

**BELL SYSTEM PRACTICES**  
**Motor Vehicles and**  
**Construction Apparatus**

**SECTION J6.621**  
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**Standard**

# **CONSTRUCTION APPARATUS**

## **OPERATION OF POLE TRAILERS**

<b>Contents</b>	<b>Page</b>
GENERAL .....	2
BALANCED LOADS .....	2
LOADING POLES ON TRAILER BY MEANS OF POLE DERRICK .....	3
LOADING POLES ON TRAILER BY MEANS OF SKIDS..	4
LOADING POLES ON TRAILER BY MEANS OF GIN POLE	7
BINDING KING POLE .....	8
BINDING COMPLETED LOAD .....	9
COUPLING TRAILER TO TRUCK.....	10
UNLOADING POLES BY ROLLING OFF SIDE OF TRAILER	12
UNLOADING POLES BY SNAKING OUT OF LOAD.....	14
SAFETY PRECAUTIONS .....	15
GENERAL MAINTENANCE AND LUBRICATION.....	15

## 1. GENERAL

1.01 Pole trailers of several types are available for hauling poles. The following practices are applicable to the various types and outline methods for their operation.

## 2. BALANCED LOADS

2.01 In loading poles on a two wheel trailer, the position of each pole, fore and aft, should be such that the total load on the trailer is balanced. When thus loaded, one man can usually raise the front end of the load from a position resting on the ground. The balance should be tested as every third pole is loaded, in order that it can be corrected as desired, by the additional poles loaded. The butts are usually loaded forward, in order that the shortest possible tongue length can be used.

2.02 When the tongue of the trailer is not long enough to connect directly to the truck with the length of poles to be hauled, it is desirable to select a long straight pole for the king pole. This pole is the first loaded and is placed directly over the tongue, with top forward as outlined in paragraphs 6.01 and 6.02. Where various sizes of poles are to be loaded on the trailer, the poles should be loaded in the reverse order to that in which they will be unloaded so that the first poles to be delivered will be on top of the load.

### 3. LOADING POLES ON TRAILER BY MEANS OF POLE DERRICK

3.01 After erecting the pole derrick, maneuver the truck to the position shown below. Place trailer at right angles to the truck, with the derrick head over the center line between the bolsters.

