the inside of the barn at any time.

FOUNDATION BOLTS. In order to properly secure the framework of the barn to the concrete foundation walls, ordinary bolts $\frac{3}{4}$ -inch by about 16 inches long must be placed in the concrete at the time the wet concrete is laid and they

should project about 5 inches above the concrete and 3 inches from the outside edge.

These bolts should be placed about every 6 feet along the foundation wall. Holes are to be drilled in the wood sill which is afterwards fitted down over the bolts and the washers and nuts then screwed on. Refer to the detail showing method of bolting building down to the concrete foundation which makes this important operation very clear.

The built-up girder should be well spiked together; no two joints should be closer than 4 feet.

The floor joists must be securely spiked to wall studs and also spiked together where they lap past each other, and in this manner the building is securely tied across its full width from wall to wall. Three rows of 1-inch by 4-inch bridging should be fixed to stiffen the joists.

All timbers throughout the building should be well nailed together and plenty of spikes should be used as faulty construction results from not using enough spikes.

No ventilators have been shown, as metal roof ventilators are the most popular and the number required will depend on their size and the length of the barn.

With regard to the sheathing boards on the roof, this is an item that allows of considerable variation. Narrow or wide boards can be used. They can be nailed close together or spread apart not more than $2\frac{1}{2}$ inches.

The 1-inch lumber for the hay loft floor may also be altered or the width changed without affecting the stability of the barn.

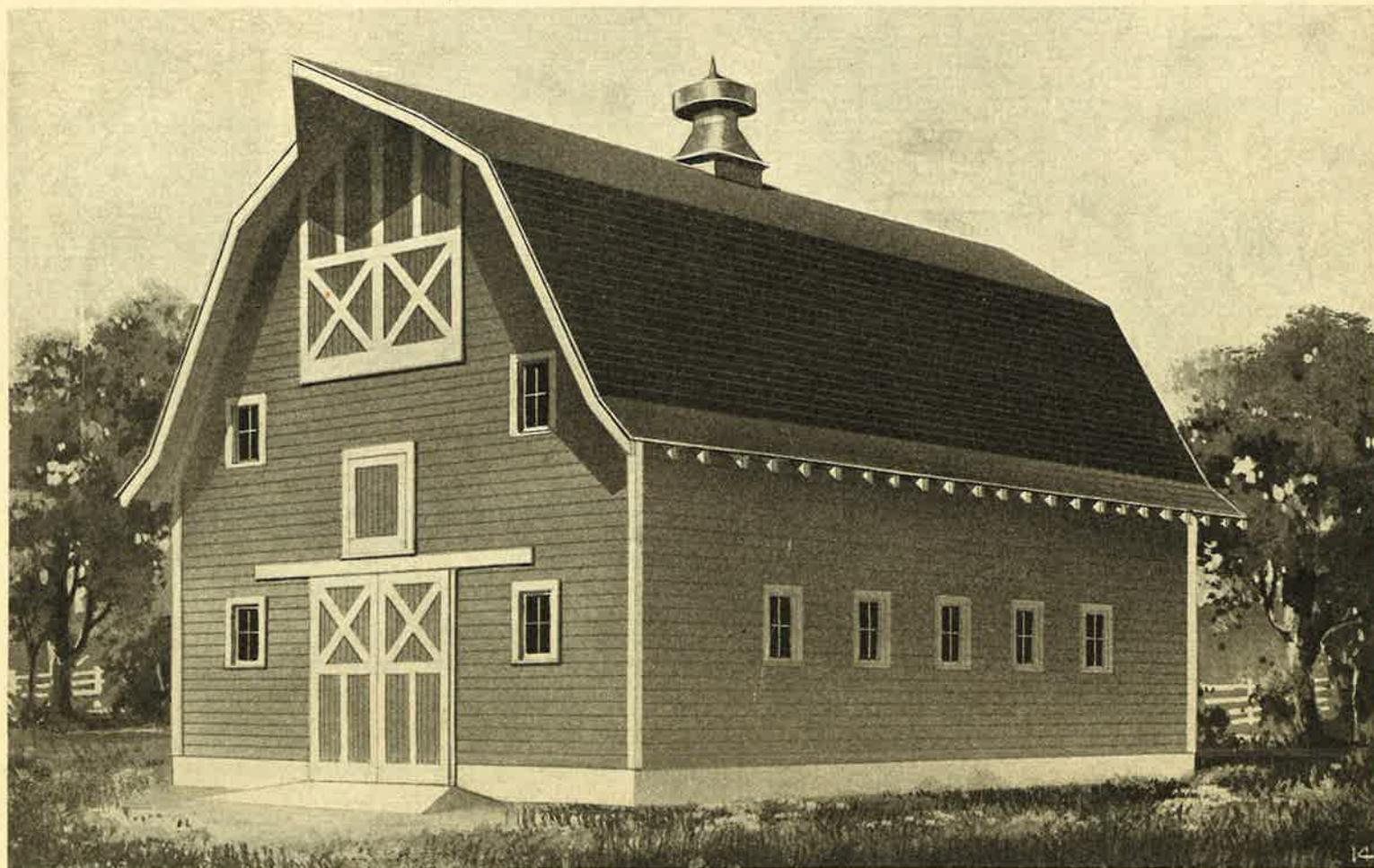
An interior view of the barn is shown looking towards the front end wall. It shows the side walls and roof framing and makes clear exactly how all the different parts of the building are put together.



SOUTHERN PINE ASSOCIATION
NEW ORLEANS, LOUISIANA

Southern Pine Barns

Complete Plans and Instructions Showing How to Build Your Own Barn



Gambrel Roof Barn—28 Feet Wide

THE barn design shown on this page illustrates what is known as the Gambrel Roof Braced Rafter type of barn and is the most popular method of construction. It has the advantage that short lengths of lumber can be used and no large or heavy timbers are required as nothing thicker than two-inch lumber is used, which makes it easy for the farmer to build with the least possible amount of assistance.

There are no difficult or complicated joints to make, which is another feature that is appreciated by the farmer who has to be his own carpenter.

The length of the rafters is properly proportioned so as to give the greatest amount of loft space and at the same time present the most attractive and pleasing appearance from the outside.

The Southern Pine method of barn construction is entirely new and illustrates the most modern and approved methods of building construction in a way that enables the farmer to select for himself a barn that will exactly suit his own requirements, and of any width or length that he desires. Never before has barn building been made possible or explained in such a simple, unique, or practical manner.

The only thing that the farmer must decide for himself is what width he wants to make his barn. Having decided on the width, then he can take the Southern Pine Design sheet for that particular width of barn and build the barn any length that he wants to. There is absolutely no hard and fast rule as between the width and length of any barn.

The farmer can build any width or length that he chooses. Certain lengths have been shown for the different barns but

they are merely average lengths and the farmer can make the barn any length or twice or three times as long or add an extension onto his barn any time he needs to.

As before stated, however, the farmer must decide the width that he wants to make his barn, and in so doing he will be guided by what he considers the least width he can use, so as to arrange his stock and work his barn in the method that his experience has taught him will best suit his particular requirements.

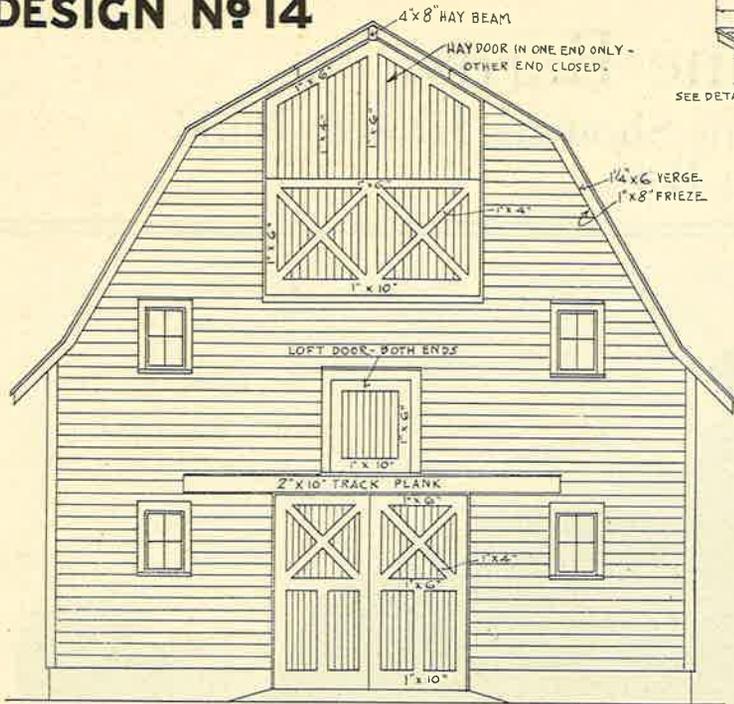
Every farmer has different requirements and we have adopted this interchangeable system which allows the farmer to build a barn of any width or any length that he needs.

