

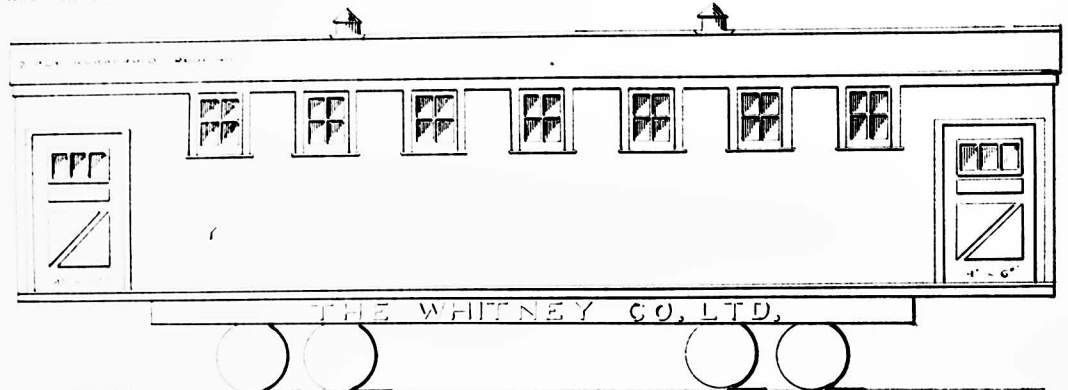
ILLUSTRATION OF HOUSING AND FEEDING LOGGING CAMP OUTFIT ON WHEELS

A. B. Wastell, Assistant Manager Whitney Co., Ltd., Portland.

President Blake: It is generally agreed that the better the creature comforts of a man are cared for the better he will work; and

and railroad camps, and, without going into detail as to the ordinary character of the conditions furnished, we submit in verse a jingle termed "The Bunk House," which we recently resurrected

Poet, but, of course, that is only sarcasm. Trusting for a successful issue of an important question, I am,
"Yours obediently,
(Signed) "DOC WILSON."



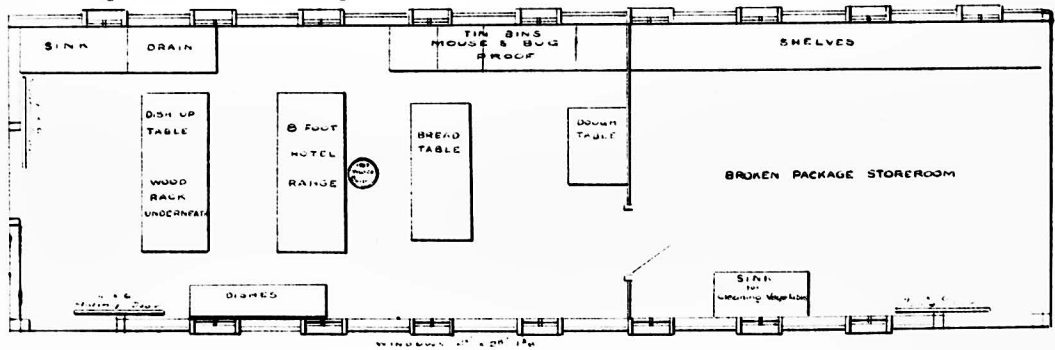
EXTERIOR OF KITCHEN CAR.

better work from a man means better financial condition at the end of a period; but, laying aside the matter of finances, the consideration of having a man work well is worth a whole lot. Mr. Russell Hawkins, manager of the Whitney Co., Ltd., has recently installed a modern logging camp, and Mr. A. B. Wastell, of the same company, has embodied his views on the matter of bunk houses in a paper which he will present to the Congress at this time.

Mr. Wastell: I would say, Mr. Chairman and gentlemen, that assuming that those present may not be able to see the diagram which I will place on the blackboard, we have provided some pictures that I would like to have distributed.

Mr. Hawkins, my chief, should be here instead of myself. I am a good deal like something that I read in a book when I was a youngster. It was a collection of poetical quotations and the author, in submitting these quotations, said that what he was offering was produced by others and he was merely the string that tied them together, and in presenting this little story about bunk houses constructed by the Whitney Company, I am only

in the Pacific Monthly, dated July, 1908, which we consider presents all the characteristics of the usual camp under the old dispensation. This



INTERIOR OF KITCHEN CAR.

rhyme is introduced with the following note: "To the Editor of the Pacific Monthly. Sir: I am sending you a few verses, entitled

"THE BUNK HOUSE."
O! Bunks and bunks,
Valises and trunks;
Blankets and swags by the score;
Smoky oil cans,
Old spittoon pans,
Scattered all over the floor!

Old gunny sacks
Filled from the stacks
Of hay in the field nearby;
Under your nose
Pillow your clothes,
And sleep with many a sigh.

