

# FARM BUILDING PLANS

Adopted by

EXTENSION SERVICE

ALABAMA POLYTECHNIC INSTITUTE

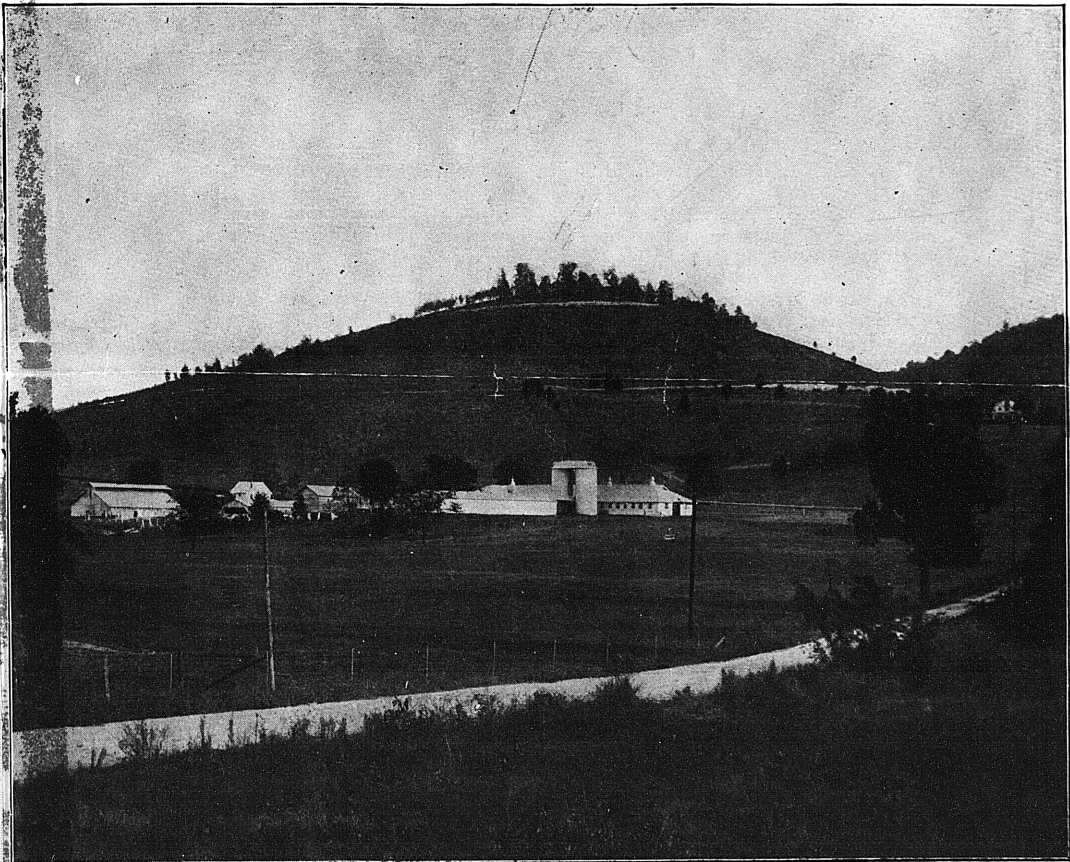
BRADFORD KNAPP, President

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Prepared by

Department of Agricultural Engineering

AUBURN, ALABAMA



Cooperative Extension Work in Agriculture and Home Economics, The Alabama Polytechnic Institute and the United States Department of Agriculture Cooperating—Acts of May Eighth and June Thirtieth, Nineteen Hundred Fourteen

## Foreword

**T**HE VALUE of all farm buildings in Alabama is scarcely over \$106,000,000 while the total value of farm buildings over the entire country is \$11,000,000,000, leaving Alabama with a total investment in farm buildings of about 50 per cent of the average value for the entire country.

While on the other hand the value of farm products in Alabama for 1925 was \$181,000,000 and the total value of all farm products for the entire country was \$12,404,000,000, making Alabama's total income from farm products near 75 per cent of the average value received by other states. With these figures in mind we feel that Alabama has an income sufficient to demand better farm homes and other buildings.