Therefore we have made no reference on this sheet to the interior floor arrangement of the barn. He can lay out the floor for a dairy barn, horse barn, general purpose barn, or beef cattle barn according to his requirements, but still using exactly the same type of barn construction as shown on this sheet. The drawings show details of windows, doors, wall and roof construction and the farmer can locate the doors and windows to suit his floor plan arrangement.

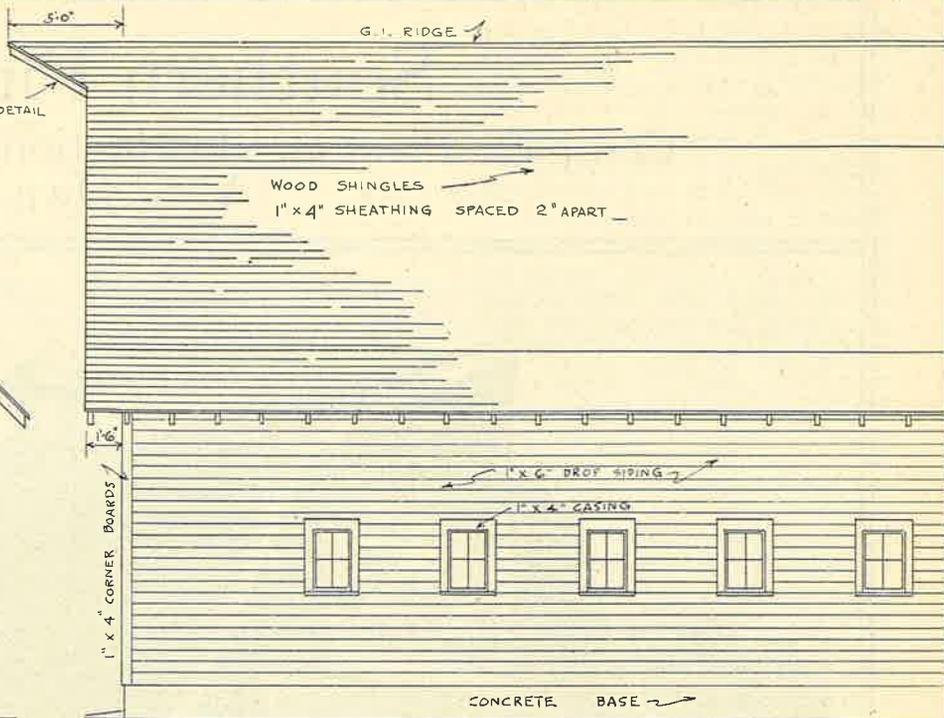
The standard widths of barns are 24, 26, 28, 30, 32, 34 and 36 feet, and for every different width we have a different design as we have to use heavier and longer timbers due to the increased span of the roof.

CONCRETE FOUNDATIONS. The concrete for the foundations and floor should be made in the proportions of one bag of cement, two cubic feet of sand and four cubic feet of clean gravel or broken stone.

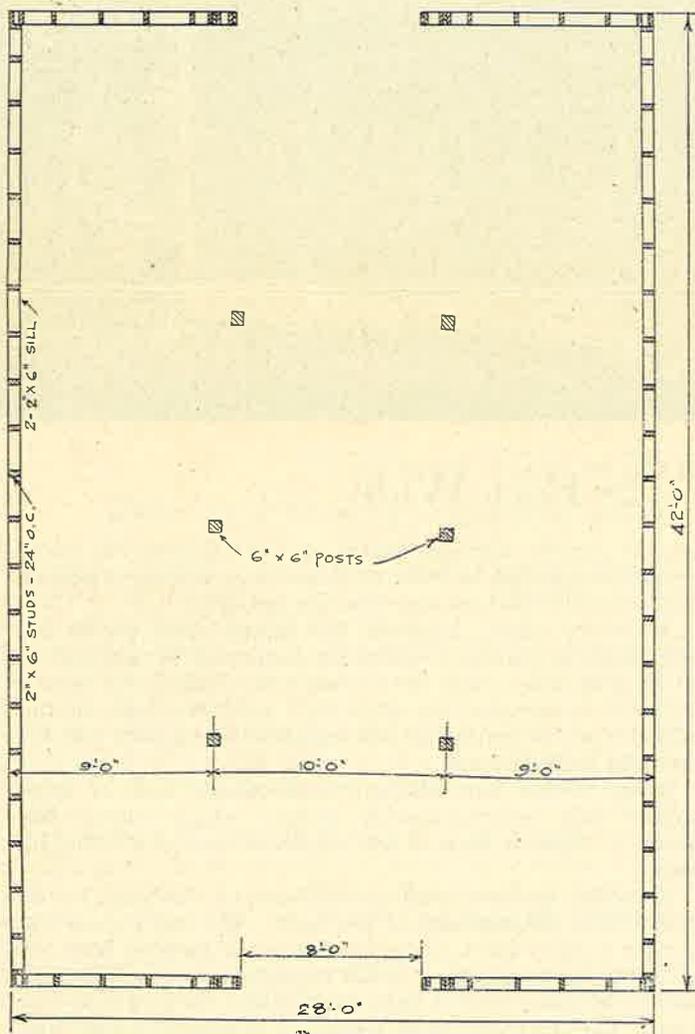
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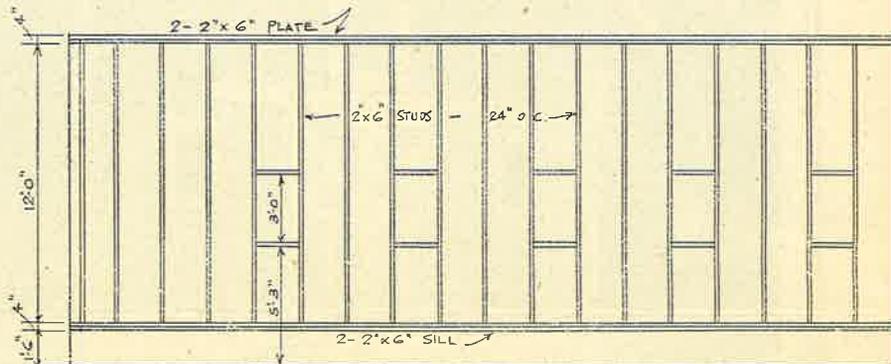
FRONT ELEVATION



