

LOOKOUT BUILDING  
PLAN No. 4-A



*STURGIL Mountain Lookout*

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U.S. Department of Agriculture  
Forest Service  
Intermountain Region  
Payette National Forest  
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210

BUILDINGS

SERIES NO. 4.

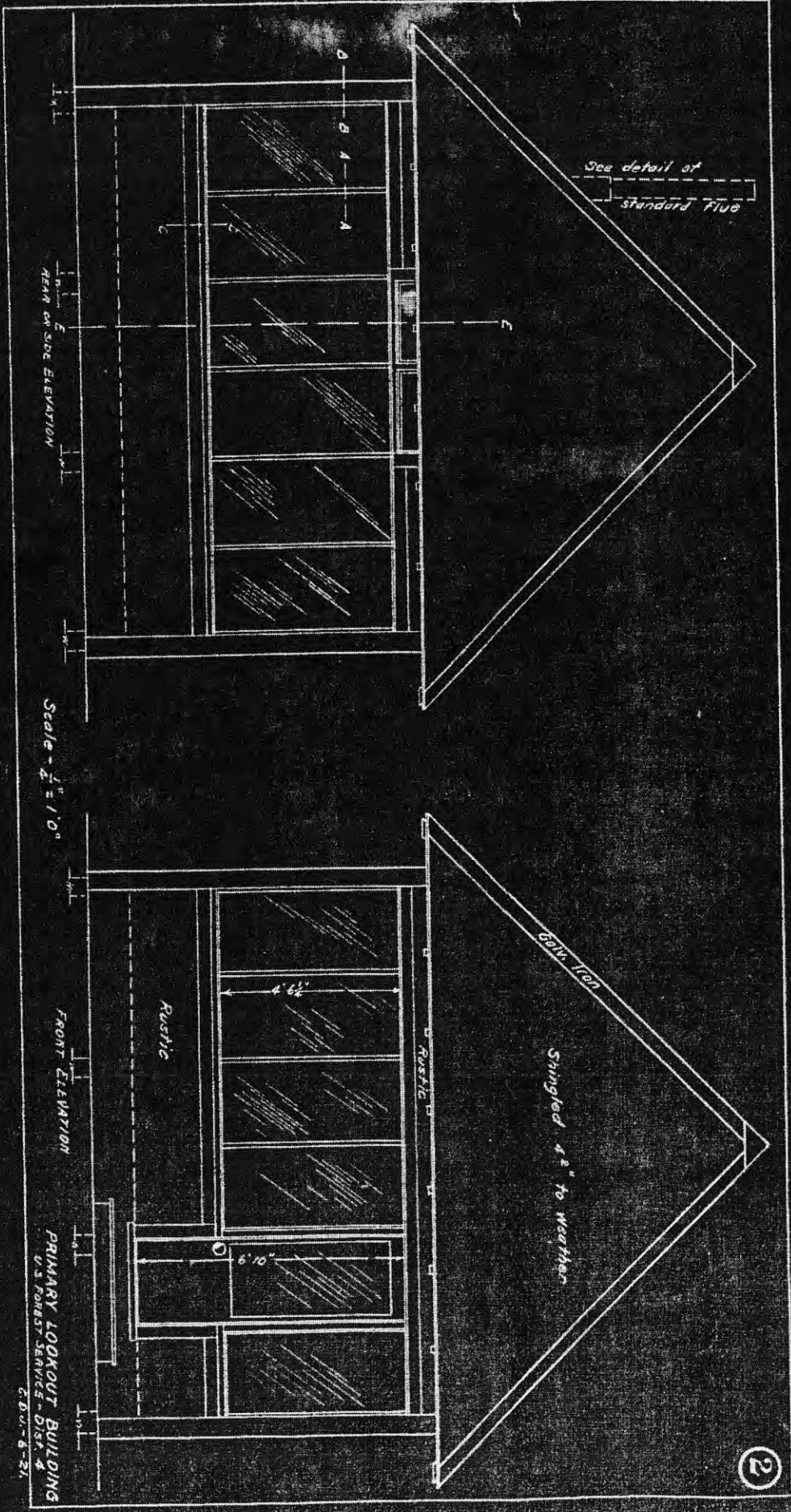
PLAN NO. 4-A. PRIMARY LOOKOUT BUILDING  
Standard for District 4.

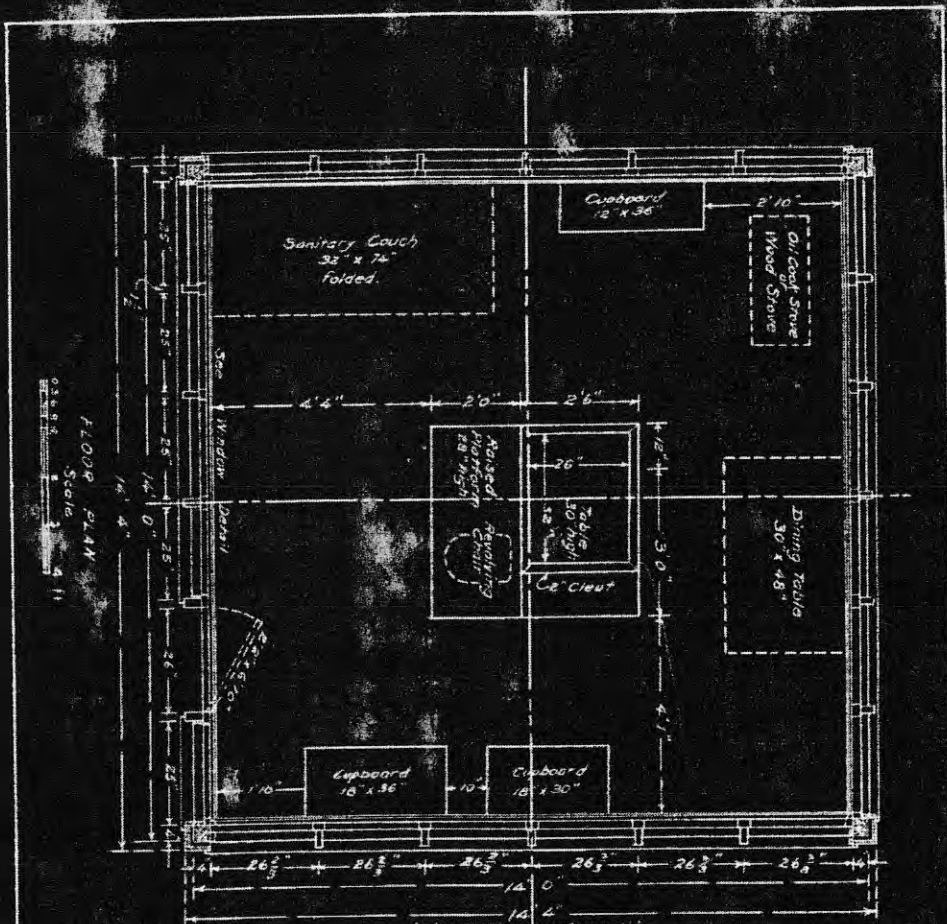
R. H. RUTLEDGE

District Forester.