If the losses due to poor farm buildings could be tabulated we would find that the total would be staggering. In "Farm Buildings" by Foster and Carter, we find this statement: "The loss in depreciation of farm machinery due to lack of proper housing is at least 100 million dollars each year. Two hundred million more are lost from feeding rodents from the food storage houses of the country. Milk production from our 20 million dairy cows would be increased by several million pounds per day if all the cows were housed under modern conditions. We are paying for good buildings whether we have them or not."

In our continued effort to furnish the plans in the following list we hope it is your privilege to receive some benefit from the service we are trying to give you and the State of Alabama.

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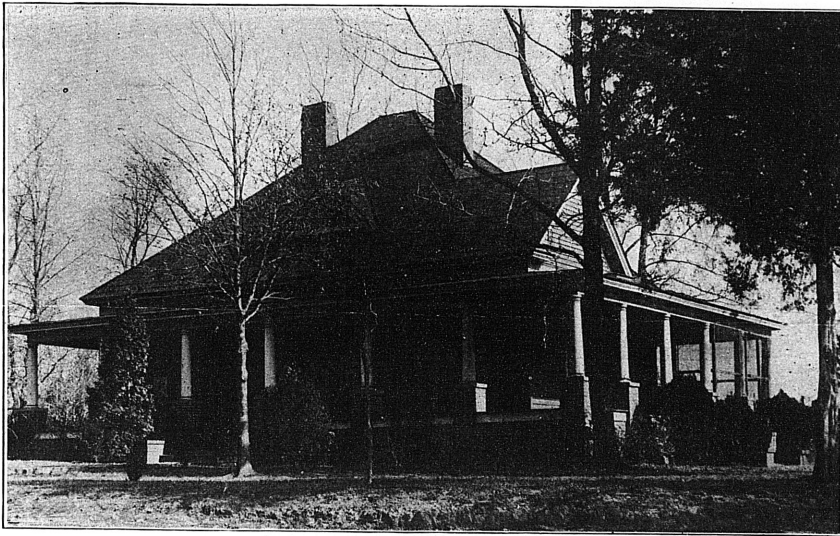
1914

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ABF 5076

# DWELLINGS

## Three and Four Room Houses

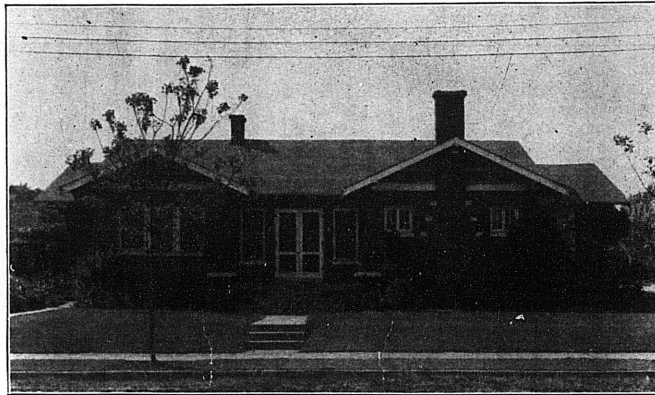


The Auburn Practice Home

ABF 5076

- A-101 4 room house, bungalow type, 1 story, living and dining room combined, 2 bed rooms, kitchen and bath.
- A-102 4 room house, bungalow type, 1 story, living and dining room combined, bed room, kitchen and bath.
- A-103 4 room house, bungalow type, 1 story, living and dining room combined, 2 bed rooms, bath, kitchen and hall.