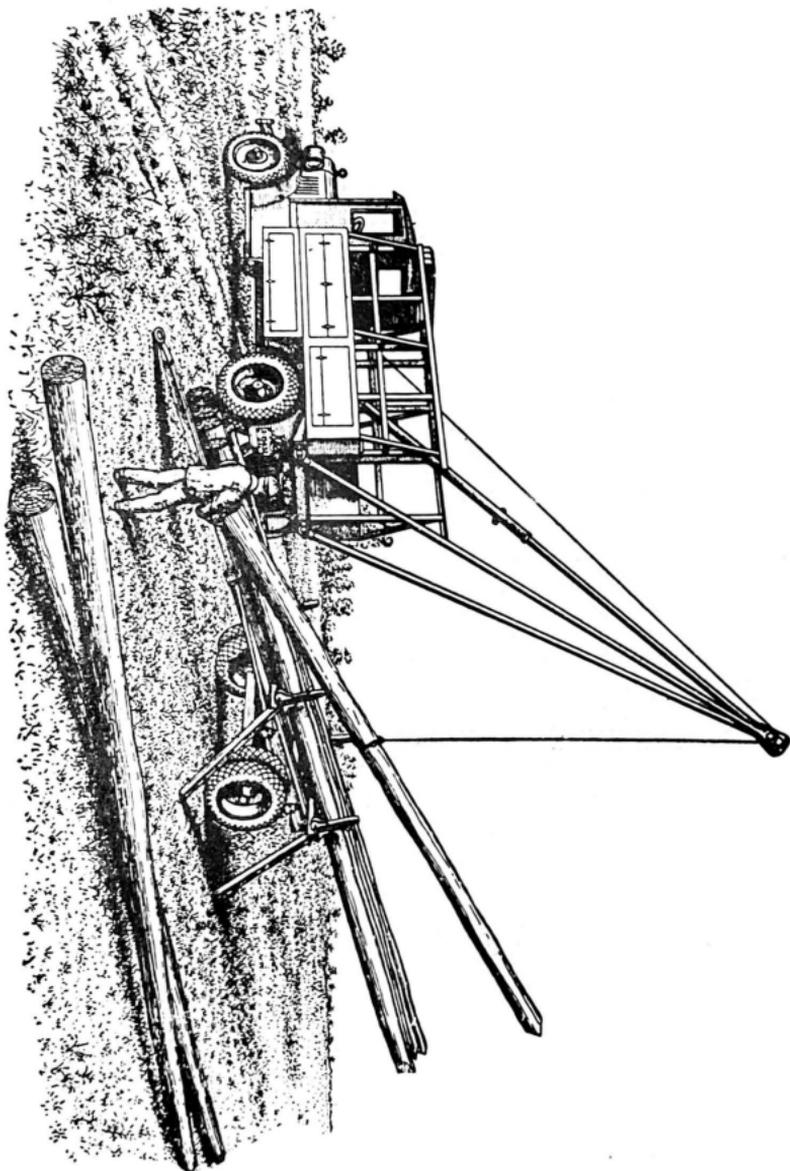


Fig. 1

## OPERATION OF POLE TRAILERS

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3.02 Place two skids between the bolsters and the ground at about a 45° angle, to guide the poles as they are raised by the derrick.

3.03 Attach winch line to the pole to be loaded. One man at the end of the pole shall guide it as it slides up the skids and into place on the trailer.

### **4. LOADING POLES ON TRAILER BY MEANS OF SKIDS**

4.01 The trailer tongue shall be attached to the truck towing hook and adjusted to the desired length by moving the truck with the trailer wheels blocked. Keep hands away from tongue end and hook when attaching trailer to towing hook.

4.02 Attach a snatch block to the trailer frame and pass the winch line over the sheave and over the pole to be loaded and back to the frame of the trailer near the snatch block.

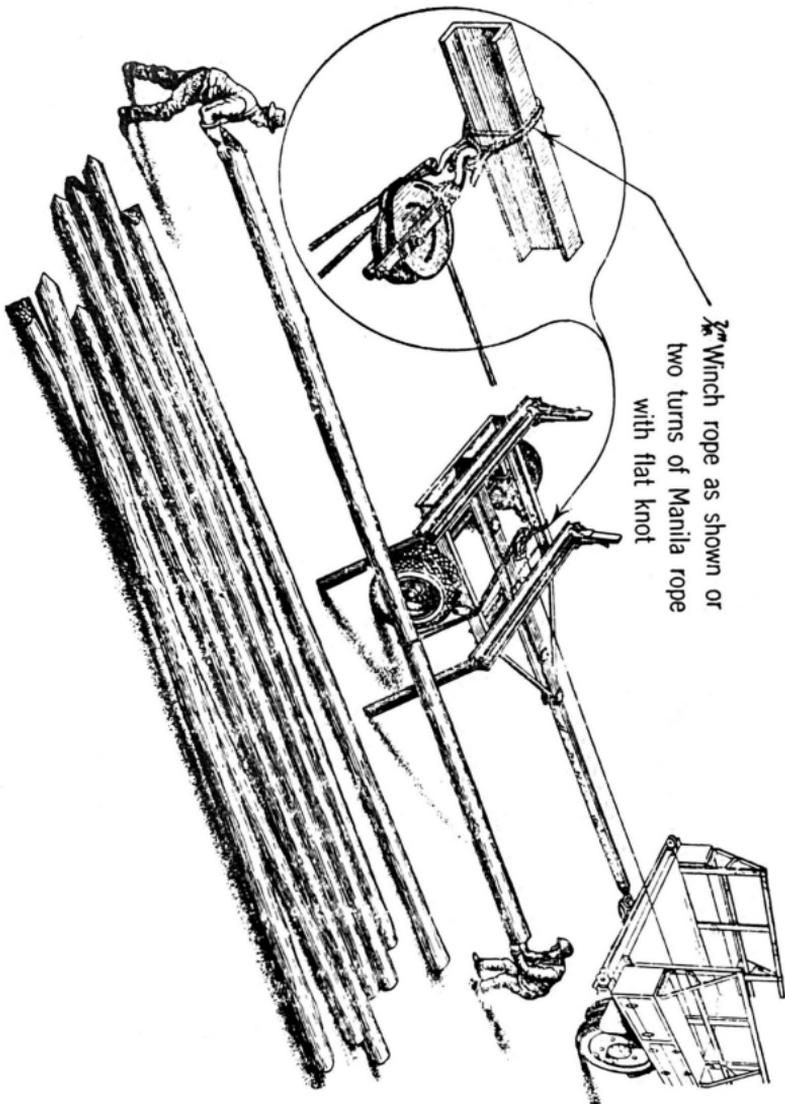


Fig. 2

4.03 Take up on the winch line. As the pole rolls up the skids, two men shall guide the ends, keeping the pole parallel with the trailer. These men shall stand at the ends of the pole, so that they will be in the clear if the pole should get out of control.