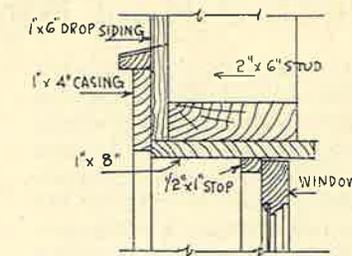
SIDE ELEVATION



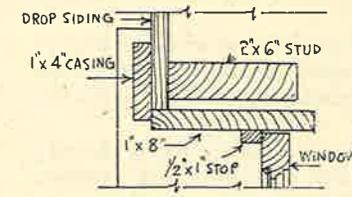
PLAN



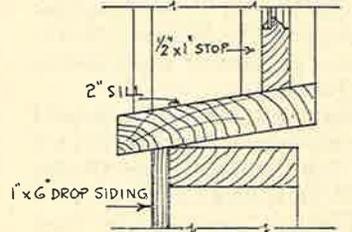
SIDE WALL FRAMING



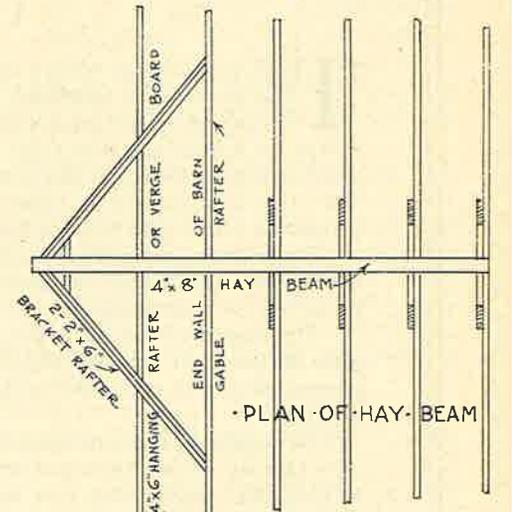
SECTION THRU WINDOW HEAD



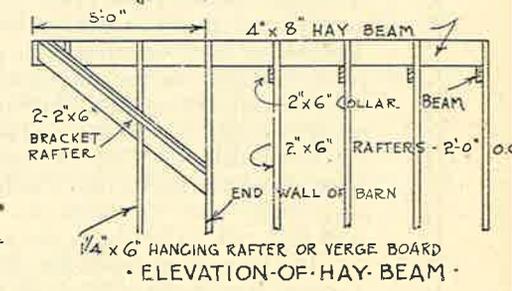
SECTION THRU WINDOW JAMB



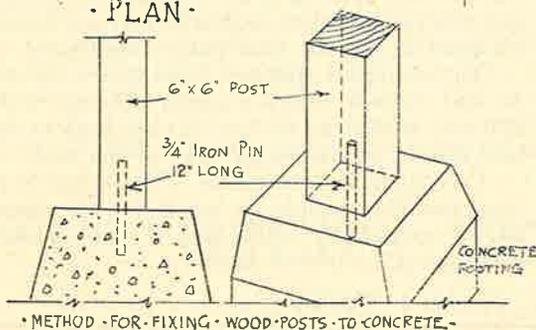
SECTION THRU WINDOW SILL



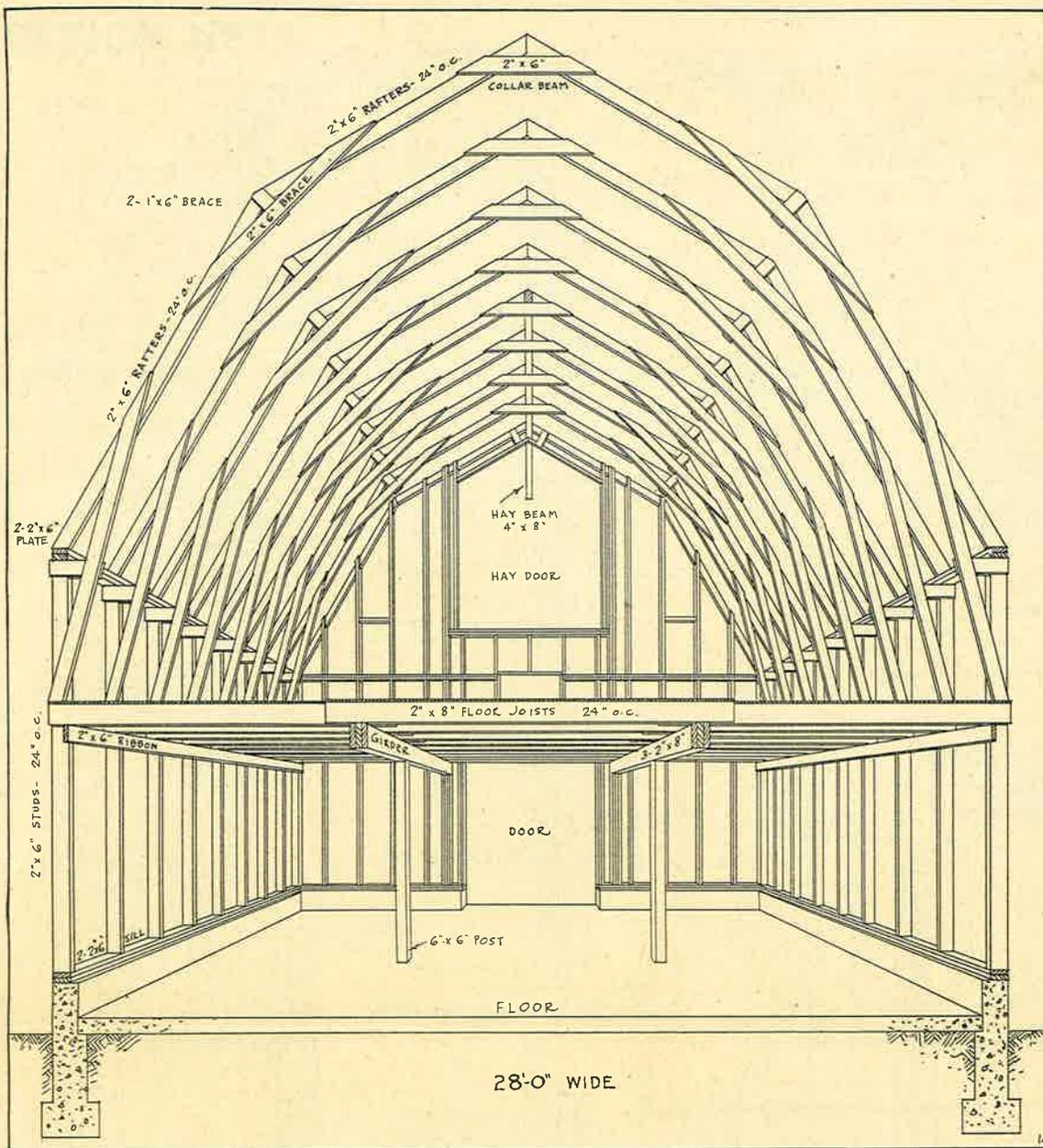
PLAN OF HAY BEAM



ELEVATION OF HAY BEAM



METHOD FOR FIXING WOOD POSTS TO CONCRETE



Interior View of Barn Showing Framing Construction of Walls and Roof

If greater economy is desired the mixture may be made in the proportion of one bag of cement, three cubic feet of sand and five cubic feet of clean gravel or broken stone.

The sand and gravel and cement should be all thoroughly mixed and turned over with a shovel at least twice while still dry and before any water is added. This is to make sure that the cement is thoroughly mixed with the sand and gravel. The mixture should then be sprayed with water from the nose of a watering can or hose and again turned over twice while wet and immediately placed in position.

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All timbers throughout the building should be well nailed together and plenty of spikes should be used as faulty construction results from not using enough spikes.

No ventilators have been shown, as metal roof ventilators are the most popular and the number required will depend on their size and the length of the barn.

With regard to the sheathing boards on the roof, this is an item that allows of considerable variation. Narrow or wide boards can be used. They can be nailed close together or spread apart not more than $2\frac{1}{2}$ inches.

The 1-inch lumber for the hay loft floor may also be altered or the width changed without affecting the stability of the barn.

An interior view of the barn is shown looking towards the front end wall. It shows the side walls and roof framing and makes clear exactly how all the different parts of the building are put together.

