

INSTRUCTIONS.

In mapping National Forest areas on these sheets, use should be made of only five scales, viz, 1, 2, 4, 8, or 16 inches to 1 mile.

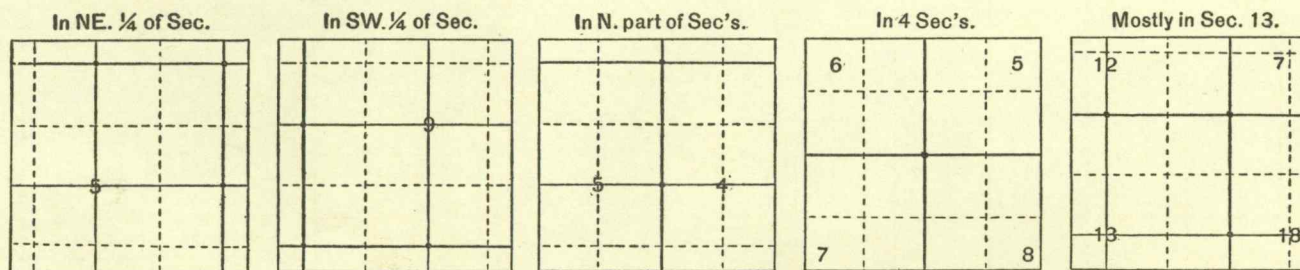
For outline maps of township or other simple boundaries, rights of way, reconnaissances, etc., the scale of 1 inch to 1 mile may be used, provided there is not much data to be plotted or the total area is not small, in either of which cases the scale should be doubled to 2 inches to 1 mile. If the area is very small or there is detail which requires it, the scale of 4 inches to 1 mile should be used.

For maps to show many features, like relief, drainage, roads, houses, land and forest types and conditions, block or other detailed boundaries, etc., as will be necessary on most working-plan maps, the scales of 8 or 16 inches to 1 mile should be used.

The plat on the front of this sheet is 8 inches square and divided into 256 squares by lines one-half inch apart. These dimensions are very well adapted to the mapping of areas surveyed by the rectangular system, as may be seen in the following table of equivalents:

KIND OF MAP.	INCHES PER MILE.	CHAINS PER INCH.	CHAINS PER SQUARE.	SQUARE MILES PER SHEET.	ACRES PER SQUARE.	SQUARES PER SECTION.	SQUARES PER ¼ SECTION.	SQUARES PER 40 ACRES.	INCH GRADUA- TION.	CHAINS PER GRADUA- TION.
Few outlines on large area.....	1	80	40	64	160	4= 2× 2	1	¼	40ths.	2
Few outlines on small area.....	2	40	20	16	40	16= 4× 4	4= 2× 2	1	40ths.	1
Numerous outlines	4	20	10	4	10	64= 8× 8	16= 4× 4	4=2×2	20ths.	1
Topographic or economic	8	10	5	1	2½	256=16×16	64= 8× 8	16=4×4	10ths.	1
	16	5	2½	¼	½	1024=32×32	256=16×16	64=8×8	10ths.	½

Each map should be placed as near the center of the sheet as the size and shape of the area will permit. The following diagrams illustrate how areas of less than 640 acres can be adjusted to a sheet when the scale is 8 inches to 1 mile:



When an area is too large to fit on one sheet the lined portion of another sheet should be pasted to the bottom or side of the first, according to the shape of the area to be mapped. The lines on all sheets should coincide wherever they join each other. The additional sheets should fold over upon the original one in such shape as to be filed with it as one sheet.

LOGGING.

A thesis on the methods and cost of logging as carried on
in the Northwest.

I. The region studied lies along the Columbia River between the mouth of the Willamette River and the Pacific Ocean and is known as the lower Columbia River Region.

The timber is a fine grade of Douglas Fir and is used in all lines of construction work both at home and abroad. The average annual cut amounts to 700,000,000 ft. with a possible value of \$5,250,000 at an average of \$7.50 per M.

The first lumbering in the region was done in about 1840 opposite the mouth of the Willamette River, where the crudest form of hand lumbering was carried on. Later lumbering was practiced in Clatsop County. In the past this district has practically furnished all the mills along the Columbia and a greater share of the mills at Portland. This district is now doing the same and it will continue to do so for at least 30 years, altho the methods in the past have been very crude and destructive.

II. The timberlands of this region are owned largely by corporate interests. The typical forest of the region is of the Douglas Fir type with a slight mixture of other conifers. The maximum stand per acre is 80 to 90 M.ft. while the average stand is about 55M. ft. The average density is between 7 and 8.

The timberland of this region of the best quality will bring \$200.00 per acre. The average value of stumpage where trees are of good quality and easily accessible is \$2.75 per M.

As the timber grows more difficult to log the value decreases.

In general the lands are more valuable for farming and grazing than for forestry and the practice of aiding reproduction could only be advised on the steeper hillsides and narrow valleys. Lower cutting of the stumps and a greater utilization of the tops and broken logs would be advised. The average owners attitude toward forestry is very indifferent.

III. The particular tract that we studied contained 10,000 acres Of which 2,000 acres were cut over before the time of purchase by the present firm. This firm, the Columbia Timber Co., has cut over 1,000 acres since that time. The average cost per acre was \$85.00. Situation. The tract lies N.W. of Nehalem Junction on the "New Right of Way."