4.04 In loading a semi-trailer, attach the trailer tongue to the truck towing hook and adjust to the proper length

## OPERATION OF POLE TRAILERS

by moving the truck with the trailer wheels blocked. Keep hands away from end of tongue and hook when attaching trailer to towing hook.

4.05 Attach a wire rope or chain between the bolster on the trailer and the bolster on the truck, leaving a little slack as shown in the following figure. Attach a snatch block to this connection. Proceed as in paragraphs 4.02 and 4.03.

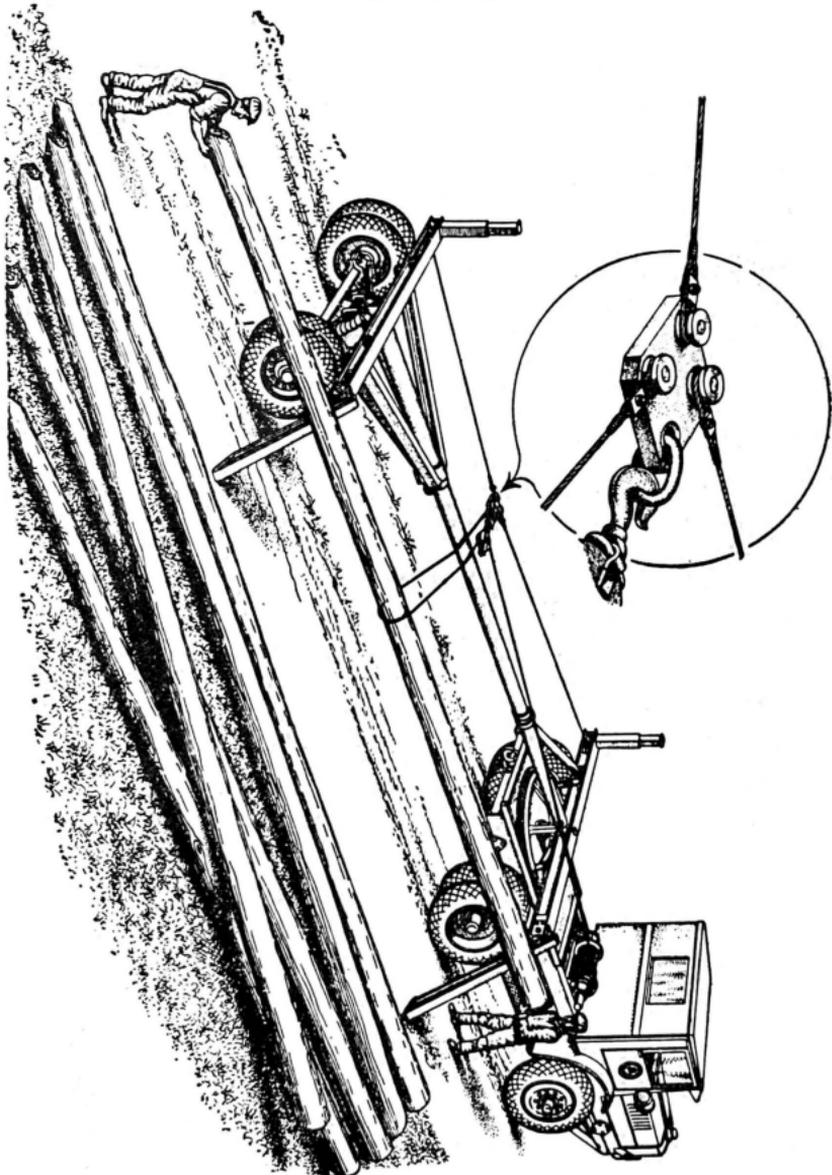


Fig. 3

4.06 In loading the second or succeeding poles, the snatch block and the dead end of the winch rope shall be located above the poles previously loaded, so that the pole being loaded can be rolled into position.