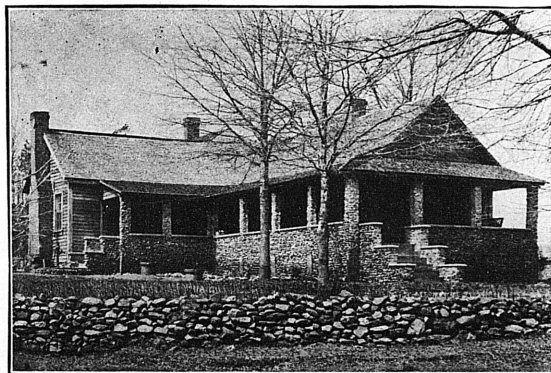
## Five and Six Room Houses



A Cullman County Home

- B-104 6 room, English Colonial house, 2 story, living room, dining room, kitchen, living and sun porch on first floor, 3 bed rooms and bath on second floor. Basement.
- B-106 6 room house, bungalow type, 1 story, basement and rooms in attic may be added. Living room, dining room, 2 bed rooms, kitchen bath, breakfast room—work room, or sleeping porch. A model on this plan was used at Alabama state fairs.
- B-108 5 room house, 1 story, boxed cornices, decked roof, living and dining rooms. 2 bed rooms, kitchen and bath, screened side-porch. Basement and rooms in attic may be added.
- B-111 5 room house, 1 story, bungalow type, living room dining room, 2 bed rooms kitchen and bath, small front porch.
- B-112 5 room Colonial house, living room, dining room, kitchen, 2 bed rooms, bath and cellar.

## Seven and Eight Room Houses

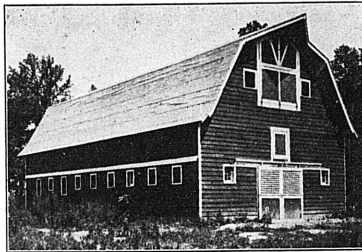


**This Farmer Added Life to His Home by Remodeling**

- C-115 8 room—2 story Colonial house, living room, library, dining room, kitchen, sun parlor on first floor, 4 bed rooms and bath on second floor.
- C-114 Remodeled Colonial 8 room 2 story house. Living room, dining room, sun parlor and kitchen, first floor, 4 bed rooms and bath second floor.
- C-105 8 room Colonial, living room, dining room, kitchen and sun parlor on first floor, 3 bedrooms, bath and sleeping porch on second floor, large porches.
- C-107 7 room bungalow, 3 bedrooms, living room, dining room, kitchen and bath. Also work room, basement and attic may be added.
- C-109 7 room—2 story house, living room, dining room and kitchen on first floor, 4 bed rooms and bath on second floor. Basement.
- C-110 Plans for remodeling an old type Colonial farm house. Main house has 2 rooms on either side of hall, with ell behind. One or two stories.
- C-116 2 story house, 7 rooms, bath and work porch.
- C-113 7 room house, living room, dining room, kitchen, sun parlor, bath and 3 bed rooms.

# BARNS AND SILOS

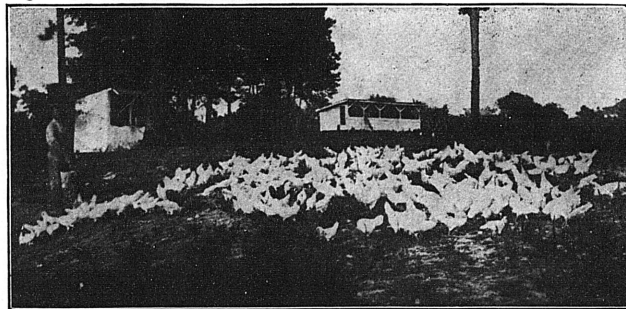
## General Purpose Barns



**An Auburn Plan Barn**

- 28-2-E G. P. barn; 12 horses; 12 cows; Gothic roof (Gambrell roof)
- 86-2-E Beef cattle barn
- 83-1-E G. P. barn; 4 horses; 8 cows
- 9-1-E Cross section, 1 story
- 30-1-E G. P. barn; 12 horses; 20 cows (Gambrell roof)
- 26-4-E Horse and cattle barn (Gambrell roof)
- 55-1-E Small barn—3 horses; 2 cows. Sable roof.
- 82-1-E 6 Horses; 10 Cows and Feed Room (Gambrell Roof)
- 84-1-E Framing details for 28 ft.
- 11-1-E Framing details for 34 ft.
- 12-1-E Framing details for 32 ft.
- 14-1-E Framing details for 36 ft.
- 20-2-E Sheep barn
- 5-1-E Wood hoop silo
- 48-1-E Capacity of silos (table)