Forest Type. It is of a Red Fir type.

Altitude. Absolute altitude 540 ft above sea level.
Relative altitude 500 ft above Nehalem Junction.

Slope. The tract slopes to the N. E.

Rock. There is very little rock upon the greater portion of the tract. Toward the Columbia River, however, rocks are plentiful and great outcrops appear. It is all of lava formation.

Soil. The soil is a damp, deep, loose clay.

Humus. The humus consists of decayed cones, needles, leaves etc.

Litter. The litter consists of partially decayed cones, leaves, needles, weeds etc.

- Ground Cover. The ground cover consists of; flax, starflower, wild strawberries, Oregon grape, Indian lettuce, oxalis, ferns and grasses.
- Underbrush. The underbrush consist of Hazel, Vine maple, alder, Chittim, Salmon berry, Black berry, Service berry, Dogwood and Indian peach.
- Reproduction. The reproduction is No. 1 for Douglas Fir. Altho in some parts there is very little reproduction on account of the dense undergrowth and groundcover.
- Species in Mixture. There is a mixture of Douglas Fir, Western Hemlock, Western Red Cedar, and a very little amount of Maple and Oak thru the valleys.
- Density, The density of the tract is 7 to 8.
- Damage. There is no evidence of recent damage from fire, alltho some of the stumps show evidence of fire damage when the trees were about 10 years old. The damage from lightning and insects is very scattering and of very slight extent. Fungus has destroyed a very few trees as shown by the heart rot.
- Quality of location. The location is No. 1 for Douglas Fir. The stand is composed of a good grade of Red Fir. Very little Yellow Fir being seen. There is a slight mixture of hemlock and cedar. It is a virgin forest averaging 125 years in age, altho there are some stumps that show a much greater age, The trees as a whole are small compared with the stands on other tracts.

Part of the tract has allready been sold and plotted in 20acre plots for fruit raising. This land brings from \$20.00 to \$40.00 when placed on the markat in this manner. Thus it can plainly be seen that it would not pay to reforest.

The average price of stumpage in this region is \$2.50 for Red Fir depending largely upon its accesibility. The Cedar and Hemlock are receiving about the same price due largely to there scattered condition. The average stand per acre is 50,000 ft. of which perhaps 2% is Cedar and Hemlock.

The first lumbering on this tract was about 9 years ago when a system of horse lumbering was carried on. The horses being used to snake the logs down to the railroad. The firm ^sconsiders that it will take at least 20 years to complete the logging of this tract at the present rate of cut.

It is my belief that the present system of running the railroads right up to the timber is agood one, as the Superintendant said, "The secret of succesfull logging is to have short hauls by your donkeys." However as stated before I believe it would be practiable to have a greater utilization of the short length logs and tops than is at present in practice. These could be manufactured into ties for which the company has a big demand. The height of stumps in most cases is 2 ft, which is very good for this size of timber.

As stated before the owners are indifferent to forestry as the land is to valuable for agriculture. There is very little danger

from fire due to the green and moist condition of the ground cover. However fire lines are constructed and watches kept when fire is imminent. The streams are dammed at frequent intervals to afford places for securing a supply of water in case of fire. Buckets are strewn along the streams thus affording a rapid method of securing water. All the engines are provided with spark arrestors and hose.

A greater fire patrol during the dry season would be recommended,

The boundary corners are marked with the regulation government survey stakes, while the boundary lines are slashed thru providing fire lines as well as a guide to the fallers.

2. The interests of the firm consists of two corporate bodies; The Columbia Timber Co. and The Clark-Wilson Lumber Co, The same membership comprise each but there is different percentages of ownership.

The different members of the firm are;

O. M. Clark President.

C. G. Wilson Vicepresident.

W. W. Clark Sect, & Treas.

J. Albert Wilson Cruiser and estimator.

The financial affairs, contracts, advertising and other office work are under the direction of W. W. Clark. The milling operations including yarding and shipping are in charge of C. G. Wilson. The logging operations and recommendations for purchasing and all cruising is directed by J. A. Wilson.

The firm is a member of the Oregon & Washington Lumber Association.

The offices and mill are at Linnton, Oregon, with a branch office at Goble, Ore. where the logging camps are situated.

3. If the firm sold all of its logs the total amount of business could be estimated at \$150,000 at present prices. The prices are very low at present and the output would bring much more under ordinary conditions. The annual cut of red fir each year is 20,000,000 ft.

The annual cut at the mill being 35,000,000 ft. The timber is manufactured for all Red Fir uses except panel work. The price of logs at present is \$7.50 per M. in the raft at the dumping ground. The price of the manufactured product in the yard is as follows:

Export and select -- \$15 up : No 1 common - \$8 to 12:

No 2 common \$6 to 8: Culls \$6 down.

The logs are manufactured at the Clark and Wilson Lumber Co., located at Linnton Oregon. The principal markets for the output are the Orient, Australia, England and California. The lumber is sent by boat to its destination and in all cases the purchaser pays the freight.