4.07 The skids for the second or succeeding layers can be attached to the top of the stanchions when the stanchions are designed for this purpose. When the stanchion is not so designed, it is necessary to use cant hooks to assist in rolling the poles over the stanchions.

## 5. LOADING POLES ON TRAILER BY MEANS OF GIN POLE

5.01 This method of loading trailers can be used to advantage at pole yards where a gin pole can be permanently installed at a convenient point and where a truck with a derrick is not available.

5.02 Rope is threaded through snatch blocks at the top and bottom of the gin pole. The trailer is located under the gin pole so that the poles can be lowered to the proper position on the trailer.

5.03 Place skids to the side of the trailer.

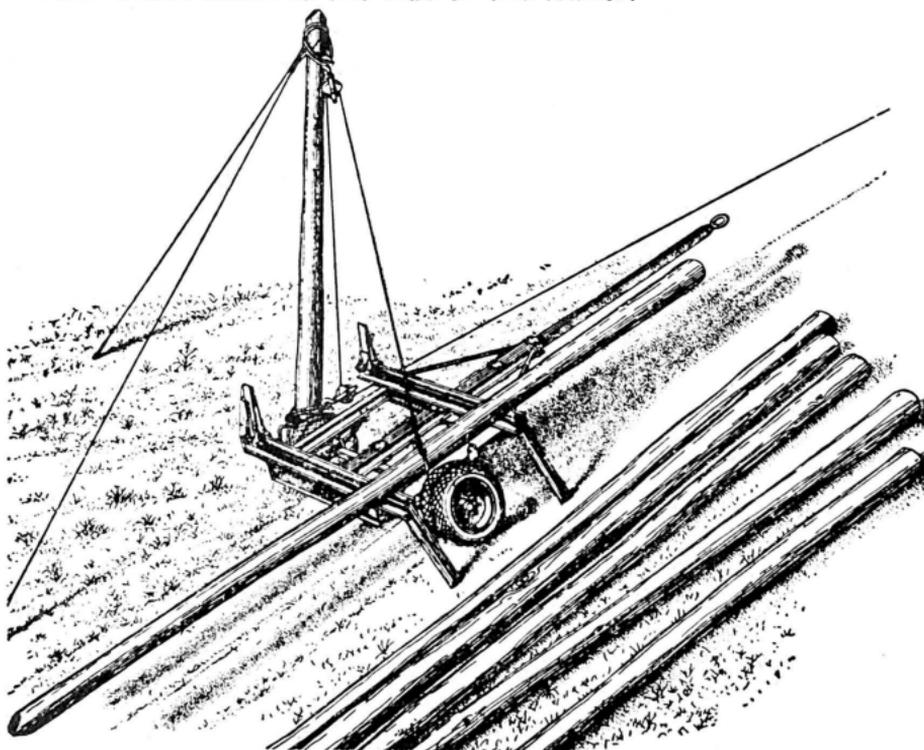


Fig. 4

## OPERATION OF POLE TRAILERS

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5.04 Attach lifting end of rope to the pole to be loaded and take up on the pulling end, raising the pole above the trailer stanchions. Lower pole to its desired position on the trailer. Proceed as outlined in paragraph 2.01.

5.05 When a pole yard is equipped with special derrick equipment, the method of loading the trailer can be varied to suit the equipment used.

### 6. BINDING KING POLE

6.01 When the trailer tongue is not long enough to attach to the truck towing hook for lengths of poles to be loaded, a king pole is placed directly above the tongue at right angles to the axle. Select one of the longest straight poles of the load for this position.

6.02 Bind the king pole securely to the tongue, near the front, so that it will not change its position when the other poles are loaded.