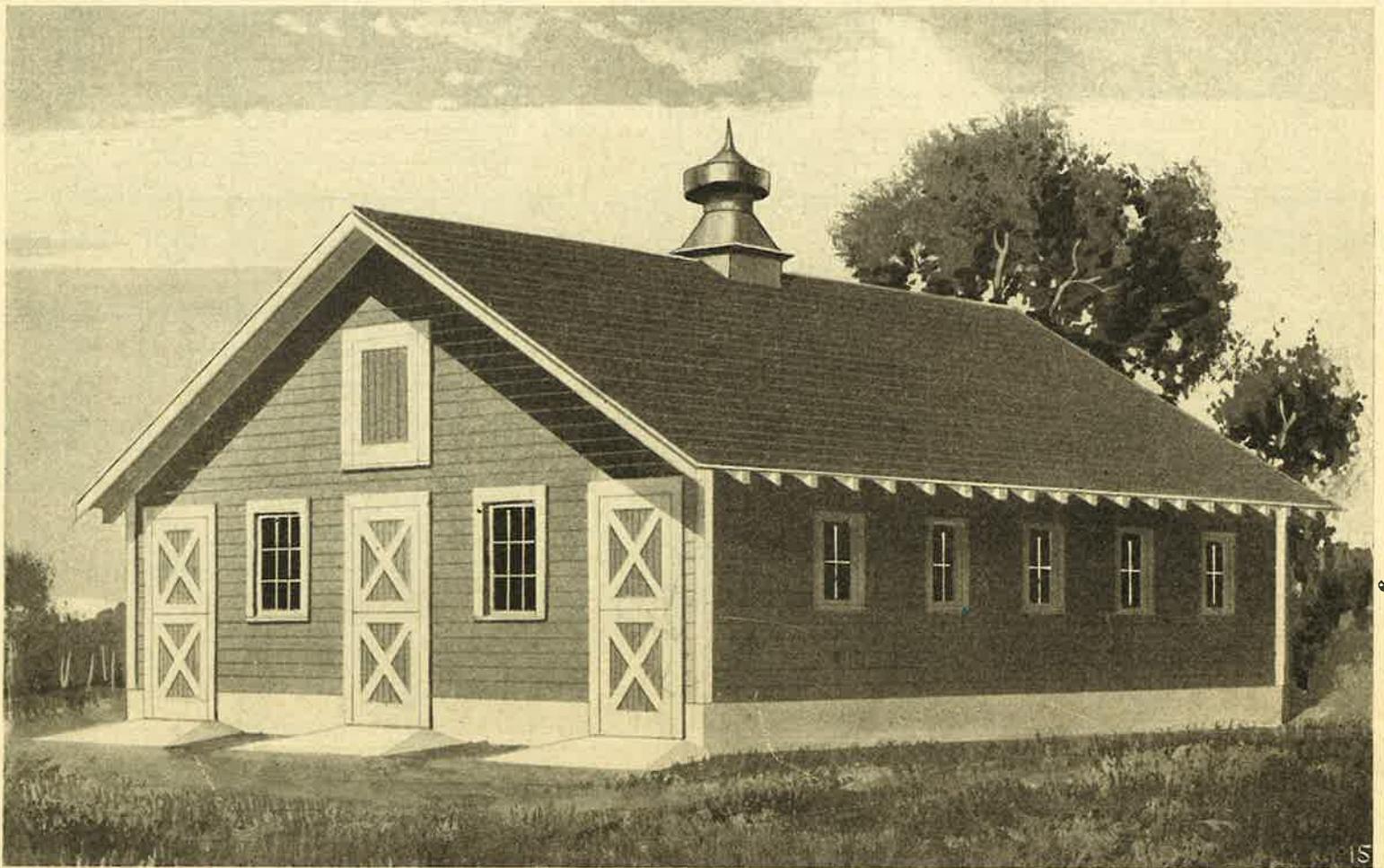


SOUTHERN PINE ASSOCIATION

NEW ORLEANS, LOUISIANA

Southern Pine Barns

Complete Plans and Instructions Showing How to Build Your Own Barn



Gable Roof Barn—30 Feet Wide

THE barn design shown on this page illustrates a Gable Roof type of barn and is a very popular method of construction. It has an advantage that short lengths of lumber can be used and no heavy or large timbers are required as nothing thicker than two-inch lumber is used, which makes it easy for the farmer to build with the least possible amount of assistance.

There are no difficult or complicated joints to make, which is another feature that is appreciated by the farmer who has to be his own carpenter.

The length of the rafters is properly proportioned so as to give the greatest amount of loft space and at the same time present the most attractive and pleasing appearance from the outside.

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The only thing that the farmer must decide for himself is what width he wants to make his barn. Having decided on the width, then he can take the Southern Pine Design sheet for that particular width of barn and build the barn

any length that he wants to. There is absolutely no hard and fast rule as between the width and length of any barn.

The farmer can build any width or length that he chooses. Certain lengths have been shown for the different barns but they are merely average lengths and the farmer can make the barn any length or twice or three times as long or add an extension onto his barn any time he needs to.

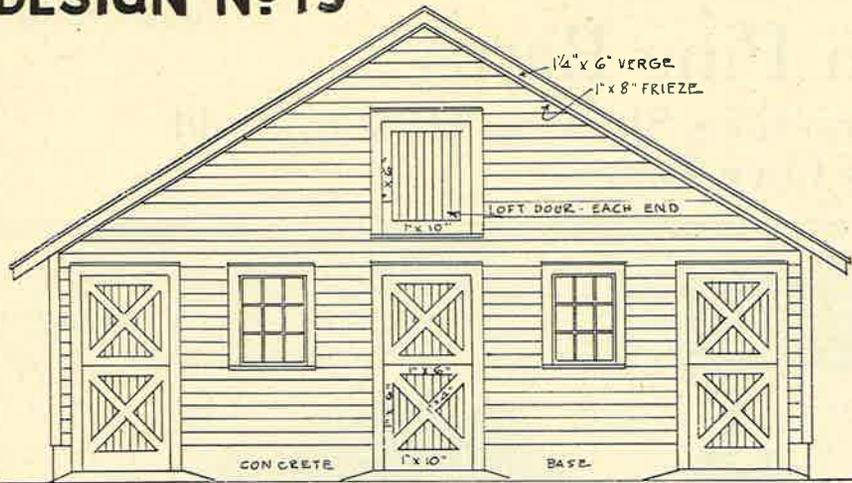
As before stated, however, the farmer must decide the width that he wants to make his barn, and in so doing he will be guided by what he considers the least width he can use so as to arrange his stock and work his barn in the method that his experience has taught him will best suit his particular requirements.

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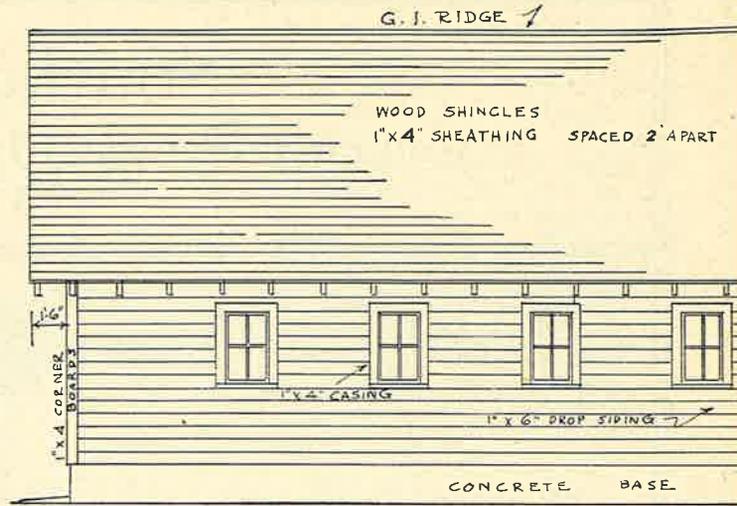
Therefore we have made no reference on this sheet to the interior floor arrangement of the barn. He can lay out the floor for a dairy barn, horse barn, general purpose barn, or beef cattle barn according to his requirements, but still using exactly the same type of barn construction as shown on this sheet. The drawings show details of windows, doors, wall and roof construction and the farmer can locate the doors and windows to suit his floor plan arrangement.