4. The cruising and estimating of the firm is done by J A Wilson. He starts to estimate at the S W corner of a 40. He paces in 20 rods and then N 20 rods; this puts him in the center of the S E ten acres of the 40. From this point he estimates the stand of the surrounding 10 acres. He does this by either counting the trees if they are scattered or merely by eye if the stand is dense. He then proceeds 40 rods N which puts him in the center of the N E ten acres. He continues thus until he has completed the forty. His estimates have a tendency to run under the actual cut by about 10%. It takes him by this

method from 2 to 4 days to cruise a section. At the prices paid in this section it would cost on the average \$22.00 per section. A cruiser receiving \$7.00 per day and a compassman \$3.50. This particular cruiser usually takes the following equipment; 2 compasses, blue print showing acreage, estimate book, tent, blankets, coffee, flour, bacon etc.

The preparatory plans for logging are laid at first cruising. They consist of the possible outlet of the logs and the extent of the logging unit. About two months before logging exact plans are prepared for the railroads, rollways, settings and the location of the camp. In establishing the railroads the center lines are run in with a compass and grade stakes are driven to grade by means of a transit. The location of the rollways is determined by the show and the amount of timber. As few rollways are constructed as possible. No attempt is made to keep track of the cost of construction as the prime factor is to secure a rapid and substantial method of getting out the logs.

Two sections has been the maximum area to be logged over from one camp. It is the aim of the firm however not to exceed one section in area as this makes it a shorter walk for the men to go to work. Conditions for this are not allways favorable and the size of the tract must be determined by the supply of water for the camp and donkeys, the ridges and the old cuttings and burnings.

2. In establishing a camp the prime determining factor is the water supply. This necessity must be abundant enough to supply the needs of the men as well as the cookhouse. It must also be accesible, that is, it must be so located that it can be easily piped to the desired locality. The camp is usually located as near in the center of the logging unit as possible, thus making the walk of the men equal

on all sides of the camp. The camp is allways located on the railroad so that supplies can be shipped in at all times.

3. No attempt was made to clear the land of stumps the buildings being placed along the railroad, the following buildings being constructed;

Building	Size	Bunks
Cook house	12-25-70	3
5 Bunkhouses	10-10-30	60
Shanty	10-10-15	4
Shanty	10-10-12	2
Shanty	10- 8-12	3
Shanty	8- 10-12	4
Sawfile	10-10-12	1
Office	10-10-25	2
Foreman's House	10-10-20	3
Sup't's House	10-20-20	2
Blacksmithshop	10-20-24	
Engine Shed	20-18-80	
Oil House	8- 8- 8-	
Sand House	6- 12-16	

Many of the men have their own homes and do not live in the camp.

All the buildings except the cookhouse and the blacksmith shop were shipped in on the cars from a former camp. It would take four men four days to build the cook house and the same number of men five days to build the blacksmith shop and engine shed. All the lumber for these buildings was shipped in from the mill.

The stoves used for heating are box wood heaters $1\frac{1}{2}$ -2-3. There is one of these in each bunk house and one in the cook shanty. There is a smaller one in the office.

The following Cook House outfit is sufficient for 80 men except the new range which is large enough to cook on for 100 men. This stove cost \$265.00 three months ago.

1 Range 3-8 ft.	100 each forks, knives & spoons
1 Coffee urn	Coffee grinders
80 plates	6 20-20 bakepans
80 cups	4 12-20 bakepans
80 saucers	15 sirups
20 $\frac{1}{2}$ gal. pitchers	3 cleavers
6 dishpans 20 in.	2 saws
80 soup dishes	20 gem pans
8 kettles with lids	50 granite dishes
18 platters	20 sugars
10 basins	50 bowls
50 pie tins	30 lunch pails
80 tureens	5 water pails
5 cans with handles	50 coffee pots
10 ladels with strainers	
10 large knives	The value of this outfit is
10 large forks	\$565.00
10 large spoons	

In each bunk house there is supposed to be a $2\frac{1}{2}$ -4 table and two chairs. Two lamps and oil are also furnished to each bunk house.

10.

The men are furnished springs and mattresses but are required to supply their own blankets. X

There is absolutely no provision made for the bathing of X the men. This should be given some consideration as good showers could be provided at a small cost from the springs above the camp.

Inside the cookhouse there are good sanitary conditions, everything being kept neat and clean. The cookhouse , however is built down in a gully below the railroad track and all the cans and rubbish are thrown out of the rear window wherethey present an unsightly appearance as well as offering a place for the breeding of disease.

5. List of goods kept in the camp store;

Tobacco	medicine	absorbant cotton	underclothing
shoes	overhalls	blankets	springs
matches	pipes	axes	grubhoes
shirts	quilts	lamps	gloves
lanterns	files	pipes	candles
padlocks	hobnails	handkerchiefs	axel grease

The average stock carried on hand to supply a hundred men is \$400,00 The men are charged with their supplies in the day book and this amount is taken from their wages when they leave. The firm charges about the same as is the custom in the surrounding cities which pays them for the cost of shipping and the trouble of sale.

The blacksmith shop and machinery consists of; blower, forge, 3 vices, anvil, tongs, hammers, bolts, dieset, gasoline engine, lathe and emeries. The invoice of the blacksmith shop at the end
TJS

11.

of last year was \$140.00, this did not include the machinery in the machine shop nor the supplies on hand as rod iron and steel.

7. The firm owns the following small equipment;

1 Gasoline engine	\$135.00
1 Gasoline car	500.00
3 handcars	225.00
1 Lathe	250.00
1 Grindstone	20.00
Steam pump	93.00
steam saw	75.00
Gasoline engine	300.00
Emery stones	<u>50.00</u>
Total Value	\$1648.00

There is a large amount of ~~canned~~ goods kept in store.