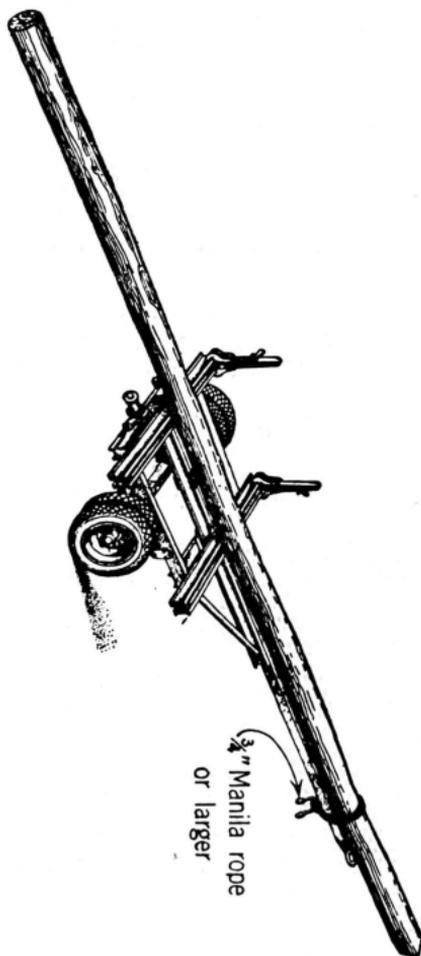


Fig. 5

## 7. BINDING COMPLETED LOAD

- 7.01 Bind a balanced load at the rear of the trailer frame and near the front end of the tongue.
- 7.02 Use the binder attached to the trailer for binding at the rear. See following figure.
- 7.03 Use portable load binder for binding near front end of the tongue.

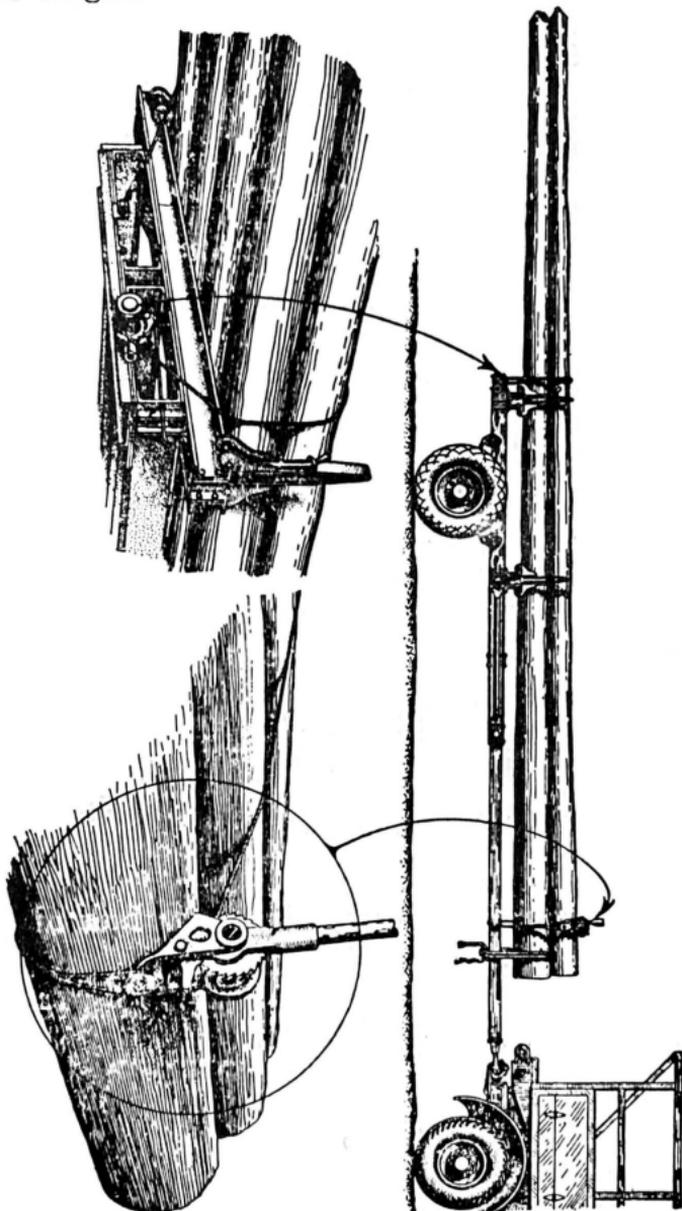


Fig. 6

## OPERATION OF POLE TRAILERS

7.04 Cast steel rope 5/16 inch diameter, six strands, 19 wires to the strand will be satisfactory for binding front and rear of the load. If this size rope is not available, 7/16 inch steel rope can be used temporarily.

7.05 Do not rely on stanchions to hold the load while traveling. Always bind the load as outlined above in addition to the use of stanchions.

### 8. COUPLING TRAILER TO TRUCK

8.01 Attach the trailer tongue direct to the towing hook on the truck when the poles are short enough so that the load can be balanced on a trailer and the trailer tongue extends about four feet ahead of the load.