July 1, 1921.

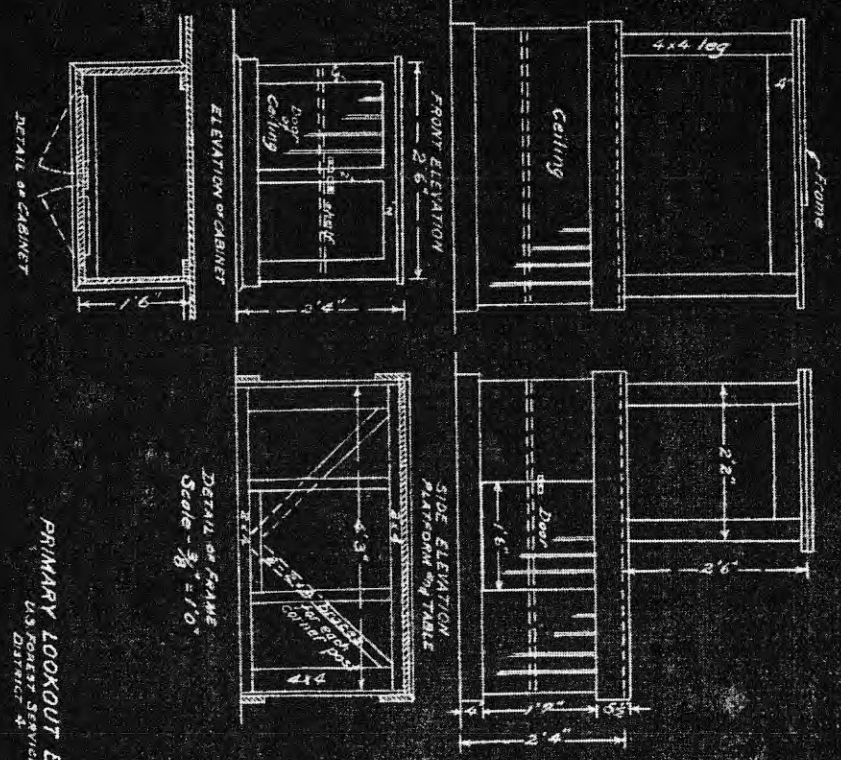






FLOOR PLAN  
Scale 1/4" = 1'-0"

Note: Measurements on this side are typical of each side and rear.

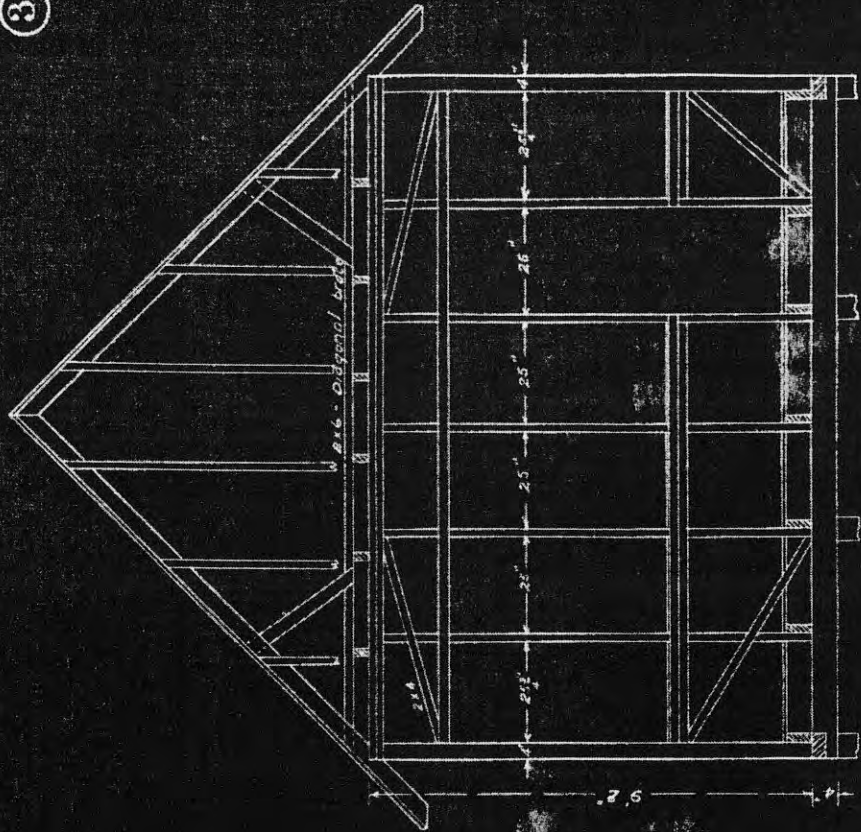


PRIMARY LOOKOUT BUILDING  
U.S. FOREST SERVICE  
DISTRICT 4

C.D.U. - 6-21



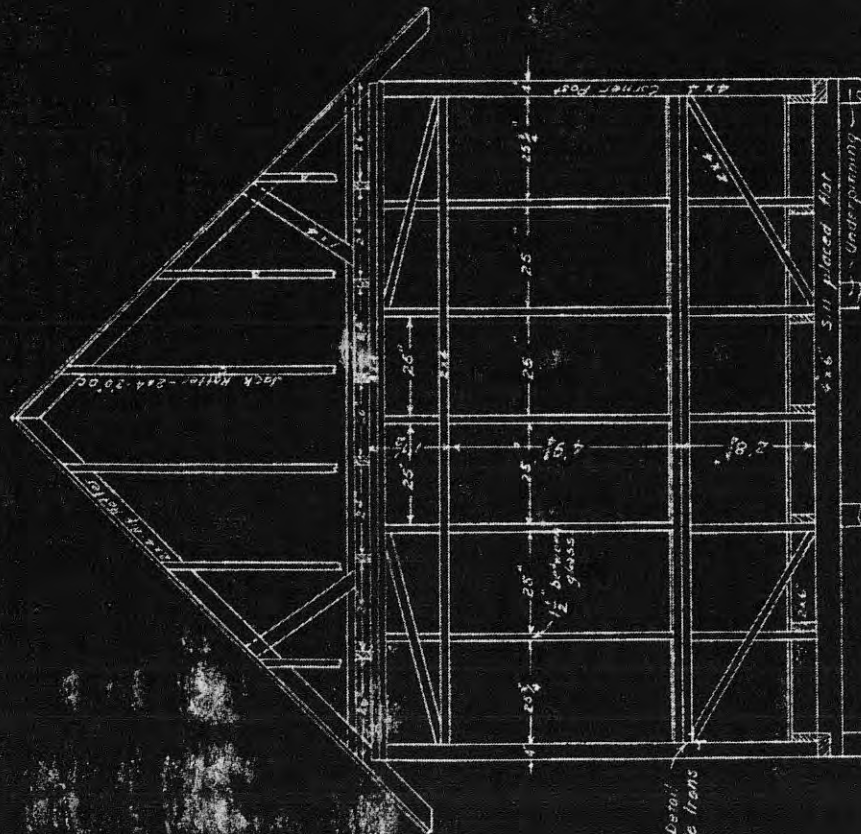
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FRONT ELEVATION

PRIMARY LOOKOUT BLDG.  
U.S. FOREST SERVICE - DIST. 4.