The standard widths of barns are 24, 26, 28, 30, 32, 34 and 36 feet, and for every different width we have a

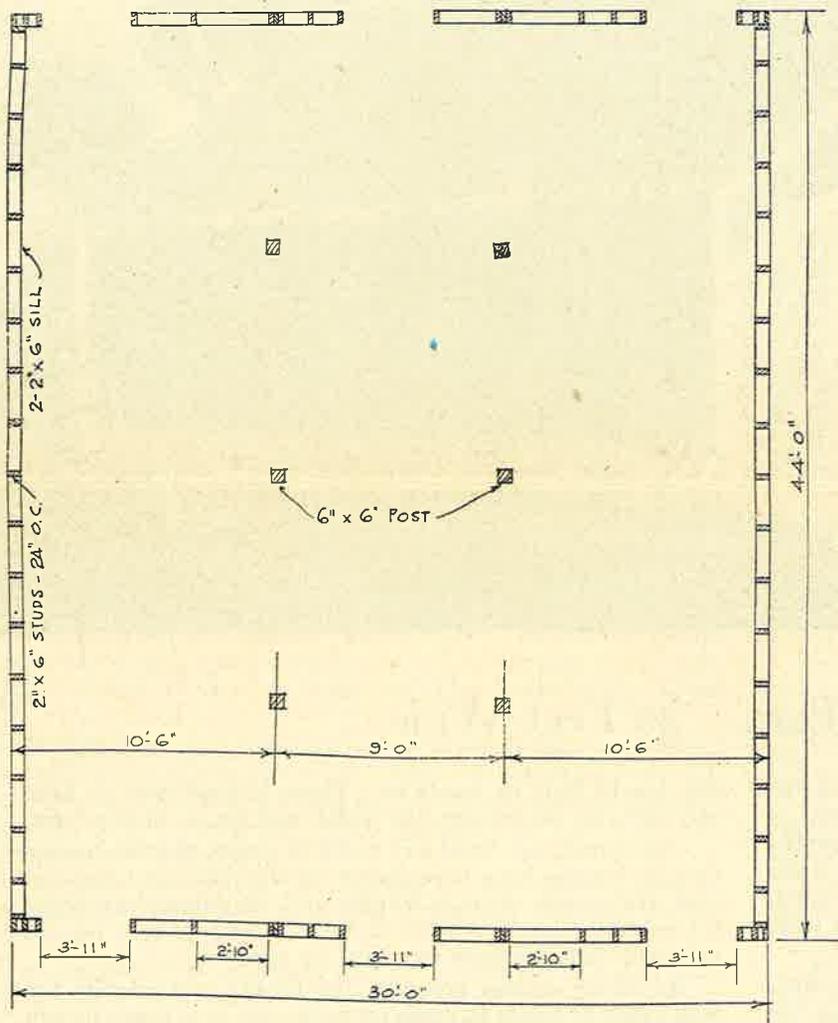
DESIGN NO 15



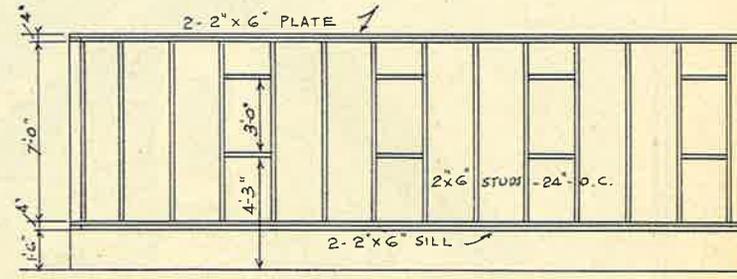
FRONT ELEVATION



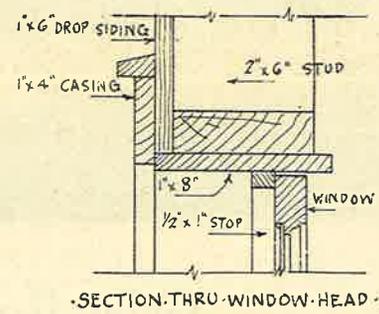
SIDE ELEVATION



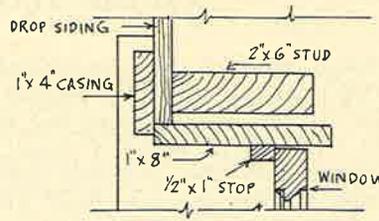
PLAN



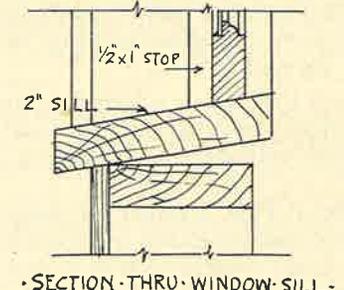
SIDE WALL FRAMING



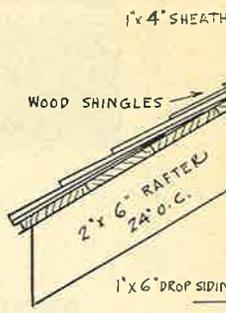
SECTION THRU WINDOW HEAD



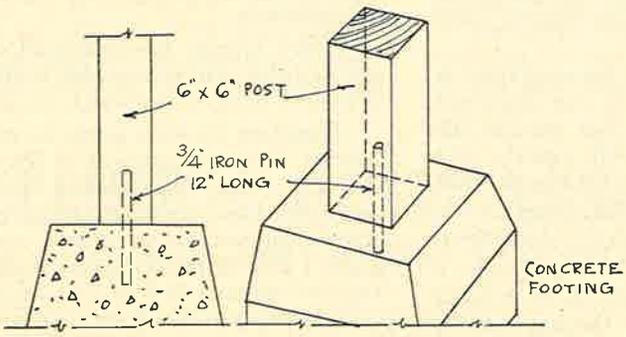
SECTION THRU WINDOW JAMB



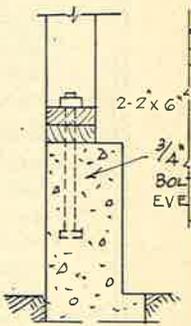
SECTION THRU WINDOW SILL



SECTION

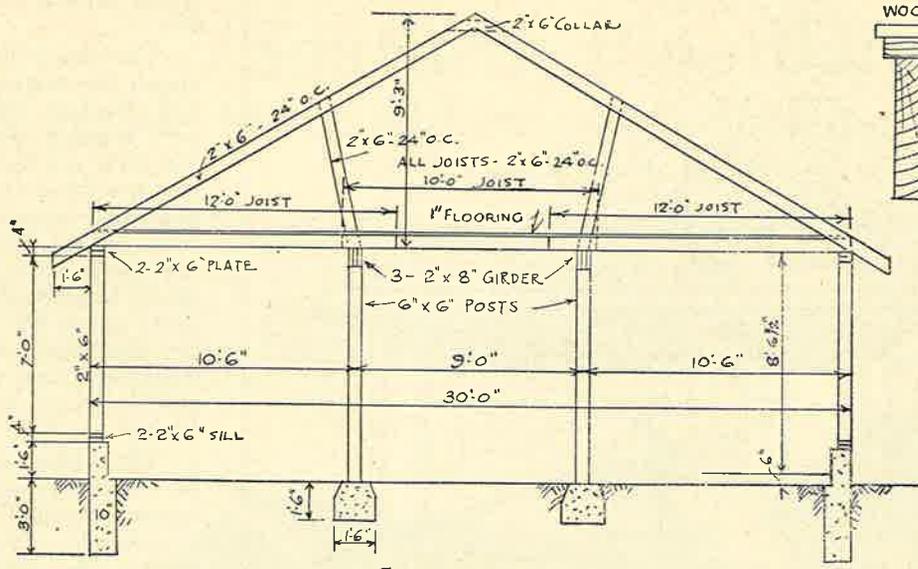
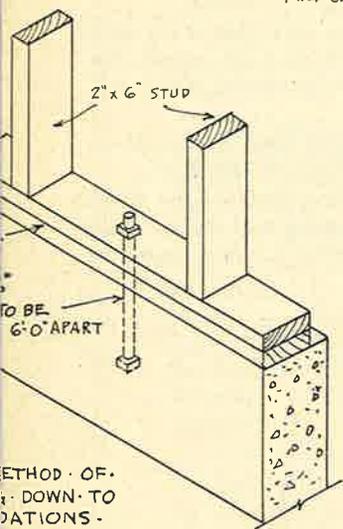
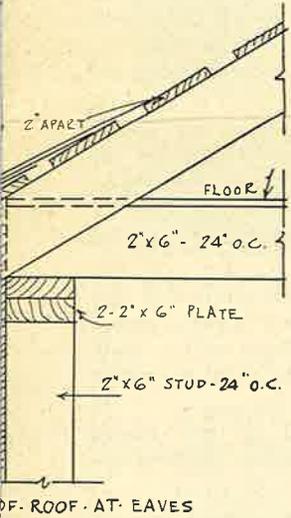
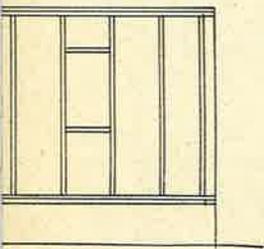
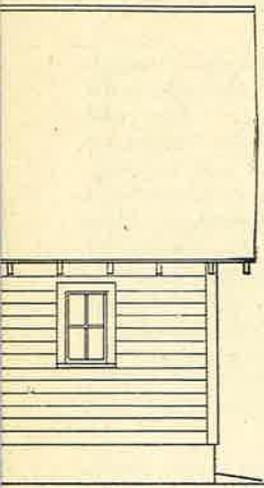