8.02 When long poles are loaded and the tongue cannot be attached as outlined in paragraph 8.01, use the type H or L draw-bar on the king pole loaded as outlined in paragraph 6.01.

The H draw-bar should be used with 1-1/2 ton or larger trucks.

The L draw-bar should be used with lighter vehicles.

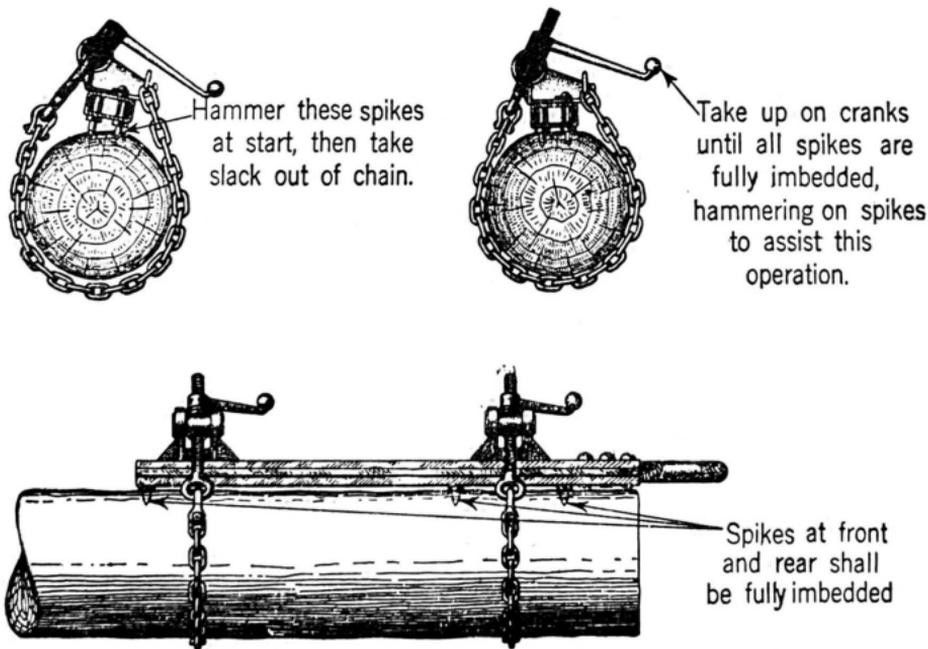


Fig. 7

8.03 Attach safety connections between the truck and the trailer, as outlined in the following figure.

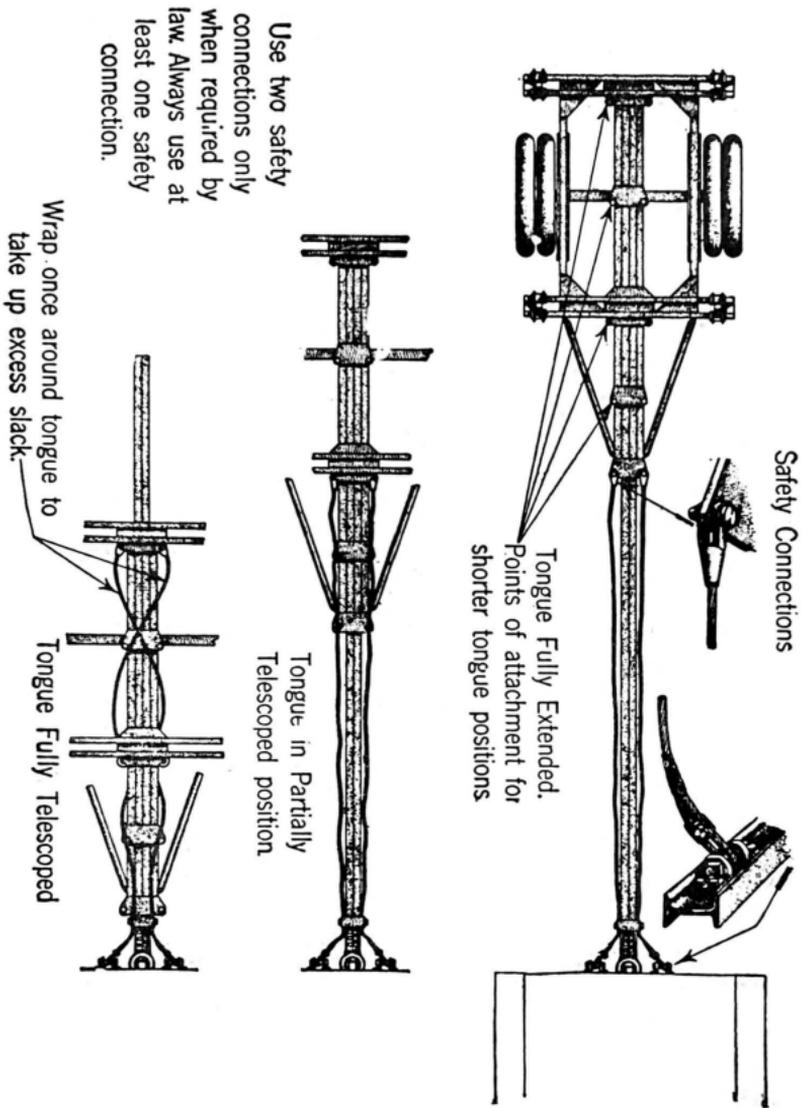


Fig. 8

8.04 The supervisor will advise you whether one or two safety connections are required by law. Use one safety connection where two are not required by law.

## 9. UNLOADING POLES BY ROLLING OFF SIDE OF TRAILER

9.01 Poles can be removed from the load by rolling over the side of the trailer. Skids are not generally required in unloading.