CD- 6-21



REAR or SIDE ELEVATION

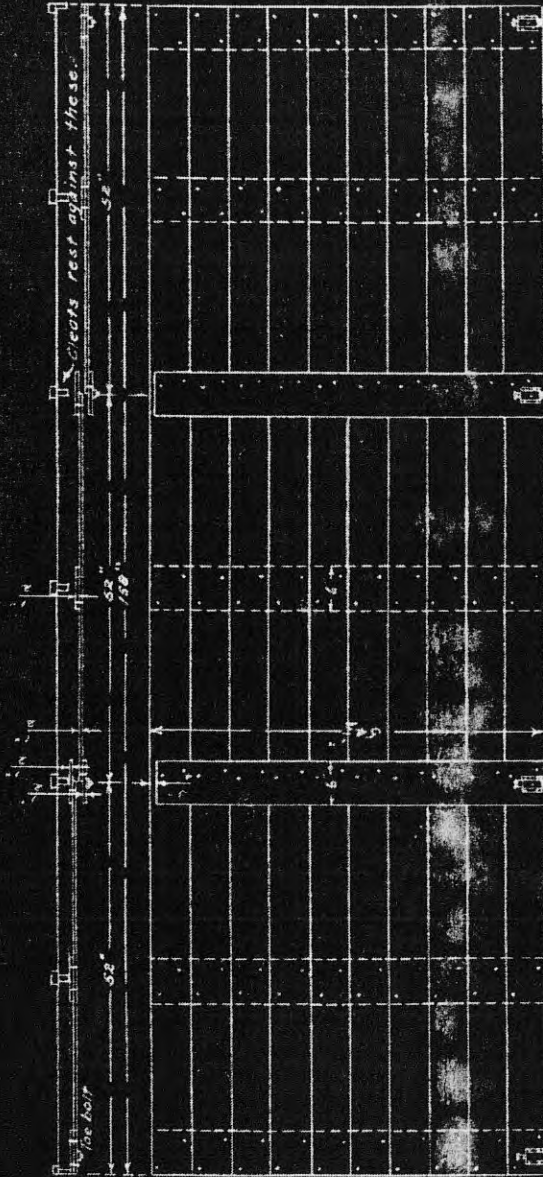
SCALE 1/4" = 1'0"

See Detail  
Argie Trans





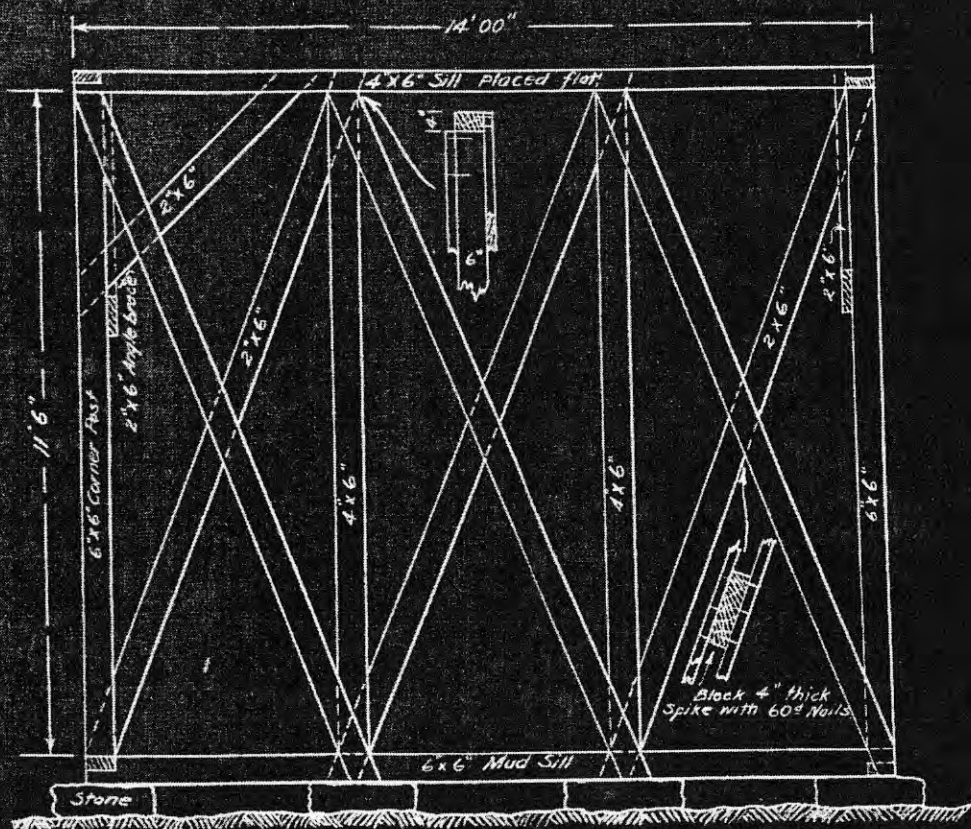
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PRIMARY LOOKOUT BUILDING  
U.S. FOREST SERVICE - DIST. 4