METHOD FOR FIXING WOOD POSTS TO CONCRETE

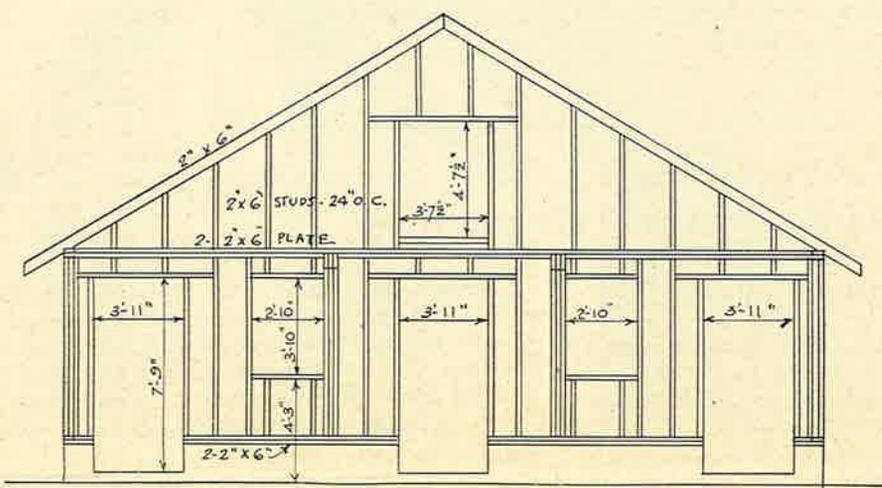


DETAIL SHOWING BOLTING BUILDING TO CONCRETE FOOTING

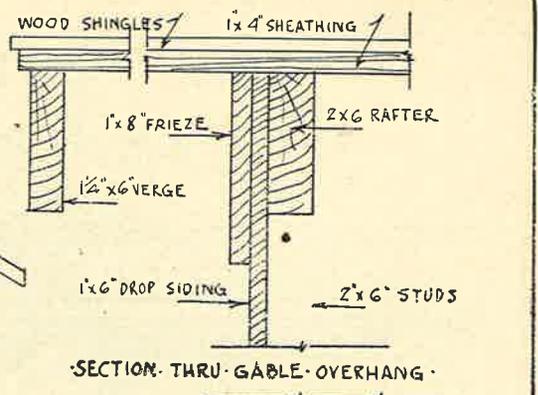




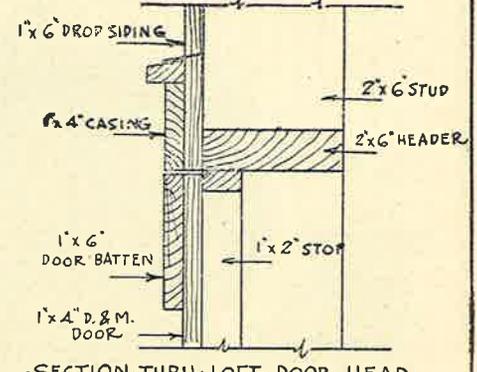
CROSS SECTION



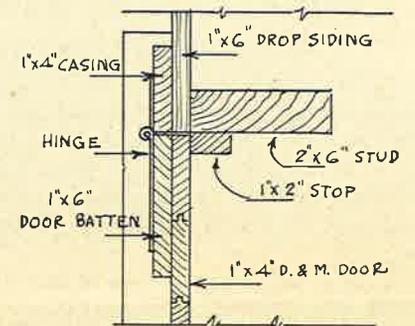
END WALL FRAMING



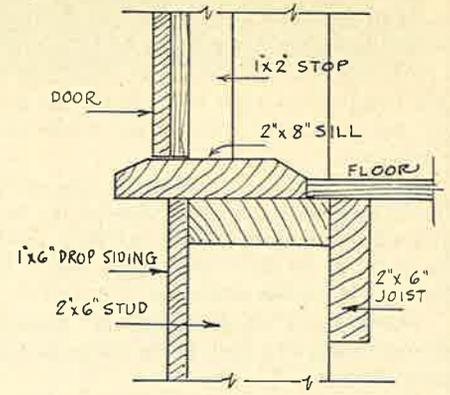
SECTION THRU GABLE OVERHANG



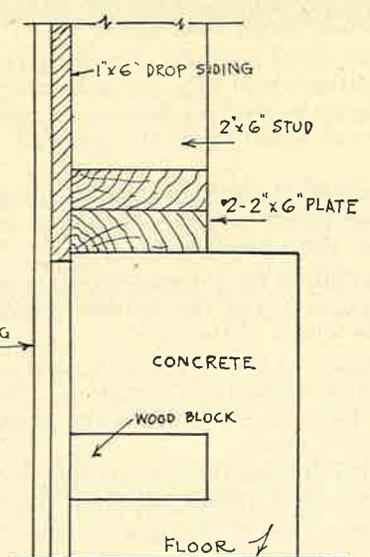
SECTION THRU LOFT DOOR HEAD



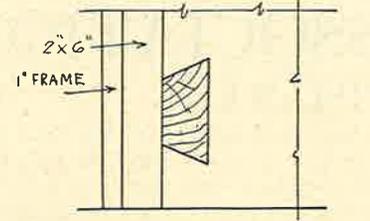
SECTION THRU LOFT DOOR JAMB



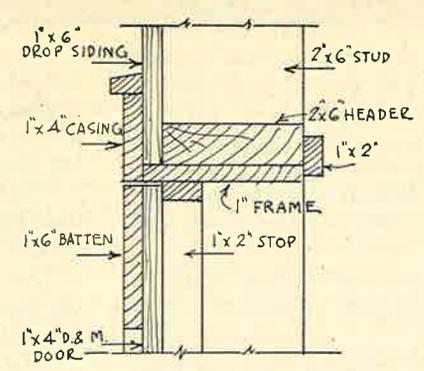
SECTION THRU LOFT DOOR SILL



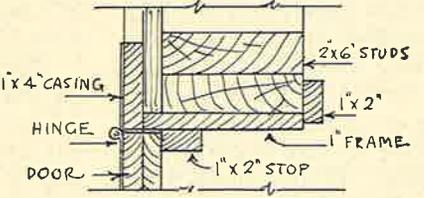
SECTION AT BOTTOM OF DOOR SHOWING WOOD BLOCK BEDDED IN CONCRETE FOR NAILING DOOR FRAME TO