Vegetables and eggs are shipped in from the outside market as is the meat of which they receive a $\frac{1}{4}$ every other day from Portland.

They charge the men \$5.00 per week for their board but on account ~~of~~ the high cost of provisions and the amount eaten this does not pay the actual cost. ~~X~~

The following is the average amount of stock carried in the commissary;

1 crate of cabbage	7 $\frac{1}{2}$ gal. cans of Baking powder
3 doz. $\frac{1}{2}$ gal. plums	24 doz. cans of milk
6 doz. $\frac{1}{2}$ gal. apricots	1 doz. $\frac{1}{2}$ gal. peaches
4 crates of razor back clams	3 doz. $\frac{1}{2}$ gal. tomatoes
3 doz. $\frac{1}{2}$ gal. pumpkin	5 bu. of potatoes

12.

$\frac{1}{2}$ sack of turnips

1 sack of onions

1 bbl. of coffee

1 chest of tea

2 doz. sides of bacon

8 hams

2 boxes of soap

1 bu. dried apples

4 gal. of sirup

1 case of rhubarb

1 bu. sack of beans

20 lbs. of butter

1 bbl. of vinegar

4 cases of eggs

2 doz. boxes of soda

1 box of crackers

8 sacks of sugar

3 sacks of graham flour

18 sacks white flour

It takes from 30 to 40 sacks Of flour per month to keep the 75 ~~4~~
men that eat at the cookhouse, 30 loaves of bread being made daily.✓

13.

Don Malmberg
C. Z - scale

Steam Lumbering.

1995

Composition of the crew and their wage;

Superintendent ^{1800.00} \$18,000 per year. ————— 26,000

Foreman \$1500.00 per year and board. ————— 17,500

Cook \$90. per month and board

2 Flunkies \$40 & \$30 per month and board.

Bull Cook \$35 per month and board.

3 Loco. Engineers \$4.25 per day.

3 " Fireman \$3.25 " "

Filer \$4.00 per day. ————— 7.15/hr

Blacksmith \$3.00 per day.

2 Ass't Blacksmiths \$2.50

8 Fallers \$3.50 & \$3.00 per day. ————— 11.00/hr avg.

Head Buckler \$3.25 per day.

8 Buckers \$3.00 per day/

3 Brakemen \$3. to \$4. per day.

8 Donkey Eng. \$3. per day. ————— 7.155/hr

10 Wood buckers \$ 2.50 per day.

3 Rollwaymen \$3. per day.

5 Chasers \$2.75 per day. ————— 5.915/hr

3 Hooktenders \$4. per day. ————— 7.955/hr

3 Head rigging men \$3.00 6.595/hr

3 2nd. Rigging men \$ 2.75.

3 Snipers \$2.75

3 Whistle Boys \$1.10 and board.

3 Head loaders \$3.50

3 2nd. Loaders \$3.00 ————— 6.285/hr.

Raft Man \$3.25 ————— 6.69/hr.

TJS High climber ————— 7.955/hr.

2nd Raft man \$3.00

10 Japs \$1.90

Various men on the construction work \$3.00 average.

Tools used in felling;

No.	Tool	Make	Cost
40	Axes	Atkins	\$1.65 4½"
44	Saws	Simons	\$1. per ft. 7ft
	Sledges	Atkins	18¢ per # 10 lbs.
	Peavies	Bandgore	2½" stock \$1.25
	Files	Black Diamond	
	Axes	Hurd Swampers	90¢ 4½"

Tool steel wedges made in the shop. Cost 30¢ per lb.

SAWS.

18 Bucking saws Filed every 2 days.

8 falling " " " 1½ "

4 High of way saws.

4 Wood buck "

3 Steam saws.

1 Bull cook Saw.

2 8½ft. Falling Saws.

There is a head faller in each crew who determines the direction the tree should fall and takes all the responsibility of getting out the timber. He is assisted by a second faller. Each set of fallers averages 30 to 40 M. per day depending on the size of the timber. The fallers outfit consists of 1 saw, 2 axes, 2 to

5 wedges, one 12# sledge, 3 wedge plates, 2 spring boards and one bottle hook. The first thing in falling is to determine the direction the tree should fall. They are usually fallen away from the donkey or away from the main block. The head faller determines the direction the tree should fall by sighting in with an axe placed in the undercut and is governed by the position, lean of the tree and by fallen logs. The bottom of the undercut is made with a saw and the chip taken out with an axe. The depth of the cut is determined by the lean, wind, species etc. The cut is then made to meet the bottom of the undercut and the tree is wedged if found necessary. A deep undercut was made in this region to prevent splittin by pulling out.

There is one head buckler who does nothing but measure the felled trees into logs so as to fill the orders received from the mill. As for instance; 8 to 16 ft. makes car sills, 20 ft. and over makes stringers, 24 to 40 ft. makes clear stuff, and multiples of 8ft. are made into ties. The buckers then saw the felled trees into logs as marked by the head buckler. They only swamp out enough so as to be able to use their saws to advantage.