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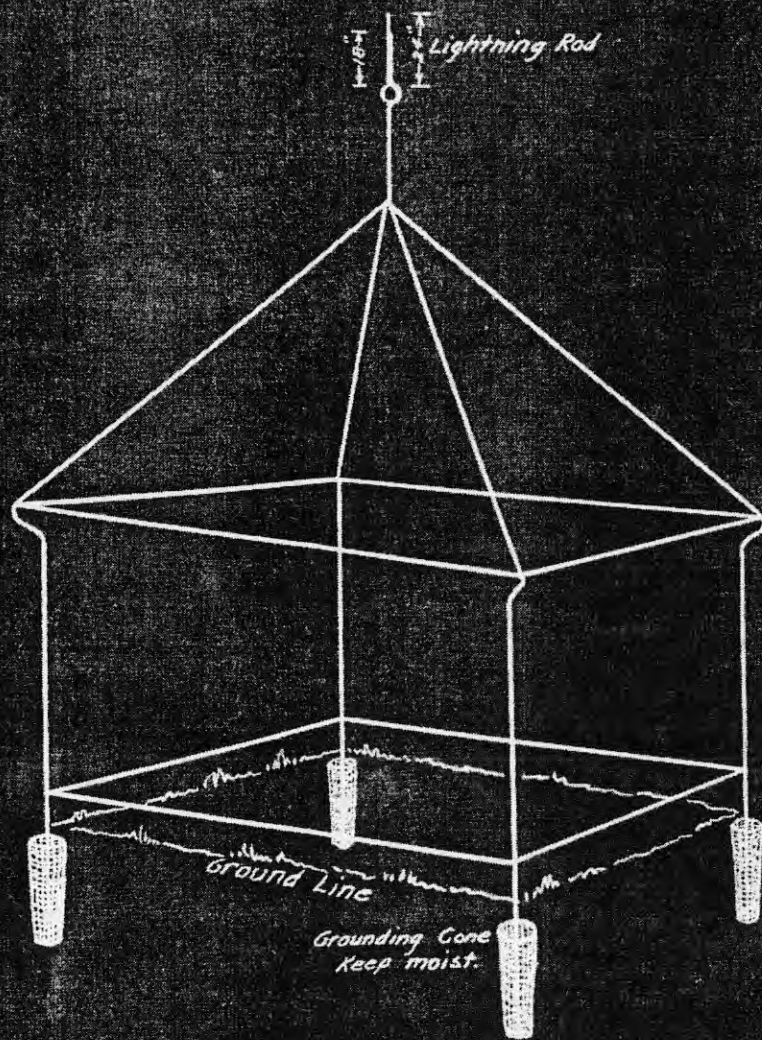
*Design of Underpinning.*  
Height will vary with local needs.  
This sketch is designed for a maximum  
elevation of 12' from ground to base of sill.

PRIMARY LOOKOUT BUILDING  
U.S. FOREST SERVICE - 0-4

C.D.J. - 6-21.



*Method of insulating building against  
Lightning.*

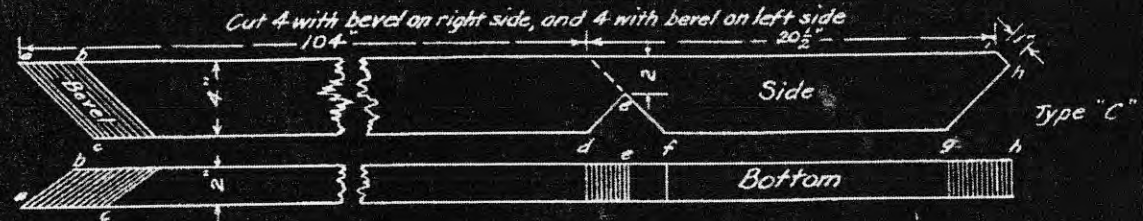
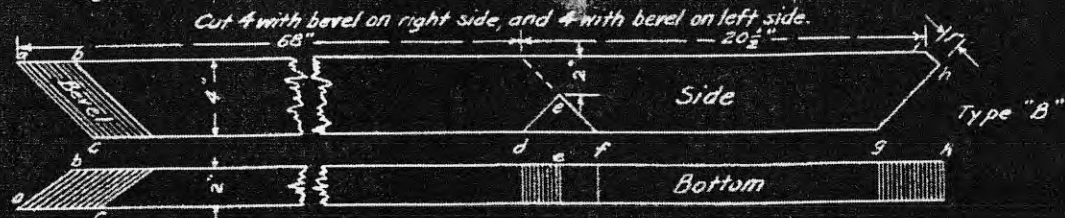
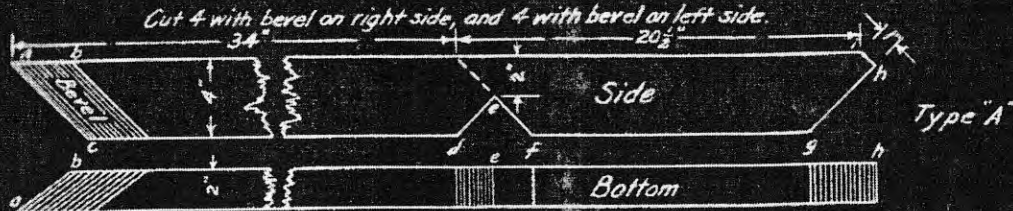


*Use #4 Galv. wire.*

*PRIMARY LOOKOUT BUILDING  
U.S. FOREST SERVICE - DIST 4.*

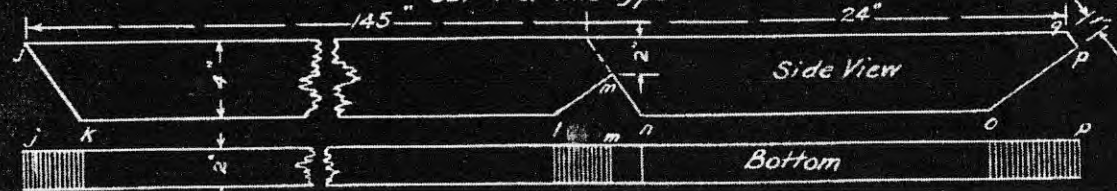
*C.D.J. 6-21.*

### Jack Rafters.



### Hip Rafter

Cut 4 of this type



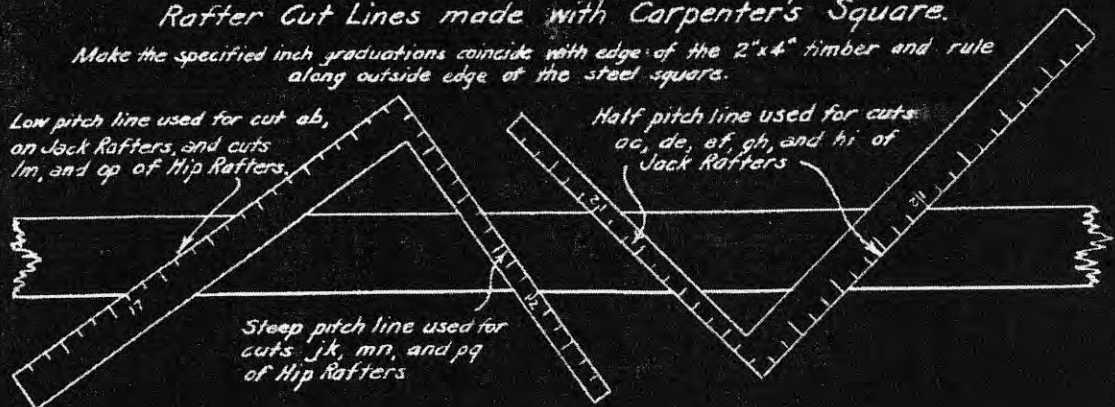
### Rafter Cut Lines made with Carpenter's Square.