## Swine and Poultry



**Good Buildings Promote Healthy Poultry**

### **Poultry Houses**

- 42-1-D Brooder house (portable Ala. Standard)
- 69-1-D Trap nest (Ala. Standard)
- 74-1-D Dry mash hopper (open Ala. Standard)
- 44-1-D Continuous brooder house
- 14-1-D Continuous poultry house

### **Hog Houses**

- 1-1-D Ala. type hog house (portable)
- 2-1-D Hog dipping vat
- 7-1-D Miss. individual hog house
- 8-1-D Miss. modified hog house
- 36-1-D Colony hog house
- 4-1-D Miss. hog self-feeder
- 32-2-D Hog breeder rack

## Dairy Barns

- 40-1-E 30 cow dairy barn
- 39-1-E 20 cow dairy barn
- 15-1-E Alternate cross section 1 story dairy barn
- 17-2-E 10 cow dairy shed
- 15-2-E Continuous dairy barn (12 cows and multiples of 12 cows)
- 24-1-E Lean-to dairy shed (6 cows)
- A2-1-E Night barn and hay storage for 25-50 cows.

## Milk and Ice Houses

### Ice House

- 29-1-F Ice house for storing ice

### Milk Houses

- 16-3-F Milk house—room and boiler room
- 18-3-F Milk House—wash room, milk room and boiler room

## Storing and Curing Houses

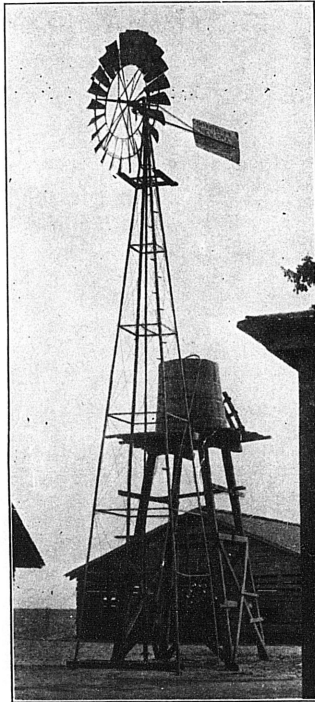
- 25-1-G Meat house, slaughtering, refrigerating and curing
- 23-1-G Weevil-proof corn crib
- 31-1-G 5,000 bu. sweet potato house
- 85-1-G Canning house
- 49-1-G 500 bu. sweet potato house
- 72-1-G Hay shed
- 73-1-G Addition to hay shed

## Community Houses

- 41-2-J Community house
- 45-2-J Club house
- 47-1-J Log Club House—20' x 20' with kitchen and porch
- 82-a-J Band stand and rest room