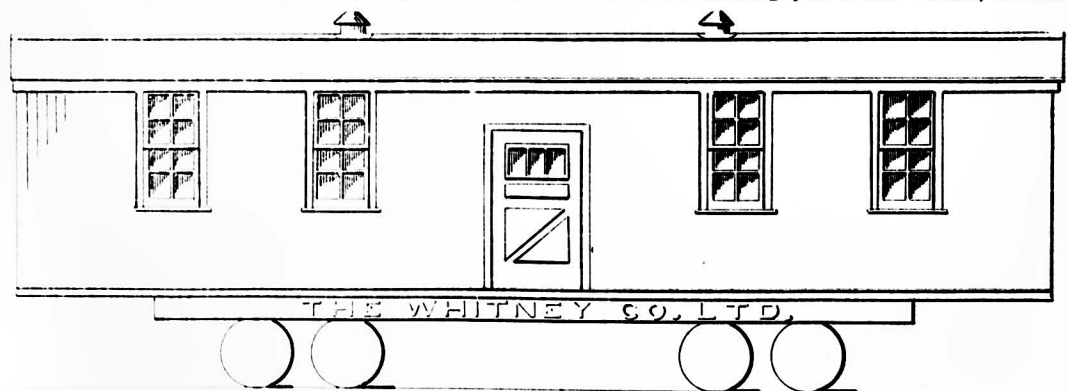
Old broken door
Drags on the floor,
Overhead the nightbats hide;
The roof's too thin
And rain drips in
The bunk where Anderson died.

Old shirts and coats
Where Spider gloats
On the flies and moths in his lair.
Rusty old stove,
Socks by the grove,
Polluting the room's warm air.

Off to the junks!
Bunkhouses and bunks!
For the toiler requires rest.
A clean, warm bed,
Or home instead,
And then his labors are blest.

In contrast to this picture, we wish briefly to call your attention to the efforts made by the Whitney Company, Limited, in connection with their operations in Clatsop county, Oregon, to establish a camp that would give to the men as many of the conveniences as are practicable, and all the necessaries for their comfort, and we trust that the future will show that the men appreciate the effort in their behalf, and that the personnel of our crew and the class of men employed will be of such grade as to warrant the incident expenditure of time and money.

In presenting the details of our camp, we do



EXTERIOR OF BUNK CAR.

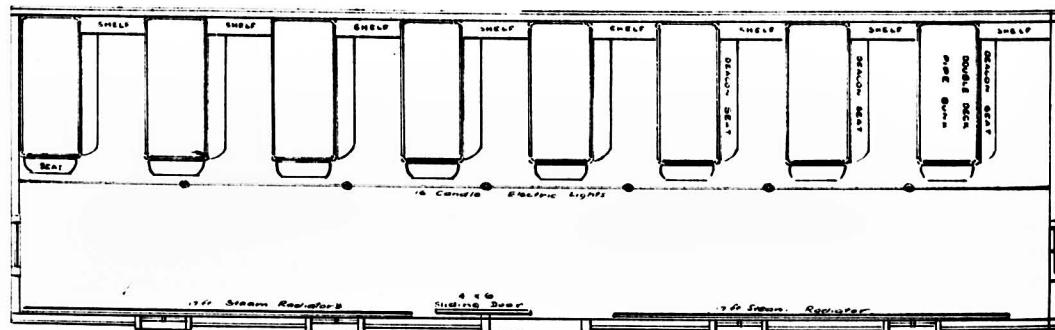
the string that ties the story together; the whole institution and the development of things are due to Mr. Hawkins' initiative ability.

One of the vital factors in our civilization which is more influential than any other feature in making for good citizenship and real happiness is the influence of home life, with all its comforts and conveniences, adjusted according to the means of the home dweller to suit, as far as possible, the family requirements. Home comforts create a feeling of contentment and satisfaction that cannot be attained by any other means.

In this age, when labor is independent and scarce, industrial conditions require the assembling of men in groups and crews for such service as required by loggers, lumber manufacturers and railroad camps, in locations more or less isolated, we consider it behooves the employer to supply quarters for his men, arranged as conveniently and comfortably as is consistent with the economy that must be practiced under existing commercial conditions.

A decade ago this consideration was not only unthought of, but unnecessary in connection with the housing of men in logging camps, sawmills

"The Bunk House." I am employed as a cook and have no pretensions for a poet's song. I am an eye witness to what I think might be corrected. A great deal has been said and written about



INTERIOR OF BUNK CAR.

the workingman, but nobody has touched upon his sleeping quarters. Yet the idea, or inspiration, came to me, and I thought I should not offend by bringing the facts for your consideration. I am well-known in the field or in town as a Cook

not assume to have originated all the features included therein by any means; we have taken opportunity to acquaint ourselves with the best features of all the camps that we could visit, and wish to bear testimony to the fact that all the

CAMP OUTFIT ON WHEELS.