Make the specified inch graduations coincide with edge of the 2"x4" timber and rule along outside edge of the steel square.

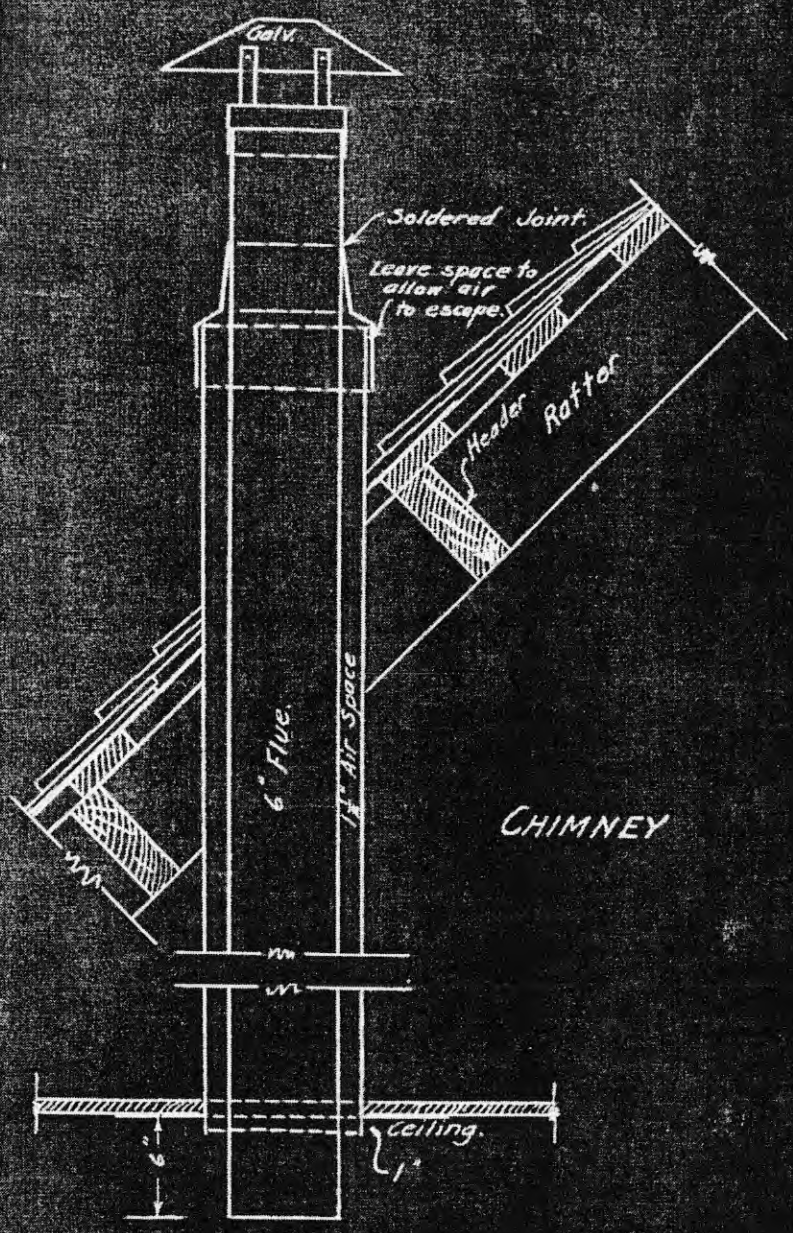
Low pitch line used for cut ab, on Jack Rafters, and cuts lm, and op of Hip Rafters.

Half pitch line used for cuts ac, de, ef, gh, and hi of Jack Rafters

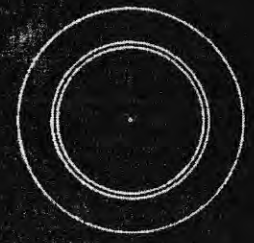
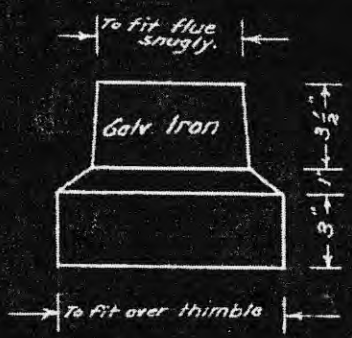
Steep pitch line used for cuts jk, mn, and pq of Hip Rafters







CHIMNEY



STANDARD LOOKOUT BUILDING  
U.S. FOREST SERVICE - DIST. 4

BUILDINGS

SERIES NO. 4.

PLAN NO. 4-A. PRIMARY LOOKOUT BUILDING  
Standard for District 4.

R. H. RUTLEDGE  
District Forester.

July 1, 1921.



PLAN NO. 4-A

PRIMARY LOOKOUT BUILDING

Standard for District 4.

The lumber of this list is given in actual working lengths plus an allowance of 1/2 inch for trimming or over run on the job. To specify actual lengths without providing such an allowance will result in poor fits of the various parts of the completed structures.

Material for underpinning and underpinning braces is not included in this list since the amounts of material for these purposes are dependent upon conditions and circumstances peculiar to each particular building site.

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Builder's List of Materials

No. Pcs.	Size	Purpose & Location	Grade and Species	Finish Bd. Ft.
<u>Sills and Underpinning</u>				
5	4 x 6 - 14	Sills	Select redwood or heart cedar	Rough 140
	6 x 6	Underpinning	" "	" "
<p>Note:- For item of underpinning no amount is given. The actual amount needed will depend upon the slope of the ground of each particular building site. Make due allowance for this item in the lumber order. If split or round material is used this item may be eliminated from the lumber list.</p>				
<u>Floor Joists, Studding, Plates, Etc.</u>				
8	2 x 6 - 14	Floor joists	No. 2 Clear, Douglas fir	Rough 112
2	2 x 6 - 12	Solid bridging (To be cut to fit)	" "	" "
4	4 x 4 - 8'10"	Corner posts	" "	24
20	2 x 4 - 1'11"	Studding over windows	" "	48
18	2 x 4 - 2'6"	" under	" "	(Sized if possible)
8	2 x 4 - 5'2"	Braces, corners	" "	32
8	2 x 4 - 4'6"	" "	" "	Rough 28
8	2 x 4 - 14	Plates	" "	25
8	2 x 4 - 13'5"	Trimmers	" "	75
6	1 x 6 - 12	Diagonal braces under sills No. 1 Common	" "	75
				36



No. Pcs. Size Purpose & Location Grade and Species Finish Bd. Ft.