The sniper noses the end of the logs nearest to the donkey so as to prevent the bruizing of the log and to make the log pull easier. The average nose is about 3 inches depending on the size of the tree,

4. After the snipping is finished the two rigging men hook on the chockers about four ft. from the end of the log. There

are two chockers on the end of the main line of the yarding donkey so that two logs may be hauled in at the same time. In case the chockers are too short the long yarder is used. The signals for handling the logs are given by the head rigging man to the whistle boy who transmits the signals by wire to the donkey engineer. The foreman of the crew is the hook tender who takes charge of the logs after they leave the rigging crew and sees that they get to the donkey safely. After the logs reach the yarding donkey a crew of chasers take them off the line of the yarder and attaches them to the main line of the roader, which pulls them in in sets of fours to the rollway. Here a chaser and the rollway man place the logs on an inclined deck 50- 100'. The logs are stamped on this platform with the company stamp by the rollway man. The rollway is built of logs two feet in diameter inclined at a slope of about 2 degrees, the top end being flush with the main line chute and the other end about four inches above the top of the flat cars.

The following are the list of donkey signals as used in this camp;

I Stop or go ahead

II Back up.

III Slow ahead on the main line.

IV Slow ahead on the trip line.

V Back up on the trip line.

III long. The rigging crew to the donkey.

L7.

Cost of the equipment of a skidding crew;

Roading donkey	\$	3000.	
Yarding donkey		2000.	
Loading donkey		1500.	
Cable @ 25¢ 3000ft.	750.	1 1/8th inch.	
" @ 15¢ 6000ft.	750.	5/8 ths. inch.	
Chockers and cables.	50.		
Gasoline Saw.	75.		
Axes, blocks, saws, peavies	120.		

\$8245.00

The cost of skidding is about \$1.25, per M. X

The logs are loaded on the flatcars by means of a loading donkey and two men who are called loaders. After they are loaded the logs are hauled out to the main line in trains of about eight cars, where a 45 ton oil burner locomotive takes them eight miles to the Columbia River where they are rafted.

The entire length of the companys railroad is 10 miles, 3 1/2 of which is only temporary. The cost of construction for a logging railroad is as follows;

Preparation of the grade	\$350. per mile
Cost of the sill timbers	500.
Cost of laying ties and rails	210/
Cost of ties	510.
Cost of rails (2nd hand)	<u>3,510.</u>
	\$5,080.00

TJS

The rails used are 56 and 60 lbs. costing second hand 33 1/3¢ per running foot. The ties are culls secured from the mill and would cost \$4.00 per M. if required to purchase. On a 7% grade the small locomotives can take five cars (empty) up and twelve loaded ones down. The oil burner can take a twenty-two percent curve if necessary. Very little grading is necessary in the construction of the road-bed as there is no steep ridges or narrow valleys that cannot be overcome by means of switchbacks. On account of the rough topography there is very good drainage of the track. This however is assisted by the construction of side ditches which carry off the surplus water. The switches vary from Nos 6 to 9. The average cost of constructing the bridges can be illustrated by an example: It took four men four days at an average wage of \$3.00 per day to construct a bridge over a gully ten feet deep and seventy feet wide.

The regular construction crew consists of ten Japs who are kept on the section the year round. They secure \$1.90 per day + a house and fuel. They do not board with the other men. As men are needed on newwork as in building a new right of way, men are secured at an average wage of \$3.00.

There are two locomotives weighing 37 ton each, built by the Lima Locomotive Works and are of the Shay pattern. These engines cost when new \$7,000 each. There is one oil burner on the main line weighing 45 ton built by the Davenport Locomotive Works of Davenport Iowa. There are thirty 40 ft. flat cars in use on the road. All the rolling stock is of standard gauge.

19.

7 The following is an average cost of logging per M.

Falling and bucking \$.75

Skidding 1.25

Cost of line .25

Skidder to the river . 50

River to the mill . 50

Wear on machinery .50

\$ 3.75 per M. —

C.2-1975

1975 cost 479.50/M

66

Outfit and cost of same owned by the firm in their camp;

3 Engines \$ 24,000

30 Flatcars 27,000

8 Donkeys 20,000

Cable 5,000

Enumerated outfit 1,500

44 Saws 300

40 Axes 50

Shops 800

Cost of track 50,000
\$ 1286.00

SUPPLEMENT.

After the logs are dropped into the river from the cars they float with the current for perhaps a quarter of a mile to where two rafters arrange them in a raft. The logs are held in place by twenty-five 63 ft boom sticks attached together by short heavy chains, called boom chains. The raft is held together cross ways by 40 ft, lengths of cable of which there are eleven to the raft. These cables are called swifters. The raft is pointed at the front end offering less resistance to the water. The company owns 26 Sets of Boom sticks each stick branded C WW

26 Sets of swifters.

2 Scale sticks

1 Saw

4 Pike poles

2 peavies

The boats that are usually used in towing these rafts would cost perhaps \$15,000. They charge 50¢ for towing from Goble to Linton.

TJS

LOGGING TERMS.

- Butt chain. Large chain attached to the end of the main line.
- Bull cook. Helper to the cook.
- Bunk. Heavy timber under the logs on the cars.
- Bridle. Two lines with hooks used in lifting logs.
- Bucker. One who saws felled trees into logs.
- Butt. The base of a tree or the big end of a log.
- Chaser. One who tends the blocks near the donkeys.
- Cat face. Scar caused by rubbing or burning when young.
- Chockers. A short noose of cable with hook used in snaking out logs.
- Conk. The decay in the wood of trees caused by fungus.
- Corkscrew. Ageared logging locomotive.
- Decking iron. Piece of rail used to slide logs onto the cars.
- Donkey. A portable steam engine equipped with drum and cable.
- Faller. One who fells trees.
- Flunkey. An assistant, as to the cook.
- Gypsy. To roll logs out of a chute.
- Gin poles. Apole secured by guy ropes, to the top of which lines
for loading logs are attached.
- Hooktender. The foreman of the yarding crew.
- Hook on man.) Chasers who work near the yarding donkey.
Hook off man.)
- Limb. To remove the limbs from a felled tree.
- Line block. Common block for running line thru.