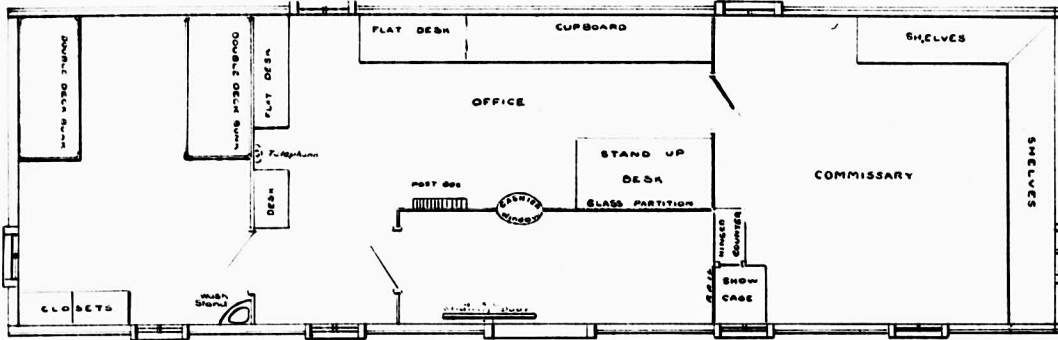
loggers in the Pacific Northwest are giving close attention to the equipping and furnishing of their camps, whether they be in houses or in cars, and that today the individual, whether he be laborer or employer, who is not satisfied with the accommodations and the meals furnished in the modern

outfit. Rubbish and litter that can be cast around the corners of houses shows up conspicuously underneath or around cars, and nuisances that may be committed about the house are not so common about the cars, because of this same conspicuousness.

The next consideration was the question of buying old equipment and building house structure

formed a truss and served as the sub-floor of our car, and upon which we mounted the frame of the houses, as shown in the blue print. Upon this rough fir floor we laid a top floor of 1x4 Western hemlock, s4s, with the purpose that as fast as this top floor was cut out with the calks in the men's shoes that the worn portion could be readily relaid in patches with other square-edged hemlock without disturbing the good portion of the floor, as would be the case if T & G stock was used. We wanted to determine, also, in this connection how Western hemlock would stand, and so far, are very much pleased with the experiment.

It will be noted, therefore, that we now have 10 camp cars 14 feet wide and 46 feet long. The frame of six of these cars being of the same construction, with four double-hung windows in the front, conveniently placed on each side of a sliding door which is in the center of the car, of size 4x6 feet by 8 inches, this size being maintained as standard for all outside doors. Each of these cars also has a swinging sash in each end, 2x2 feet eight inches, with louvre frame to give free circulation of air.



INTERIOR OF HEADQUARTERS CAR.

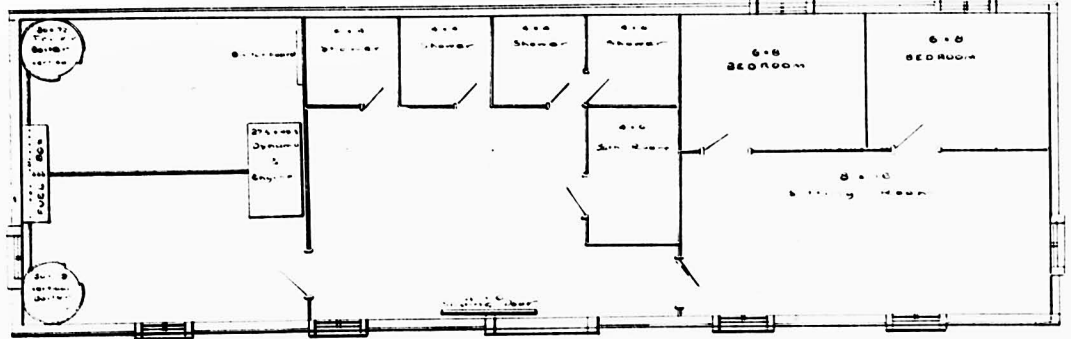
camp would certainly be over-fastidious. Therefore, as we refer to our camp in presenting this subject, it should be understood that, with the exception of the special features of baths, steam heat, electric lights, location of range in the cook house and the bunks in the bunk cars, which are all as indicated on the blue prints which are in the hands of the secretary for your inspection, if you are interested to follow up details, that all the other features are practically uniform with the equipment in all the camps in the district.

The first consideration that should be given attention in establishing a new camp is the question of whether to use houses or cars. In either event, the capacity should be from 70 to 80 men, and the decision as to the nature of the housing will depend largely upon the past experience of the principals of the company. Many loggers continue to use houses, which may be made either of rough or finished lumber, as circumstances warrant. Invariably these houses are set on sills, so that they may be skidded on flats, or logging cars, for shifting to a new location when desired to change camp.

Inasmuch as the camp is naturally located in the edge of the timber, the first advantage that appeals to us in having the camp on wheels, is that if a forest fire occurs the outfit can be hooked up with a locomotive and run out of danger; whereas in so many instances houses and cabins used for camps have been entirely consumed by forest fires.

Secondly, sanitary considerations, which are of great importance, and we are convinced that greater cleanliness can be obtained with a car

thereon to suit our individual ideas, or of purchasing standard camp cars, built for the purpose by the several car manufacturing concerns. Our decision, from considerations of economy, and also to secure better accommodations and conveniences, was to build our structure on old flat cars. These cars were turned over to us after being overhauled—the trucks and sills be-