Roof Frame and Cover

✓4	2	x 4	- 16	Hip rafters	No. 2 Clear, Douglas fir	Rough	43
✓8	2	x 4	- 10'8"	Jack "	"	"	57
✓8	2	x 4	- 7'10"	" "	"	"	43
✓8	2	x 4	x 5	" "	"	"	27
✓8	2	x 4	- 14	Ceiling joists	No. 1 Common	"	75
✓4	1	x 4	- 3	Braces, hip rafters	"	"	4
✓2	1	x 6	- 12	Diagonal braces over ceiling joists	"	"	
✓1	1	x 6	- 14	" "	"	"	12
✓8	1	x 12	- 8	Sheeting over eaves	"	"	7
✓4	1	x 12	- 7	" "	any species	"	64
✓4	1	x 12	- 9	" "	"	"	28
✓35	1	x 4	- 6	" from plates up 8" O.C.	"	"	36
✓35	1	x 4	- 8	" " 8" O.C.	"	"	70
4250	-	-	-	Shingles 4½" to weather	Star A Star, red cedar	"	94

No.	Pcs.	Size	Purpose & Location	Grade and Species	Finish	Bd.Ft.
<u>Milled Lumber</u>						
* 3		14'0" long	Window sills	No. 1 Common, any species	S4S	
* 1		12'0" "	" "	" "	" "	
1		3'0" "	Door sill	" "	" "	
2		2"x4" - 7'7"	" jambs	Douglas fir	" "	10
* See Detail Sheet No. 4						
4		1"x5-3/8"x14'0"	Window head jambs	No. 2 Clear, pine	S4S	28
4		1"x5-3/8"x10'0"	Corner boards	" "	" "	20
4		1"x6-3/8"x10'0"	" "	" "	" "	24
8		1"x3" x 4'9"	Window casings	" "	" "	10
8		1 1/4"x1 1/2" x 4'9"	" "	" "	" "	10
18		1 1/2"x6" x 4'9"	" "	" "	" "	68
5		1"x4" x 14'0"	" "	" "	" "	24
8		1"x4" x 14'0"	" aprons	" "	" "	38
28		1"x4" x 2'	Frieze between rafters	No. 1 Common	S1S	19
10		1"x4" x 6'	Base boards	" "	S1S-1E	20
2		5/8"x2" x 36"	Strips for table board	Clear maple	S4S	1
2		5/8"x2" x 26"	" "	" "	" "	1

Mouldings

175	Lin.Ft.	1" Quarter round, 6' & 8' lengths (all interior corner finish)
50	pcs.	3/8"x1 1/2"x4'9" stop
75	"	3/8"x1 1/2"x2'2"
25	"	3/4"x1 1/2"x2'2"
(for inside stop on window sill, see Detail Sheet 4)		
2	pcs.	1"x1 1/2" O.G. stop, 7' length for door
1	"	1"x1 1/2" "



No.                      Size                      Purpose & Location                      Grade and Species                      Finish                      Bd.Ft.

Walls, Ceiling and Flooring.

30	1 x 8 - 14	Rustic outside walls	(No. 3	Clear, Oregon, Douglas fir	"	280
6	1 x 8 - 12	"	"	"	"	48
52	1 x 4 - 8	T & G Flooring, vertical grain	"	"	"	139
52	1 x 4 - 6	"	"	"	"	104
52	1 x 4 - 8	T & G Ceiling	"	"	"	139
52	1 x 4 - 6	"	"	"	"	104
195	1 x 4 - 4'4"	Walls below windows	"	"	"	282
150	1 x 4 - 1'7"	" above	"	"	"	79

Cupboards.

8	1 x 12 - 2'3"	Sides	No. 2	Clear, Yellow pine	S4S	18
2	1 x 12 - 3'	TOP	"	"	"	6
1	1 x 12 - 2'6"	"	"	"	"	3
2	1 x 6 - 3'	"	"	"	"	3
6	1 x 3 - 2'3"	"	"	"	"	4
3	1 x 2 - 2'11"	Front	"	"	"	1
2	1 x 2 - 2'8"	"	"	"	"	1
1	1 x 2 - 2'2"	"	"	"	"	1
26	1 x 4 - 1'9"	For doors T & G	"	"	"	15
18	1 x 4 - 1'3"	"	"	"	"	8
2	1 x 12 - 8'	Miscellaneous use	"	"	"	16

No. Pcs.	Size	Purpose & Location	Grade and Species	Finish	Bd.Ft.
<u>Platform.</u>					
4	4 x 4	1'11" Frame	No. 1 Common, any species	Rough	11
4	2 x 4	4'3" "	"	"	12
4	2 x 4	3'9" "	"	"	10
8	2 x 4	1'11" "	"	"	11
4	2 x 4	2'9" "	"	"	8
4	2 x 4	2'5" "	"	"	5
18	1 x 4	4'4 1/2" T & G Flooring, vertical grain	No. 2 Clear, Oregon Douglas fir	"	26
66	1 x 4	2'3" Walls, T & G	"	"	50
2	1 x 4	4'9" Base boards	No. 1 Common, any species	S4S	3
2	1 x 4	4'3" "	"	"	3
2	1 x 4	4'9" Cap	"	"	3
2	1 x 4	4'3" "	"	"	3
<u>Shutters.</u>					
120	1/2 x 6	4'4" T & G horizontal boards	No. 3 Clear, Oregon, Douglas fir	"	320
36	1/2 x 6	4'4" Tie pieces	"	"	96

Window Sash and Doors.

- 1 - 2'2" x 6'10" - 1-3/8 Sash door, 26 oz. glass. See Detail Sheet No. 4
- 1 - 2'2" x 6'10" - 1-3/8 Screen door, - screen same size as glass in door
- 3 - Extra 26 oz. window lights, one to fir 26"x54 1/4" sash, two to fit 26-3/8" x 54 1/4" sash securely packed for rough transportation.
- 26 - Window lights, 25" x 54" double strength - securely packed for rough transportation.



FLUE

If wood or coal stove is to be used instead of oil stove, order:

- 1 pc. 26 gauge galvanized iron pipe, riveted, 6" diameter, 7'6" long, with storm cap riveted on top. (See Detail Sheet #9.)
- 1 galv. iron 1/2 pitch roof plate.
- 1 " 6" drip ferrule. (See Detail Sheet #9).