# WATERWORKS AND SEWAGE DISPOSAL

## Equipment

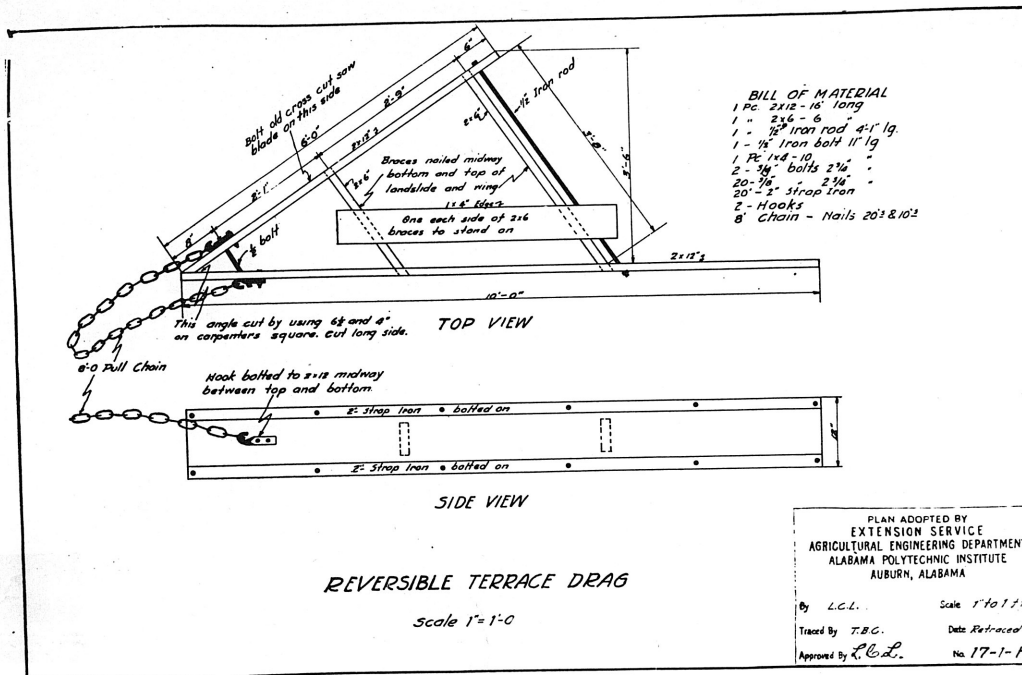


Typical Windmill Installation

- |   |  |
|---|--|
| 37-1-DE Sanitary toilet   | 71-1-DE Concrete well or pump house                                      |
| 64-1-DE Single chamber septic tank                                | 58-1-DE Layout for deep well hydro-pneumatic system (electric motor)     |
| 38-1-DE Two chamber septic tank                                   | 59-1-DE Layout for shallow well, Hydro-pneumatic system (electric motor) |
| 44-1-DE Siphon septic tank (2 chamber)                            | 81-1-DE Layout for gravity water system (gas engine)                     |
| 69-1-DE Barn ventilating system                                   | 77-1-DE Typical ram installation   |
| 78-1-DE Hand water supply system (pitcher pump)                   | 76-1-DE Layout for tile sewage disposal system                           |
| 53-1-DE Barrel water supply system (Hand pump and barrel)         | 25-1-DE Grease trap for tile sewage-disposal system                      |
| 52-1-DE Barrel water supply system—hot and cold water (hand pump) |  |



# Farm Conveniences



PLAN ADOPTED BY  
 EXTENSION SERVICE  
 AGRICULTURAL ENGINEERING DEPARTMENT  
 ALABAMA POLYTECHNIC INSTITUTE  
 AUBURN, ALABAMA

By L.C.L. Scale 1" to 1'-0"

Traced by T.B.G. Date Retraced 2/20

Approved by K.C.L. No. 17-1-H

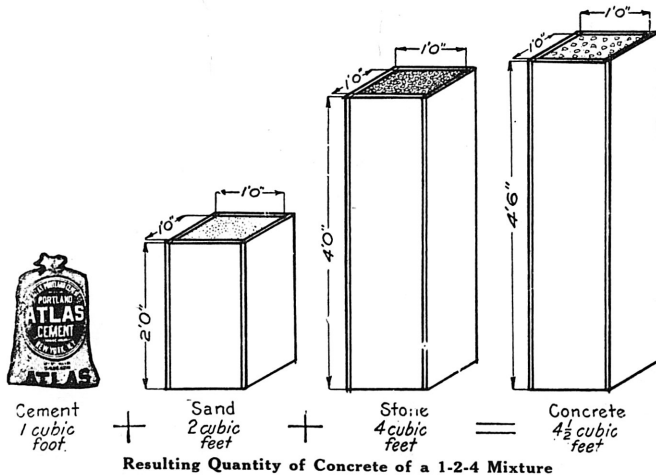
- 62-1-H Hurdle for driving hogs
- 63-1-H Cross section of hay racks
- 47-1-H Crimson clover stripper
- 17-1-H Reversible terrace drag
- 33-1-H Split-log road drag
- 56-1-H Concrete fence post
- 66-1-H Wagon rack
- 50-1-H Wooden stall and stacion
- 60-1-H Unloading chute for cattle
- 80-1-H Shop forge
- 35-1-H Farm gates
- 65-1-H Concrete feeding floor for hogs and concrete hog trough
- 45-2-H Cattle stock
- 67-1-H Water gates

- 61-1-H Hog turn
- 70-1-H Hay curing rack
- 13-2-H Farm repair shop and machinery shed
- 54-1-H Lespedeza seed pan
- 75-1-H Farm shop, garage and machinery shed
- 57-1-H Small car garage
- 59-2-H Grading pens
- 81-1-H Soda Crusher
- 83-1-H Vertical distance between terraces on different slopes. Also fall in inches per 100 feet. Variable grade terrace
- 85-1-H Cold frame or hot bed
- 12-1-H Small hand hay press
- 87-1-H Snaking hoist for Ford or other farm truck