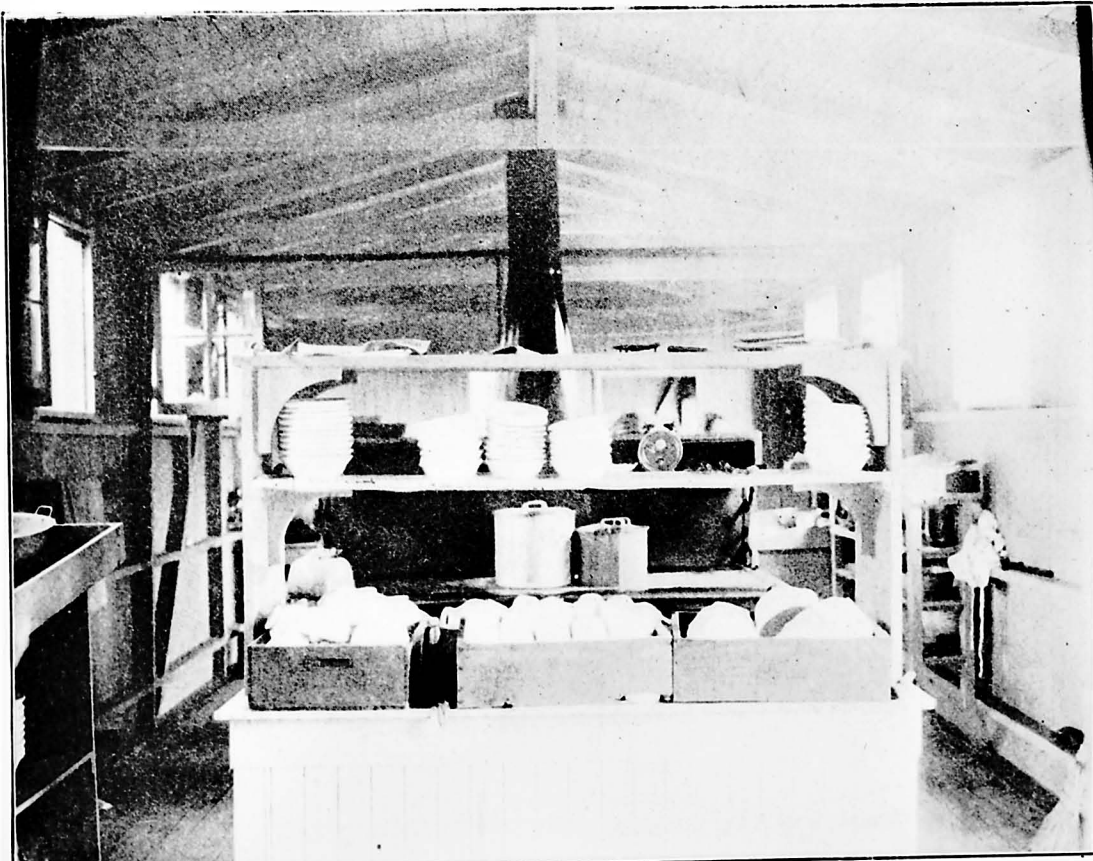
INTERIOR OF UTILITY CAR.

ing put in good order. The cars were 34-foot flats. We determined to give them an over-hang on each end of six feet, making length of the house 46 feet, for which purpose three selected fir sticks 4x6—46 feet long were laid lengthwise upon the floor of the cars on edge, securely spiked. Across these supersills we laid a floor of 2-inch plank 14 feet long crosswise, which

ing flanges, constituting a rigid, clean structure with an upper and lower bunk in each set. Each bunk is provided with an iron headboard sprung into position, and regulation woven wire springs being suspended on lugs on the side frame of the bunks; each bunk is provided with an excelsior, cotton top mattress 2 feet 6 inches by 6 feet. The arrangement of the bunks is original with us, in that we have not placed them along the wall lines of the car, but have set the bunks at right angles to the side of the car, as shown on blue print. It will be noted that each pair of men in the car will thus have a certain amount of privacy, in that there is a space in front of each set of bunks that represents their quarters. We have provided the usual deacon seat for convenience of the men in the upper berths to get aloft, and have provided two shelves against the wall in the end of their compartment, one at the height of the upper berth and one at the height of the lower berth, for each man's trinkets—shaving mug, etc. Wire hooks are provided on the underneath side of the shelf for suspending belongings. Each of the bunk cars is provided with steam coils made of 1-inch pipe and return bends on the wall line on each side of the front door and underneath the windows. Above these coils is suspended a wire upon which wet clothing can be readily dried in front of the coils, and the louvred windows in each end give necessary circulation to carry off odors. Each of the bunk cars is provided with two tables and several benches, so as to make it convenient for a reading and writing room, the space in the front of the car, clear of the ends of the bunks, giving an area 7x16 feet for this purpose in each car. All reasonable effort has been made to have these cars equipped, and the men now employed appear to appreciate and, so far, have taken good care to maintain the neatness and cleanliness desired.

Cook Car.

The cook car has much less interior fixtures than is usual, as our observation indicated that many of the cupboards, etc., that line the walls of the modern outfits are put to no practical use. Our cook car has a door in the end butting on to the dining car; has three doors in the front at ends of the car, and is also provided with a run of single swinging sash windows of size 3x3 feet 8 inches, there being seven windows in the front



INTERIOR OF KITCHEN CAR.

CAMP OUTFIT ON WHEELS.

of the car and nine windows in the rear of the car. The window sills are five feet from the floor of the car. The ceiling height in all the cars is 8 feet 6 inches. At the end of the car set at right angles to the side five feet from the end door that opens into the dining car is the dish-up table, in size 3x7, with two overhead shelves for platters, etc.; underneath is a wood rack;

spur in a cool position, and is entirely enclosed with galvanized iron fly screen so as to get good air circulation.