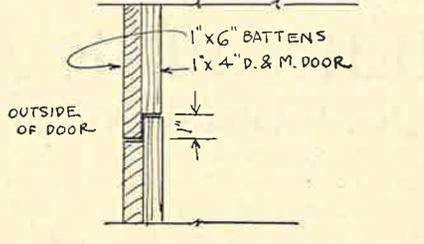
SECTION THRU WOOD BLOCK



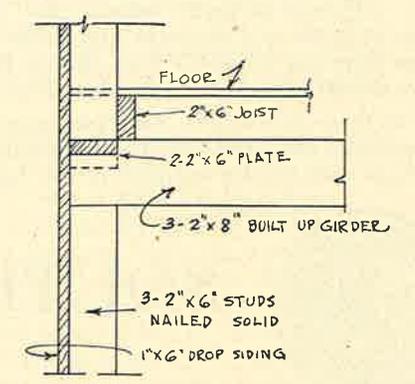
SECTION THRU DUTCH DOOR HEAD



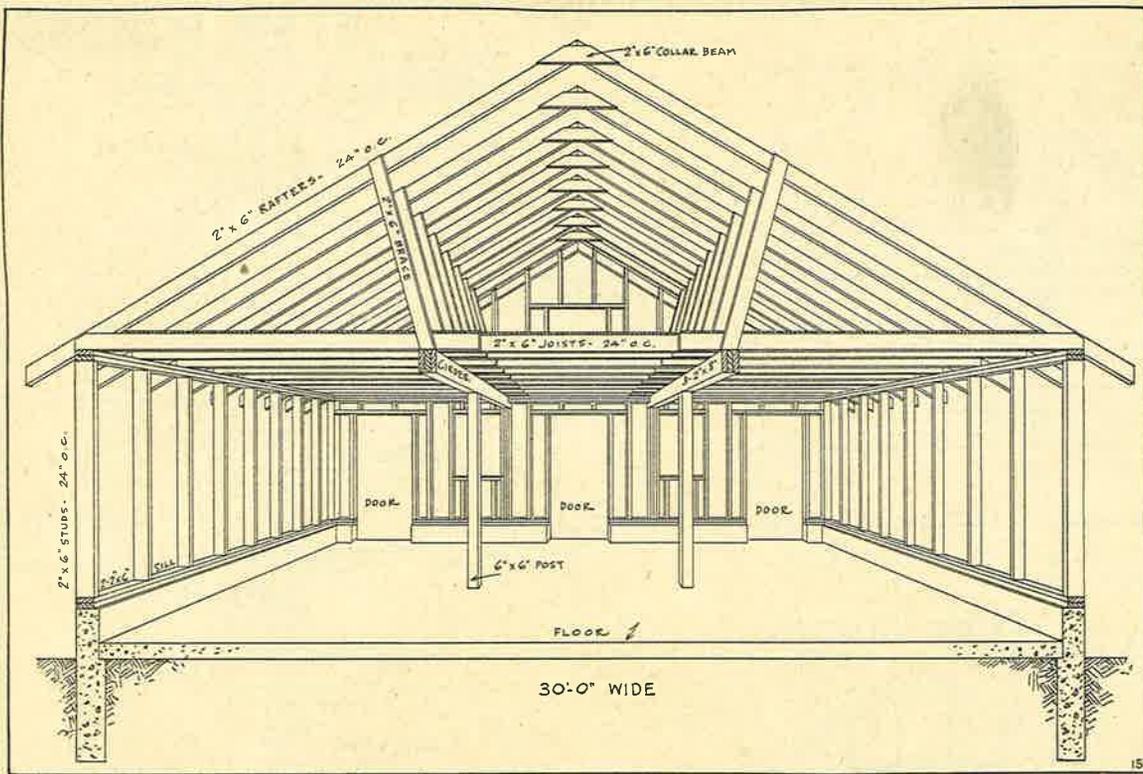
SECTION THRU DUTCH DOOR JAMB



SECTION THRU CENTER OF DOOR



DETAIL AT END OF GIRDER



**Interior View of Barn
Showing Framing Construction of Walls and Roof**

different design as we have to use heavier and longer timbers due to the increased span of the roof.

CONCRETE FOUNDATIONS. The concrete for the foundations and floor should be made in the proportions of one bag of cement, two cubic feet of sand and four cubic feet of clean gravel or broken stone.

If greater economy is desired the mixture may be made in the proportion of one bag of cement, three cubic feet of sand and five cubic feet of clean gravel or broken stone.

The sand and gravel and cement should be all thoroughly mixed and turned over with a shovel at least twice while still dry and before any water is added. This is to make sure that the cement is thoroughly mixed with the sand and gravel. The mixture should then be sprayed with water from the nose of a watering can or hose and again turned over twice while wet and immediately placed in position.

Before the wet concrete is placed in position the wood forms which hold the concrete should be hosed with water. This will prevent the concrete from sticking to the boards and also prevent the boards, if they were dry, from absorbing all the good and moisture from the concrete.

The cement floor should be finished on top with a layer of cement mortar $\frac{3}{4}$ -inch thick composed of one part of cement to two parts of sand.

When concrete is to be placed on top of concrete that has been laid the previous day, the old concrete should be well sprayed with water. This is to make certain that the new concrete will stick properly to the old concrete and make a perfect joint. This also means that the concrete floor should be well sprayed with water before the final top layer or finishing coat of cement mortar is applied.

The floor plan shows the exact spacing of all the studs for the side and end walls and how they are arranged at the door and window openings and at the corners of the building. It also shows the

position of the center posts or columns which support the floor of the hay loft.

The side wall framing elevation shows the height of the side walls and window spacing. The end wall framing shows the height of the studs and the roof and the correct spacing of the studs around the door and window openings. The cross section shows the position of the center posts, the height of the studs, the height of the loft floor joists above the ground floor level, and the height of the roof and the length and sizes of the roof rafters and the length and sizes of the roof braces.

The cross section also shows the thickness and height of the concrete foundation walls and size of concrete piers under the wood posts. The depth of the concrete foundations should be increased if necessary in order to go down and rest on solid ground or below the frost line, according to locality.

At each corner of the barn three corner studs are arranged as shown on plan and provide for nailing space should it be desired to line the inside of the barn at any time.

FOUNDATION BOLTS. In order to properly secure the frame work of the barn to the concrete foundation walls, ordinary bolts $\frac{3}{4}$ -inch by about 16 inches long must be placed in the concrete at the time the wet concrete is laid and they should project about 5 inches above the concrete and 3 inches from the outside edge.

These bolts should be placed about every 6 feet along the foundation wall. Holes are to be drilled in the wood sill which is afterwards fitted down over the bolts and the washers and nuts then screwed on. Refer to the detail showing method of bolting building down to the concrete foundation which makes this important operation very clear.

The built-up girder should be well spiked together; no two joints should be closer than 4 feet.

The floor joists must be securely spiked to wall studs and also spiked together where they lap past each other, and in this manner the building is securely tied across its full width from wall to wall. Three rows of 1-inch by 4-inch bridging should be fixed to stiffen the joists.

All timbers throughout the building should be well nailed together and plenty of spikes should be used as faulty construction results from not using enough spikes.

No ventilators have been shown, as metal roof ventilators are the most popular and the number required will depend on their size and the length of the barn.

With regard to the sheathing boards on the roof, this is an item that allows of considerable variation. Narrow or wide boards can be used. They can be nailed close together or spread apart not more than $2\frac{1}{2}$ inches.

The 1-inch lumber for the hay loft floor may also be altered or the width changed without affecting the stability of the barn.

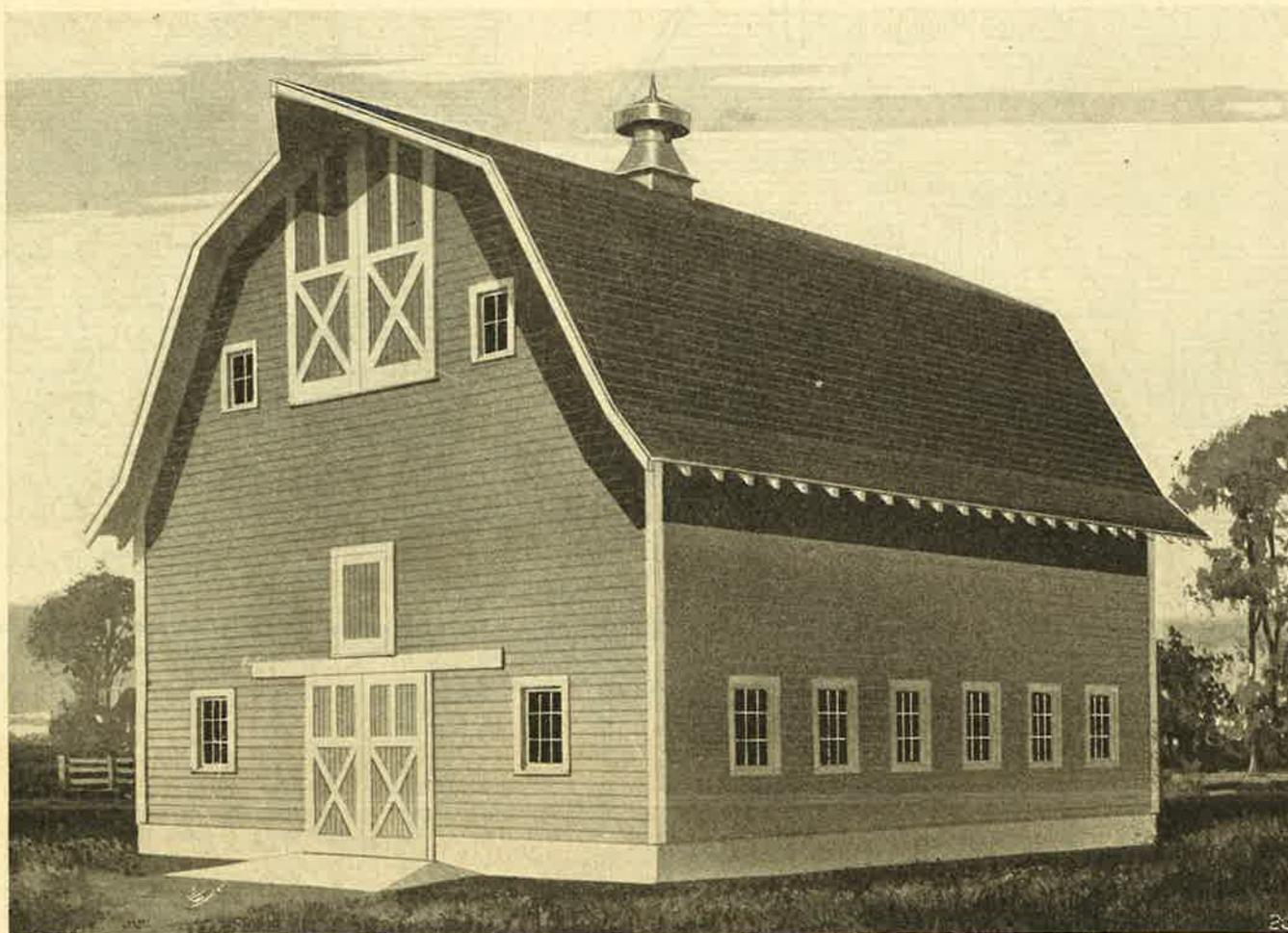
An interior view of the barn is shown looking towards the front end wall. It shows the side walls and roof framing and makes clear exactly how all the different parts of the building are put together.