# Home Conveniences

- 14-1-H Model kitchen layout
- 21-1-H Porch swing
- 22-1-H Ironing board
- 23-1-H A roughage feed rack
- 24-1-H Kitchen cabinet
- 20-1-H Barrel baby crib
- 58-1-H Bulletin rack
- 62-1-H Kiddie Koop (folding)
- 64-1-H Students' and farmers' desk
- 66-1-H China cabinet (portable)
- 68-1-H Convenient kitchen plan. Built-in kitchen cabinet. Plain kitchen table. Towel rack.

## Miscellaneous Information About Concrete Mixtures



Quality of materials, quantity of materials and other information about farm structures may be obtained by writing the Agricultural Engineering Department, Alabama Polytechnic Institute, Auburn, Alabama.

# VALUABLE BULLETINS

## For Free Distribution

Bulletins on various farm structures that may be secured from this office, your Home Demonstration Agent, County Agent, or by writing the office of publication U. S. Department of Agriculture, Washington, D. C.

### **Farmsteads and Community Buildings**

Planning the Farmstead Farmers Bulletin No. 1132  
Plans of Rural Community Buildings Farmers Bulletin No. 1173  
Use of Rural Community Buildings Farmers Bulletin No. 1274

### **Painting and Preserving Farm Timbers**

Painting on the Farm Farmers Bulletin No. 1452

### **Barns and Silos**

Beef Cattle Barns Farmers Bulletin No. 1350  
Equipment for farm sheep raising Farmers Bulletin No. 810  
A Simple Hog Breeding Crate Farmers Bulletin No. 966  
Homemade Silos Farmers Bulletin No. 855

### **Poultry and Hog Houses**

Poultry House Construction Farmers Bulletin No. 574  
Poultry Houses and Fixtures Farmers Bulletin No. 1554  
Brood Coops and Appliances Farmers Bulletin No. 1107  
Back Yard Poultry Keeping Farmers Bulletin No. 889  
Hog Houses Farmers Bulletin No. 438

### **Water Works and Sewage Disposal**

Farm water and Sewage Systems Alabama Polytechnic Institute  
Protecting the Farm Against Fire Alabama Polytechnic Institute  
Simple Plumbing Repairs Farmers Bulletin No. 1460  
Installing Modern Plumbing Sears Røebuck and Company  
Farmstead Water Supply Farmers Bulletin No. 1448  
Farm Plumbing Farmers Bulletin No. 1426  
Water Systems for Farm Homes Farmers Bulletin No. 941  
Water-Supply, Plumbing and Sewage Disposal Farmers Bulletin No. 57  
Sewage and Sewerage of Farm Homes Farmers Bulletin No. 1227

### **These Publications may be secured from Alabama State Board of Health, Montgomery, Alabama:**

The Use and Construction of the Concrete Septic Tank  
The Use and Construction of the Concrete Slab Pit Privy  
Plans and Specifications for Approved Earth Pit Privies  
Plans and Specifications for Approved Toilets for New Buildings for Alabama Public Schools  
Plans and Specifications for Approved Toilets for Alabama Non-Consolidated and Rural Public School Buildings Now Requiring Sanitation  
Rules for Maintenance "Earth Pit Privies"

### **Curing and Storage Houses**

Cotton Warehouses Farmers Bulletin No. 216  
Construction and Fire Protection of Cotton Warehouses U. S. Department Of Agriculture Bul. 801

### **Milk and Ice Houses**

Farm Dairy Houses Farmers Bulletin No. 1214  
Plans For Small Dairy House Farmers Bulletin No. 689  
Ice Houses and the Use of Ice on the Farm Farmers Bulletin No. 623

### **Conveniences**

Farm Home Conveniences Farmers Bulletin No. 927  
Use of Farm Home Conveniences Farmers Bulletin No. 270  
Convenient Kitchens Farmers Bulletin No. 1513