Dining Car.

The dining car is as usual, can accommodate 80 men. The tables are glued up boards, fastened by carriage bolts to trestles at each end and can be readily disconnected if desired. We put in four tables for convenience, so that the end space

out the car. A suspended shelf is located over each table 15 inches above the top, upon which syrup, catsup, meat sauces, pepper, butter, salt, vinegar, etc., are located, and gives ample accommodation even with tables but 30 inches wide. Both tables and suspended shelves are covered with white oil cloth. The frames in windows and doors of the dining car are the same as the kitchen, except that the end door is in the reverse end, so as to open into the cook car. The walls and ceilings in all the cars are painted with cold water paint.

Power and Bath Car.

One car in the equipment is a combination for power and utility purposes. A space 14x16 feet has been reserved at one end for cook's quarters and partitioned to provide two bunk rooms, each 6x8 feet, and a general or sitting room 8x16 feet. We have 30 feet left, which has been planned to carry four closet shower baths and one bath tub. Also a room 14x14, which will be equipped with two 30x72 upright boilers. These boilers will be connected with the dynamo engine, as well as with the heating pipes installed throughout the train. One boiler would be sufficient under ordinary circumstances, the second boiler being an auxiliary. This compartment will also be equipped with switchboard, engine and dynamo. For lighting purposes we have decided upon using the well-known marine type generator direct connecting to and on same base with the marine engine, operating at 80 pounds steam pressure, which occupies floor space of 48½x27½.

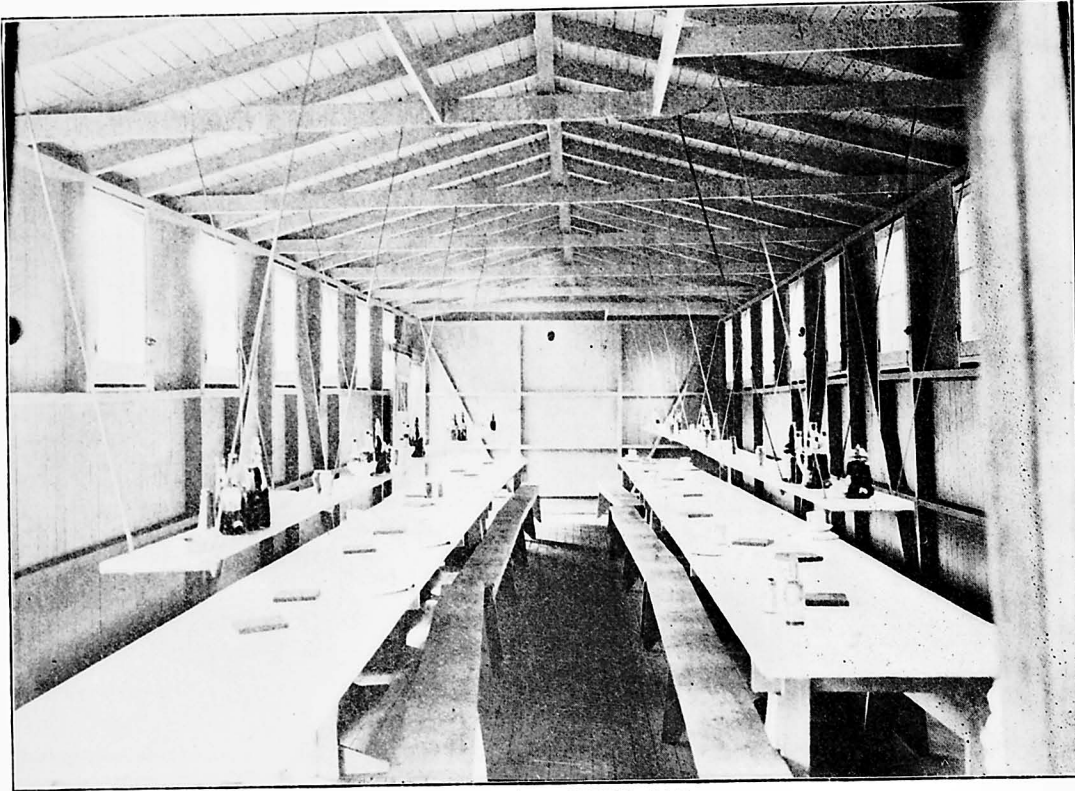
The generator is capable of supplying about 100 16-candle power 110-Volt lamps. The switchboard panel is simple and is easily handled, and the engine and dynamo are as near fool-proof as ingenuity can make them. The connections from the cars to the switchboard are planned for absolute control at the switchboard, so that lights are on or off at the option of the foreman, and we mean to install, in addition, one outside camp light, which will be a helio incandescent arc of 100-candle power capacity.

Store Car.

In addition to the cook stores, we have one car which is designed to carry package goods, both for cook house and commissary, thus enabling us to order in quantities, and the storekeeper delivers to cook packages as required, and also transfers to the commissary car full packages of such articles as required to maintain that stock.

Commissary and Office Car.