LOGGING TERMS. Con't.

Loading line. Line used in placing logs on the cars.

Long yarder. Piece of cable 30 ft. in length with hook and eye.

Monkey block. Block fastened on the end of the trip line.

Main line. Line used in hauling in logs.

Nose. To round off the end of logs to avoid bruising and to make the logs drag more easily.

Picaroon. A piked pole used to drag lumber from a flume.

Peters. A form of chocker hook.

Power buckle. To load logs by means of a single line.

Stag. To cut the trousers off at the knees.

Strap. Short length of cable used to hold rollway blocks in place.

Sniper. One who noses logs.

Rollway blocks. Blocks 1-1-1½ ft. used to stop logs on the rollway.

Rigging. Blocks, cables and blocks used in skidding logs.

Roller. To take the place of a tommy moore.

Tommy moore. A very large block.

Trip line. Small line used in returning main line.

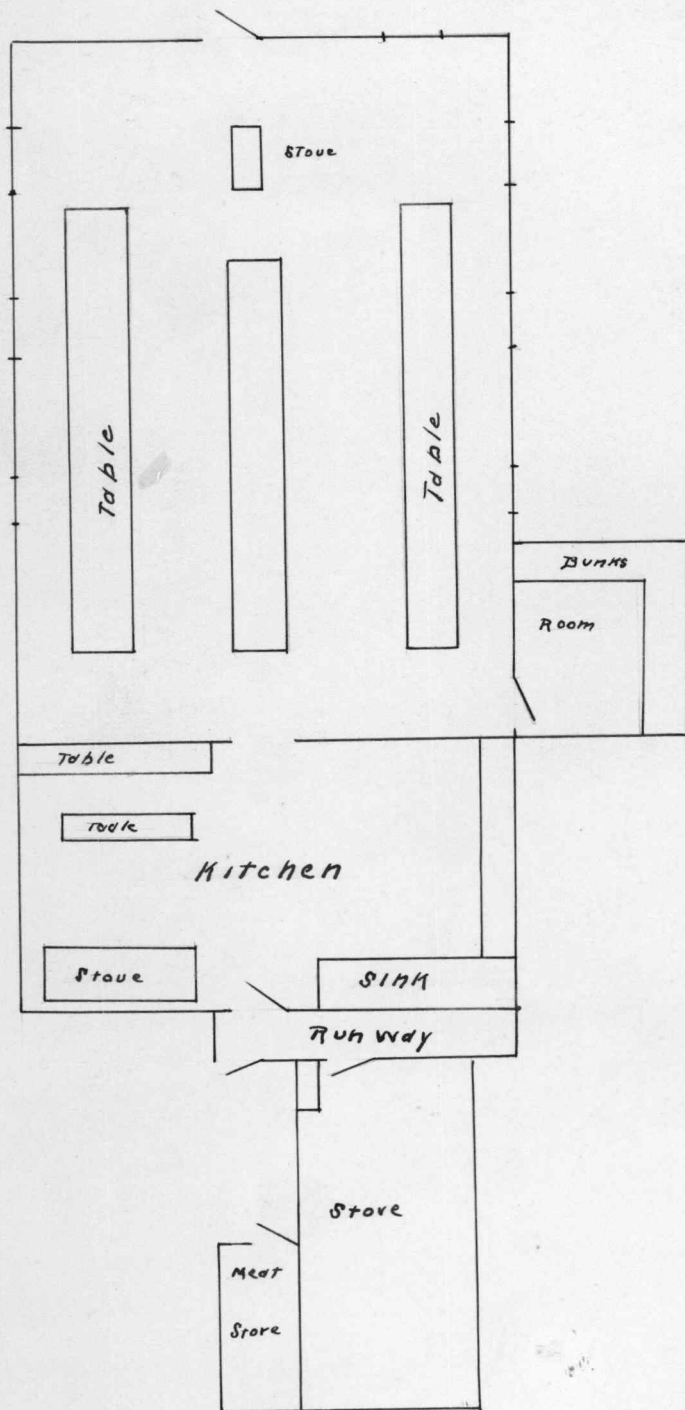
Trip hook. Hook on the end of the trip line.

Train blocks. Small blocks on bunks preventing shifting of logs.