HARDWARE

- 8 - - Angle tie plates
- 1 - - Galvanized iron hood (26 gauge)
- 17 - - Toe bolts with wood screws to fasten window shutter to walls. See Detail.
- 60 Lin. Ft. 8" wide galvanized iron 30 gauge ridge cap (over shingles on hip rafters)
- 1 Gr. Wood screws #9 - 1 1/4" flat head, blue
- 2 " Wood screws #9 - 1" round head, for fastening window stops.
- 2 " Round iron washers to fit #9 - 1" round head wood screws
- 1 " Wood screws #16 - 2 1/4" round head
- 1 " Round iron washers to fit #16 - 2 1/4" wood screws
- 2 Doz. Blue screws #6 - 1" flat head, attaching strips to platform table
- 12 Lbs. 30d. Common wire nails
- 15 " 20d. " " "
- 20 " 8d. " " "
- 7 " 6d. Finish " " "
- 10 " 3d. Fine galvanized shingle nails
- 5 " 8d. Box nails
- 5 " 8d. Finish nails
- 2 Staples, galvanized fencing for fastening lightning rod
- 3 Hinges 3 1/2" x 3 1/2" loose pin butts #160 D2. A.C.
- 7 Pr. Hinges 2" loose pin butts, half surface #160 D2. A.C. Cupboard
- 3 " 3" strap hinges with screws for ventilators
- 7 Cupboard turns #8830 for cupboard doors
- 1 Rlm knob latch #8052, knob #9241 for sash door
- 1 Screen door set #1903 (Pacific Hardware & Steel Catalogue)
- 6 " knobs
- 1 Pc. Galvanized screws 9 2 1/2 x 7 1/2, 7 1/2 mesh

See Detail Sheet No. 3  
" " " 4

- 3 " strap hinges with screws for ventilators
- 7 " Cupboard turns #8830 for cupboard doors
- 1 " Rim knob latch #8052, knob #9241 for sash door
- 1 " Screen door set #1903 (Pacific Hardware & Steel Catalogue)
- 6 " " knobs
- 1 pc. Galvanized screen door, 7' x 7', 1/2" mesh

PAINT

- 2 gal. Brown paint - For outside walls
- 5 " Moss green paint - For roof.
- 3 " Light tan, gray, or ivory white paint - for inside walls and ceiling
- 1 1/2 " Ivory white paint - for trim
- 1 " Floor paint
- 3 " Boiled linseed oil
- 2 " 4" Paint brushes
- 2 lb. Putty
- 6 pc. Sand paper No. 1

LIGHTNING INSTALLATION

- 226 Ft. No. 4 Galvanized wire
- 4 lb. (260) 1 1/2" Galvanized steel wire staples - chisel point
- 1 " Solder
- 1 " Aluminum paint
- 4 " - Western Electric No. 1 Paragon Ground Cones, filled with ground charcoal

Note:- The items of wire and staples includes a sufficient amount for height of building given in plan. The actual amounts needed will depend upon the height the building is constructed above the ground. If the cones cannot be grounded at the corners of the building, add the number of feet of wire necessary to reach the nearest practicable grounding place. For details of Lightning Installation material and construction, see Page 15.



Guy Material.

5/16" Galvanized cast steel guy rope, amount as need  
4 - 1/2" Turn buckles with eyes on each end  
8 - 9/16" Galvanized oval thimbles  
32- 5/16" Roebling or Crosby clips

int as needed  
end

## S P E C I F I C A T I O N S

FOR

### PRIMARY LOOKOUT BUILDING

Standard for District 4.

These specifications are intended to embrace all material necessary in the erection and furnishing of the building in all its parts and to furnish such instructions as appear necessary to give the builder a general idea of the plan. The plan is standardized and must be followed unless the District Forester's permission to deviate from it is secured.

#### LOCATION

The house should be set square with the cardinal directions, that is, squarely north and south and east and west.

#### EXCAVATION.

Excavation for the foundation of the building shall be carried down to solid earth. If practicable to make the site level, it is best to do so. If impracticable, at least provide a level footing 2' x 2' for each foundation block or underpinning footing.

#### UNDERPINNING AND FOUNDATION BLOCKS

(See Sheet 6)

Heights of underpinning needed will depend upon circumstances and conditions at a given building site. It is understood that in many instances to use the mud construction as shown on Sheet 6 will be impracticable. If so, set underpinning on separate supports or footings.



Underpinning or mud sills for underpinning should never be placed directly on the earth. Place them on footings of either -

(a) Substantial flat stone, maximum dimensions approximately as follows:

8" thick, 10" wide, 10" long

(b) Masonry footing

12" high, 14" square at base and 8" square at top

If high underpinning is used it should be braced as shown on Sheet 6.

#### MATERIALS

All structural material should conform as closely as possible to the specifications given in the builder's list.

#### SILLS.

Sills should preferably be of cedar. Douglas fir may be used as a second choice. Pine should never be used unless the sill is to be 2 feet more above the ground.

Sills at corners should be halved together. The plan calls for one sill in the center of the building. Angle braces on 45° angles should extend from each foundation post to the floor joist just above and from each corner to the sills. (See Plan of foundations.)

#### FLOOR JOISTS, STUDDING, BRIDGING, ETC.

All joists, girts and studs should be sized, dressed down so that all sticks of respective dimensions are made of uniform size.

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Floor joists should be straight grain Douglas fir free from knots larger than one inch in diameter. Lay floor joists directly upon the sill. Toe nail them into place. 2" x 6" solid bridging shall be cut between sills. This item in the lumber list has been specified uncut, since the variation of thickness of floor joists and studs makes impossible the statement of the exact length of each piece of bridging. Studding, headers, trimmers, etc., may be of any reasonably straight grain material free from loose knots and knots which materially weaken the stick. Stud should be extended from sill to plate and should be firmly nailed to the floor joists and toe nailed to the sill. At the top they should be toe nailed to the plate with 2-30d. nails driven vertically through the plate into their ends. Corner studs should be of 4" x 4" sticks. Braces as shown in the drawing should be inserted. Top plate should be of 2" x 4" double with top joints over the corner studs. Plates should be fastened to each stud with two 30d. wire nails. They should be securely nailed together throughout with 20d. wire nails.

Headers over and under window openings shall be single. The lower header should be fastened to the corner stud by means of iron corner braces. (See Sheet No. 3)

Ceiling joists should be placed directly over the plates, toe nailed to the plate with 2-20d. nails and side nailed to the jack rafters with 2-20d. nails.

### ROOF.

Rafters and other members of the roof frame should be of select, straight grained lumber; 1st choice Douglas fir, 2nd choice white fir, 3rd choice yellow pine, free from knots and other imperfections. Too much attention cannot be given to the selection of the best sticks for rafters. Care should be taken to cut the rafters true in order that they will have a firm bearing on the plate and with respect to jack that they rest squarely against the hips. Hips should meet without opening at the top. The hip rafters should be braced with 1" x 4" pieces to 2" x 6" diagonal braces shown on Sheet 3. These diagonal braces should be laid diagonally over the ceiling joists from



corner to corner. They should be nailed at each ceiling joist with 2 - 20d. nails. Roof projections should be sheathed solid with 1" x 12" rough lumber. Rafter ends are to have no trim. Shingles should be laid 4 1/2" to weather on 1" x 4-7/8", placed 8" on center for roof covering. Lay the bottom courses of shingles double and project them 1 1/2" to lower edge of the sheeting.

### SIDING.

Siding should be nailed at each stud with 2 - 8d. nails. Care should be exercised to fit siding closely under window sills and at eaves. Cant board should be inserted between rafters over the plate. Bore a 3/4" hole in each cant board to provide ventilation in the attic. Corners should be finished with 1" boards.