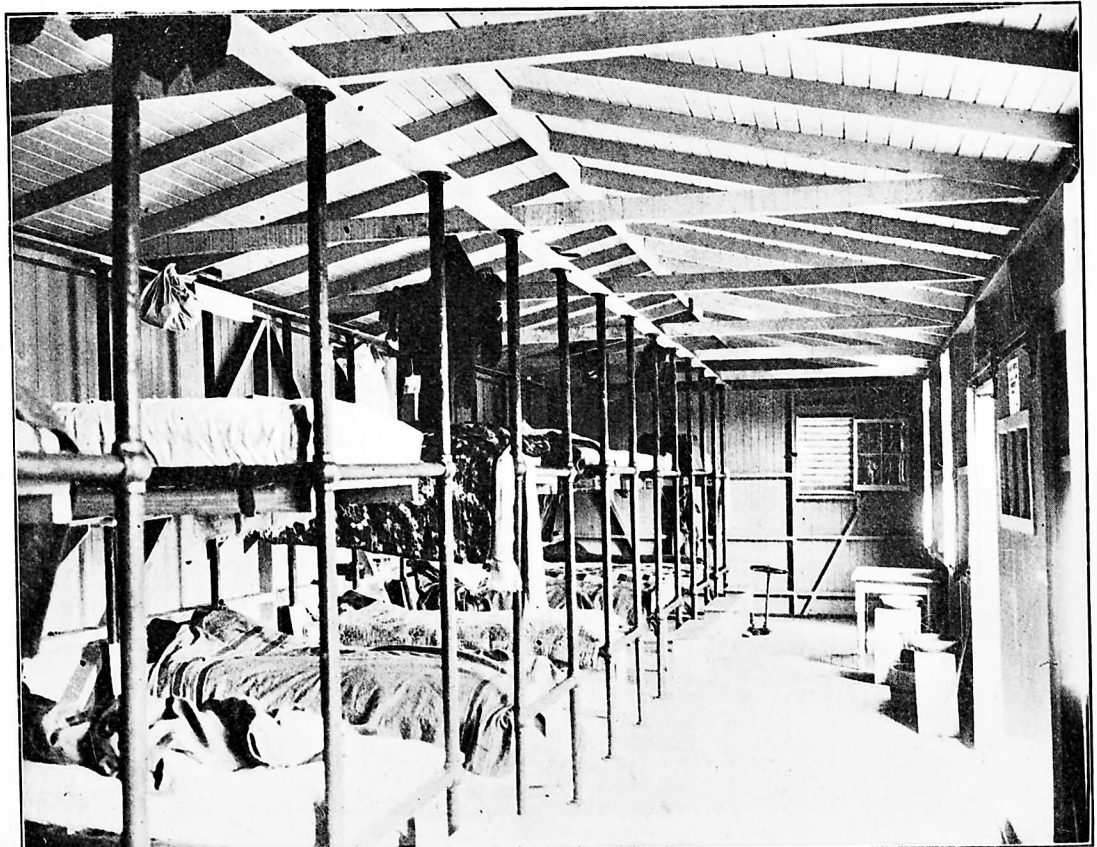
The tenth car in the outfit is the commissary car, completing the train. The car is designed not only for commissary stores and office, but also to provide sleeping quarters for general foreman and storekeeper. The door is in the center



INTERIOR OF DINING CAR.

paralleling this table is set a range, which is 3x8 feet, with a 40-gallon galvanized iron boiler set on the back of the range, connected up with the waterback. It will be noted that this is unusual, as all the outfits that we have witnessed have the range set alongside the wall with a lot of scrap rail on opposite side as counterweight. In our arrangement, the range sets directly over the floor of the original car, and there is no fear of the car overturning, as has been occasioned in cook cars swinging around curves. In the center, at the back of the car, adjoining the end door, is a sink 3x5 feet, with the usual drain board adjoining, which is 2x4 feet. Back of the stove is a bread-mixing table, 30 inches wide by 6 feet long, set on ball casters, so that it can be moved about the kitchen, and the position of the stove enables the cook to get the necessary heat by regulating the position of this movable bread table in conjunction with the back of the range so as to get the temperature required to raise his bread. Our cook has commented that he never before realized how much easier it was in having the stove so arranged as to be able to work all around it, instead of being confined to the front only. The dough table for pastry work is 30 inches by 4 feet, and underneath has two tilting bins of flour and meals. Necessary shelving for utensils, dishes, etc., is run along the wall lines to suit the cook's requirements. For such spices as tapioca, sago, ground sage, powdered sugar, etc., we have provided tin boxes with hinge tops, which are set in shelving and are movable, and when empty can be readily scalded before using again. We anticipate this will be much more satisfactory than the usual wood bins for this purpose. The dish-up table and bread table are covered with zinc. Kitchen purposes require 24 feet of this car, which leaves 22 feet for store, a partition being run across the car separating the store from kitchen, but with connecting door. The store room has spaces for barrels, heavy boxes, etc., and is lined with shelves. In one corner a stationary wash tub is set for the cook's laundry purposes, to which cold and hot water is piped. This compartment also serves as a paring room, and the conveniences of water therein is much appreciated by the cook.

can be left between the tables on each side if desired to facilitate men leaving the table. Intermediates of the tables are single upright supports with a bracket on the floor of the car, also bolted to the table top, so that there is no interference with the legs of the table when seated, except at the ends, where the trestles above mentioned are in place. The benches are made up to match the lengths of the tables and are customary style and can be readily moved when desired to swab



INTERIOR OF BUNK CAR.