**SOUTHERN PINE ASSOCIATION
NEW ORLEANS, LOUISIANA**

Southern Pine Barns

Complete Plans and Instructions Showing How to Build Your Own Barn



Gambrel Roof Barn—36 Feet Wide

THE barn design shown on this page illustrates what is known as the Gambrel Roof Braced Rafter type of barn and is the most popular method of construction. It has the advantage that short lengths of lumber can be used and no large or heavy timbers are required as nothing thicker than two-inch lumber is used, which makes it easy for the farmer to build with the least possible amount of assistance.

There are no difficult or complicated joints to make, which is another feature that is appreciated by the farmer who has to be his own carpenter.

The length of the rafters is properly proportioned so as to give the greatest amount of loft space and at the same time present the most attractive and pleasing appearance from the outside.

The Southern Pine method of barn construction is entirely new and illustrates the most modern and approved methods of building construction in a way that enables the farmer to select for himself a barn that will exactly suit his own requirements, and of any width or length that he desires. Never before has barn building been made possible or explained in such a simple, unique, or practical manner.

The only thing that the farmer must decide for himself is what width he wants to make his barn. Having decided on the width, then he can take the Southern Pine Design sheet for that particular width of barn and build the barn any length that he wants to. There is absolutely no hard and fast rule as between the width and length of any barn.

The farmer can build any width or length that he chooses. Certain lengths have been shown for the different barns but

they are merely average lengths and the farmer can make the barn any length or twice or three times as long or add an extension onto his barn any time he needs to.

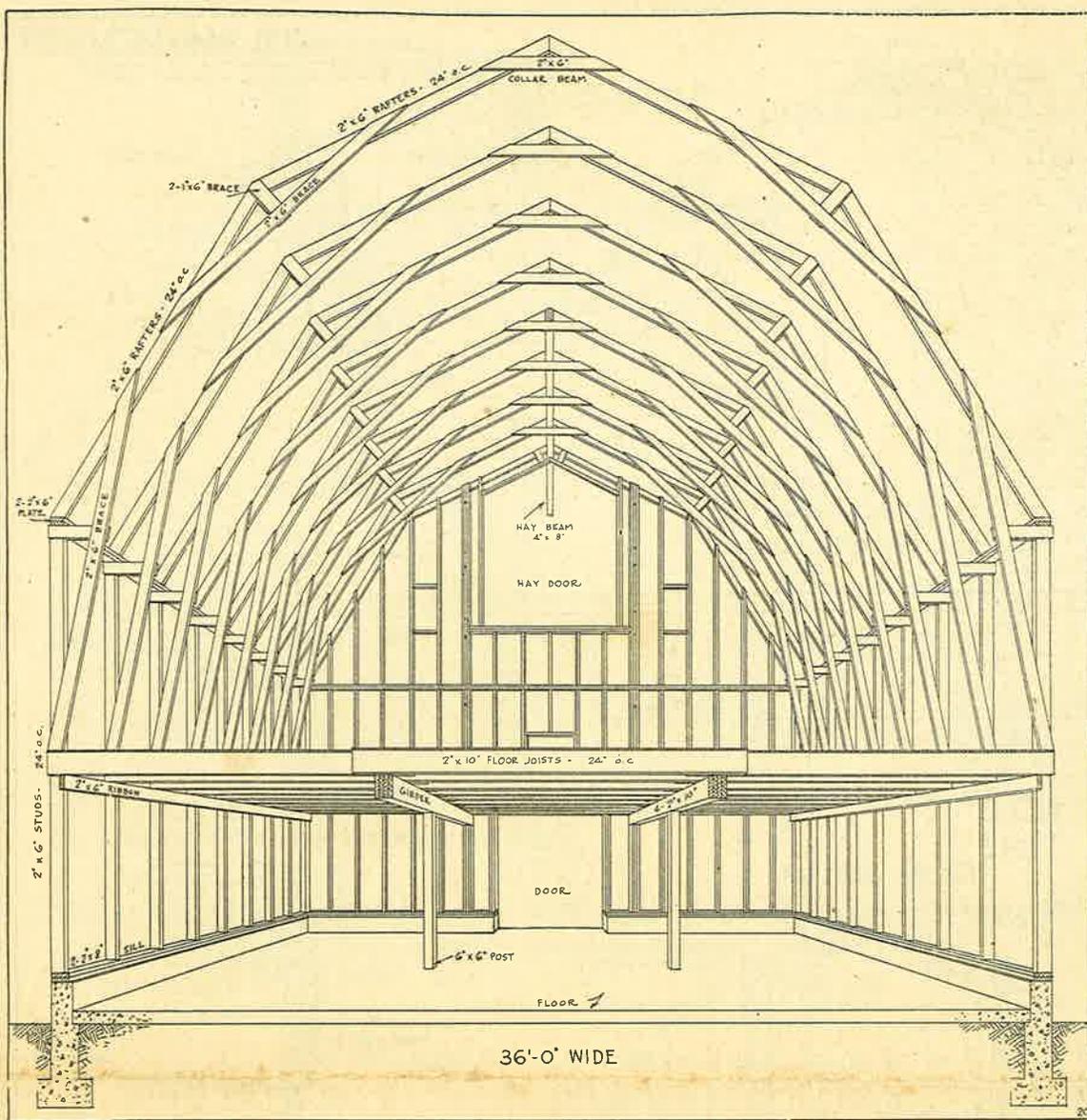
As before stated, however, the farmer must decide the width that he wants to make his barn, and in so doing he will be guided by what he considers the least width he can use, so as to arrange his stock and work his barn in the method that his experience has taught him will best suit his particular requirements.

Every farmer has different requirements and we have adopted this interchangeable system which allows the farmer to build a barn of any width or any length that he needs.

Therefore we have made no reference on this sheet to the interior floor arrangement of the barn. He can lay out the floor for a dairy barn, horse barn, general purpose barn, or beef cattle barn according to his requirements, but still using exactly the same type of barn construction as shown on this sheet. The drawings show details of windows, doors, wall and roof construction and the farmer can locate the doors and windows to suit his floor plan arrangement.

The standard widths of barns are 24, 26, 28, 30, 32, 34 and 36 feet, and for every different width we have a different design as we have to use heavier and longer timbers due to the increased span of the roof.

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Interior View of Barn
Showing Framing Construction of Walls and Roof

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