### INSIDE FINISH

Ceiling and walls shall be of 1/2" x 4", T & G milled ceiling. Floor shall be of 1" x 4" vertical grain T & G No. 2 Douglas fir. All corners should be finished with 1" quarter round moulding. Provide a trap door 2' x 2' for entrance through the ceiling to the attic.

### FLUES.

Either oil stoves or common wood stoves may be used depending upon accessibility of fuel. If wood stoves are used the flue construction should conform to the standard illustrated in Detail Sheet No. 9. In spacing the joints of pipe below the roof line see to it that the joint passing through the roof will set as shown in the drawing. Guy the top of the flue securely with three strands of #9 or #12 telephone wire.

### DOORS.

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### DOORS, WINDOWS, AND FRAMES

Install three sets of ventilators over the windows as shown on Sheets 2, 3, and 4. These should be at the rear and both sides. Provide hinged shutters for them as shown on Sheet 4. Sheet 4 shows detail of window construction. Stops should be fastened in place with #9 - 1" round head wood screws and washers. Glass should be bedded in putty to make windows tight. The window sills are set at an angle of 75° and are grooved at bottom to keep drip from siding. Sills should be cut around corner posts as shown in detail. Shutters, the details of which are shown on Sheet #5, should be provided for each set of windows. They should be placed in position at the end of each season.

### CLOSETS, PLATFORM, AND CUPBOARDS, ETC.

Sheet No. 1 shows the furnishing of the house, the details of construction and floor plan arrangement of them. Cupboards should extend in height to level of window sill. The builder's list indicates the material to use. The revolving chair is available upon requisition to the Ogden Supply Depot. The sanitary couch with pad and the stoves of either kind may be purchased in the field.

The dimensions of the platform are shown on Sheet No. 1. The finish around the top of the platform should be made of 1" x 4" laid flat against the sides of the platform and extending 3/4" above the floor of the platform. This will give a finish and at the same time act as a block to keep the chair from slipping off. The table used on the platform, after being oriented, should be nailed or screwed firmly on to the platform floor. Since the house is always to be set square with the cardinal directions, the oriented table will be square with the walls. After this is done, the hardwood strips should be very carefully set on the surface of the table in orientation and screwed down. It will be noted that the locator board will then have a play of 6 inches in any direction, which will facilitate getting around obstructions to view.

## TELEPHONE WIRING.

Telephone wire should not be anchored to the sides of the building. Establish a pole for anchoring or anchor to a nearby tree if one is available. Bring the wire to the building as shown in Cut No. 18 of the Telephone Circular. During the period of the year that the Lookout is unoccupied the leading in wire should be disconnected at the Fahnestock clip and at the fuse and then taken into the building. Its replacement at the beginning of the fire season is a simple task. From the fuse, the wire should be brought down the side of the building on knobs, taken under the building on knobs along the floor joists to a point under the platform. There it should be brought through the floor near one inside edge of the platform and up through the platform along one of the table legs to the ringer set which ordinarily should be fastened to a leg of the table. The protector should be placed on the inside wall of the platform at the point where the wire comes through the floor.

## INSULATION.

See Sheet No. 8. Insulation should be considered as a part of construction. Material for it should be ordered with the hardware.

No. 4 galvanized wire should be used for all conductor material. The conductors should be run down all hips from the main wire or terminal which should be extended from the peak up about 20 inches and filed to a sharp point. The hip conductors first mentioned should be continued over the points of the eaves and directly to the ground at the four corners of the house, care being taken to make no sharp turns in the wire. As an integral part of the system there should be connected to the vertical conductors two horizontal conductors, one running clear around the house on the eaves, the other running clear around the house at the ground line. This arrangement with connections is shown by the attached sketch. All connections between conductors should be mechanically and electrically perfect. At the meeting or crossing points the wires should be soldered together carefully. All wires should be securely stapled directly to the building every 12 inches, and in addition the staples

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should be placed on each side of each soldered connection, so as to eliminate any strain on the joint. When the wiring is complete it should be given two coats of aluminum paint.

If there is a stove pipe or other metal projection it should be connected to the main system by a direct wire.

Probably the most important part of the system is the GROUND. While conditions on lookout points differ to such an extent that it will be necessary to use different types of ground, the standard ground rod or connection will be a perforated copper cone filled with ground charcoal, manufactured by the Western Electric Company and known as the "Paragon Ground Cone No. 1", price \$1.65 each. These cones are 1 foot long and vary in diameter from 1½ inches at the bottom to 4½ inches at the top, and are provided with a wire cable connection so that the lightning rods can be attached and soldered without difficulty. One of these cones should be sunk in the ground at each corner of the building, standing out about 8 inches from the structure and to such a depth that the copper cable protrudes above the surface. This will admit of a convenient connection and inspection. The vertical rods on the four corners of the building should be given direct connection with these ground cones.

#### PAINTING.

##### Color

Outside: brown walls, white trim - 3 coats  
Roof: moss green - 3 coats  
Inside: walls and ceiling, - light tan, gray, or ivory white - 2 coats  
floor, - color to harmonize with the walls and ceiling - 2 coats

If the lumber is dry, give the outside and roof a priming coat as soon as they are placed. Add the second coat as soon as the first is dry. Do not apply paint if the lumber or shingles are not seasoned or if their surfaces are damp from rains, fogs, dews, frosts, etc. Do not paint during damp weather. Before applying paint to knots, cover them with a light coat of shellac. Before applying paint to the interior, the surface should be carefully cleaned. To secure a real fine finish sand paper the surface. Nail holes should be filled with putty after the first coat of paint is applied.

The floor should receive three coats of floor paint to harmonize with the wall paint.

### GUYING.

If the house is to be exposed to severe winds it should be guyed at each corner with 5/16" galvanized, cast steel guy ropes. 1/2" turn buckles with 2 eyes should be inserted in each guy for the purpose of adjusting the tension of the guys. Anchors for guys may be either 3/4" eye bolts set in hard rock, guy wire wrapped around large rocks, 1/2" telephone guy rods sunk in ground or any other substantial form of anchor.

The guy at the upper end should be fastened to the hip rafters and to corner studs. This attachment should be made before the roof and siding is put on. The guys can best be fastened to the building as follows:

Bore 1/2" holes through the hip rafters 1 inch from the top edge and in line with the inside corner of the corner studs; bore a hole on about 45° angles from outside corner to inside corner through the stud. The inside outlet of the holes should be about 5 inches below the top of the stud. Pass one end of the guy rope through the hole in the stud and on through the hole in the rafter and bring the wire back through the hole in the stud leaving a projecting end long enough to fasten with 2 wire rope clamps at a point just outside the building. The guy wires on the inside of the building should be recessed into the stud so as to make possible the nailing of the ceiling and wall covering over them.