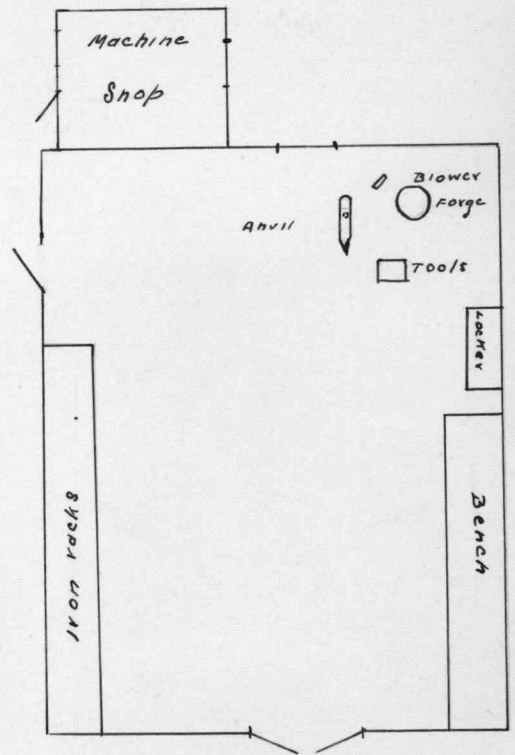
Under cut. Notch cut in the base of a tree to determine the direction of the fall of the tree.

Whistle Wire. Wire used in giving signals from rigging crew to the donkey.

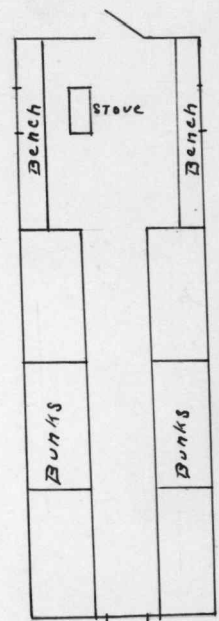
Whistle punk. Boy who transmits the signals by wire to the donkey.