The meat house is located away from the camp

CAMP OUTFIT ON WHEELS.

of the car, as shown in the blue print, and opens into a lobby five feet deep and 12 feet long. At the right-hand end of the lobby is the counter, over which the commissary stores are delivered to the men. The commissary storeroom is 14x15,

understandable in connection with the blue prints provided.

We expect that the outlay of money represented by this train to accommodate a crew of from 70 to 80 men will enable us to get the best men that are obtainable.

We appreciate that there are many doubting

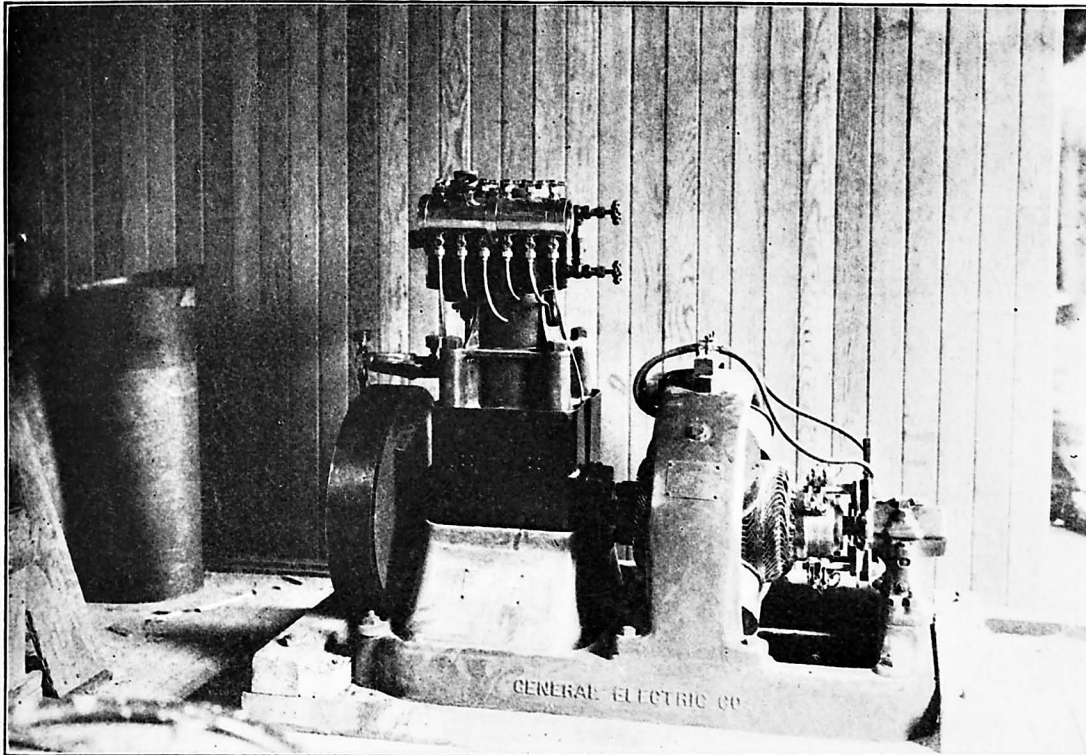
veniences will be eliminated in large measure by the attitude of the men themselves who want to be decent and cleanly and enjoy some of the comforts of home even in a logging camp.

DISCUSSION.

President Blake: Is there any discussion on that paper that Mr. Wastell has presented? He has kindly consented to answer any questions in detail that may be propounded and if there are any questions by any of those present we would like to have them.

Mr. Donovan: I would like to ask the approximate cost of the ten cars completely equipped with dynamo and all the other luxuries enumerated?

Mr. Wastell: The cost of the outfit will approximate \$6,500; that is, \$650 per car for the



DYNAMO SUPPLYING LIGHT FOR CAMP TRAIN.

provided with all necessary shelving and a glass showcase (with lock) on the counter, containing cigars, etc. The counter is provided with a flap and gate, securely bolted inside. Opening directly from the commissary room is a sash door into the office, which is 8 feet wide and 20 feet long with an ell 5x8. The men gain access to the office, receiving mail, pay checks, etc., through the cashier's window, which opens into the lobby directly opposite the commissary car. Shelving and lockers are provided in this room for stationery, baskets, packing, hospital supplies, etc., to which the general foreman has access, but a night latch on the door leading to the commissary indicates our purpose of keeping everybody, except our storekeeper, out of that compartment. In the office a flat and stand-up desk is provided for the storekeeper, who is also camp timekeeper, as well as a desk for the general foreman. The telephone is in this office, both the private line connecting with unloading dock and boom house as well as a long distance telephone for general use. A door opens into the ell portion of the office from the lobby to the left of the front door, through which the general foreman is enabled to get into the office, and, if desired, on to his bunk room. The bunk room is 10x14, is provided with two double-tier pipe bunks of the same style as provided in the regular bunk cars, but foreman and storekeeper are assigned to the lower bunks, the upper bunks being reserved for headquarters officers and overnight visitors. In this room two closets are provided for the convenience of the men; also a stationary wash basin and a reading table.