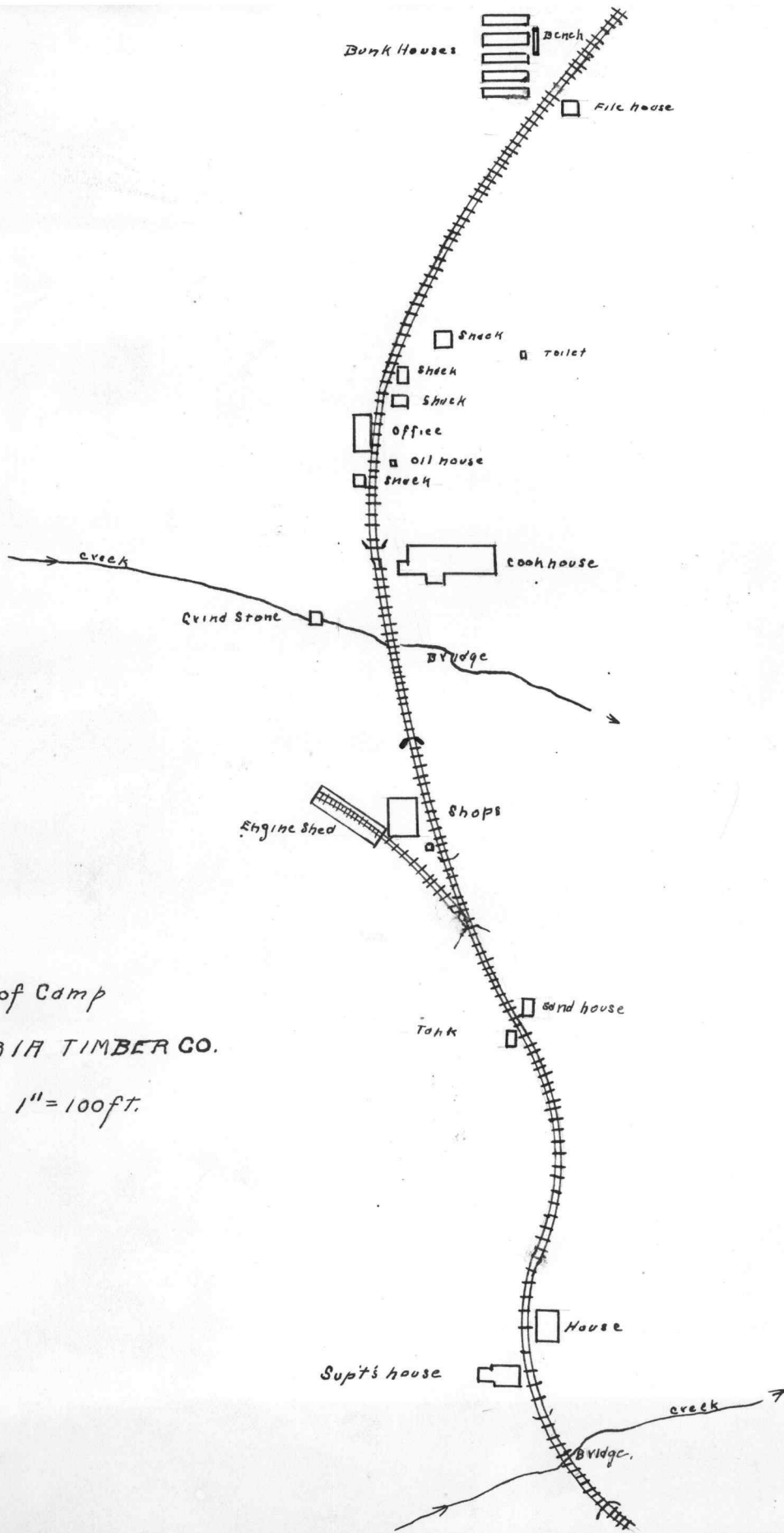
Cook Shanty



Blacksmith Shop



Bunk house

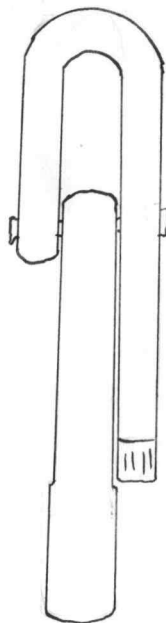
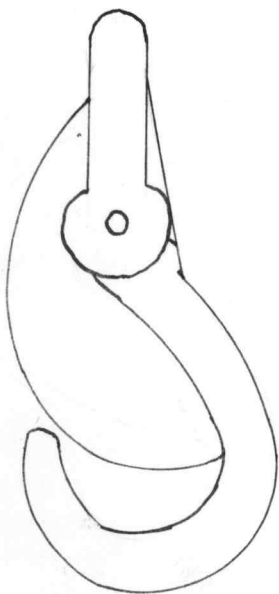
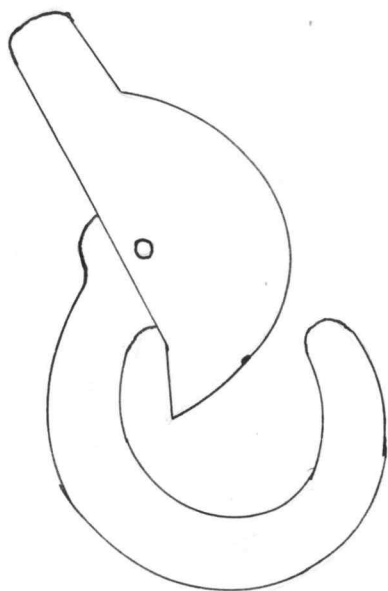


Map of Camp

COLUMBIA TIMBER CO.

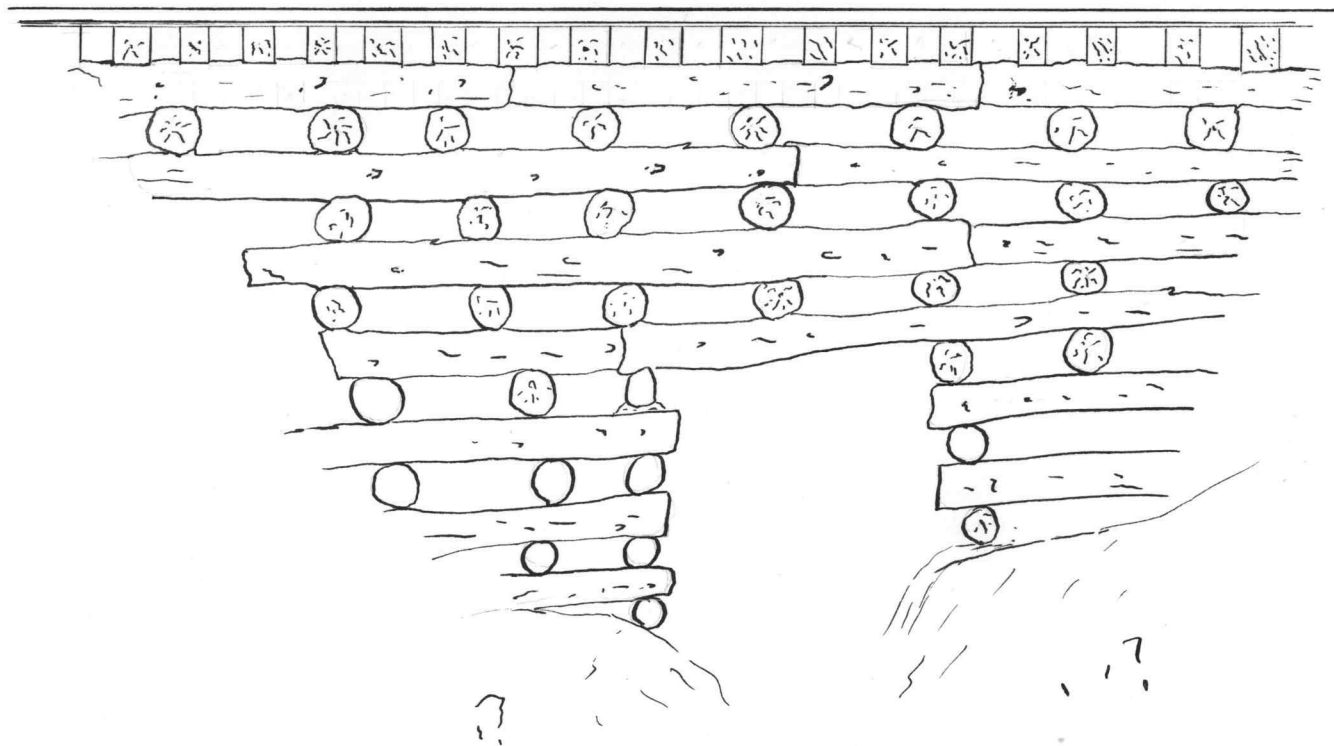
Scale 1"=100ft.

10
Sio



Supt's Patent Logging Hook

es.



Style of Bridge constructed on
Columbia Timber Co. Tract.

10



Clark, Wilson Camp.

Showing Donkey + Rollway.



English Vessel "Knight of the Garter"

450 Ft. Overall

Capacity 5,000,000 B.F.

*Loading For Chinese Ports
at Linnton, Ore.*