This car is well lighted throughout, not only by windows but by the use of sash doors and sash set in all partitions.

In General.

Our water supply for boilers and dynamo car and for cooking requirements is provided by means of a 2,000-gallon tank, which is erected at a height so as to give good pressure and furnish adequate supply without in any way interfering with the water supply for the donkey engines. The same pumping plant, however, that provides water for the donkeys is also used for the camp supply in our present location. In shifting camp, we will sometimes have the benefit of a gravity supply, but these conditions are entirely local, according to the setting of the camp.

We do not cover matters of sanitation in this paper, as you will be presented special papers on this subject, which is, however, a matter of great importance and which has been given due thought in the equipment of this camp.

We trust that we have made this description

Thomasases who contend that the men will not appreciate the privileges and conveniences of this outfit, but the expression of the men themselves indicates keen appreciation of our efforts, and we believe undesirables who do not respect the con-

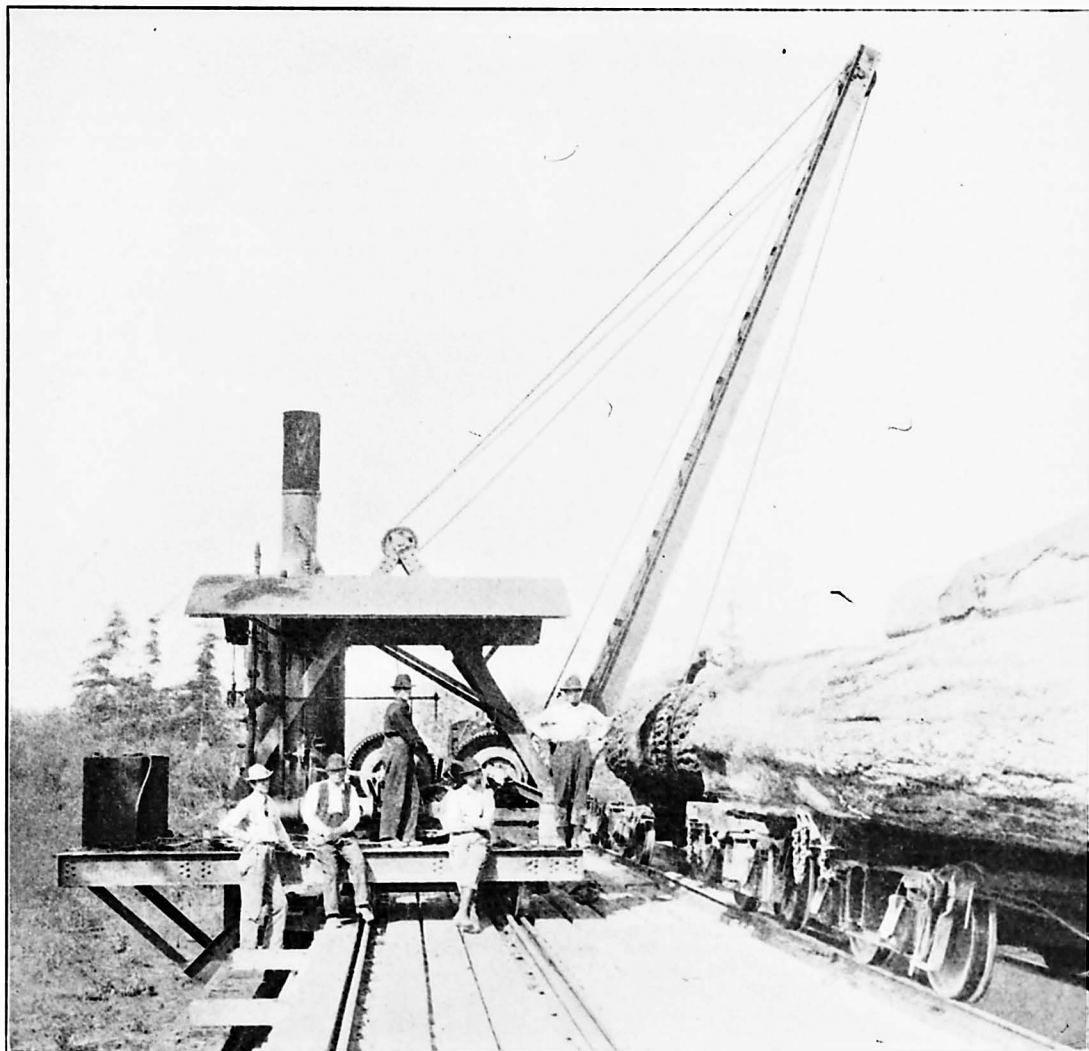


MALLETT LOCOMOTIVES, WHITNEY CO., LTD.

complete proposition, including the heating arrangements and shower bath arrangements and all of those features.

Mr. Taylor: How much right-of-way do you have?

Mr. Wastell: We figure on fourteen feet, but we clear about twenty-four feet right straight through, that we may have plenty of room to clear with our camp outfit. We have standard gauge road cars.



UNLOADING LOGS, WHITNEY CO., LTD., CAMP