9.02 One man shall stand on the ground at each end of the pole to be unloaded and use cant hook to roll the pole off the trailer. See following figure.

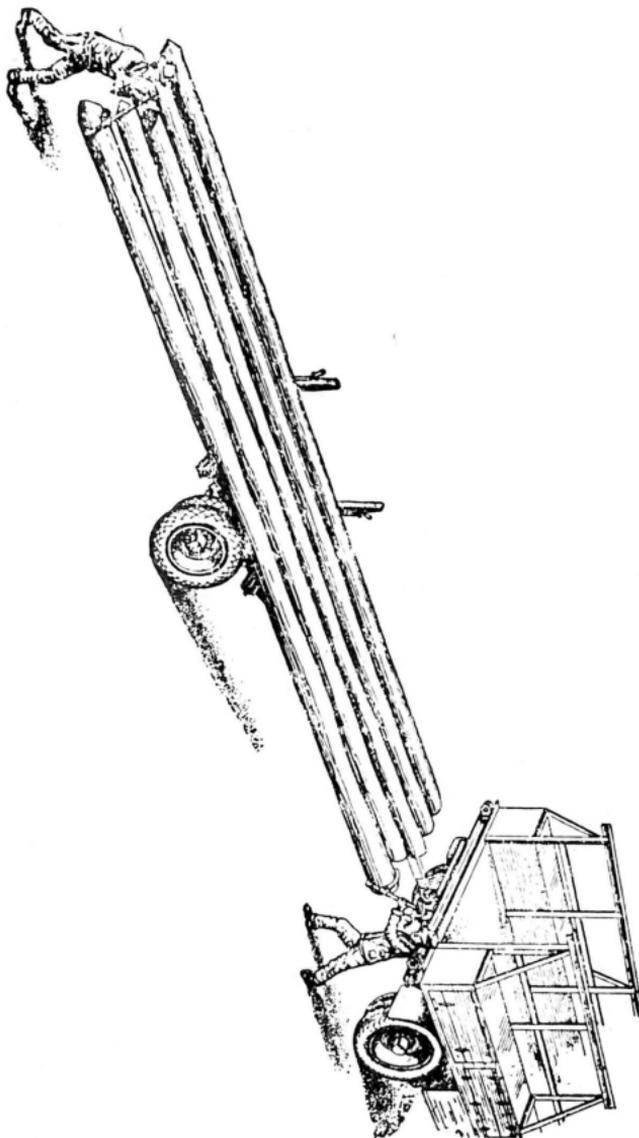


Fig. 9

9.03 After removing the top layers, the stanchions can be removed and the bottom layer removed in a similar manner.

9.04 In removing top layers before stanchions are removed, and when it is necessary to stand on the load, the men shall be careful to have a firm footing and to roll the pole away from themselves and not toward themselves.

9.05 Make sure that when moving a pole or a load, the other poles are not dislodged by taking away the support provided by the pole being moved.

## 10. UNLOADING POLES BY SNAKING OUT OF LOAD

10.01 When an existing pole line is close to the road, a line can be attached to the pole to be unloaded, the other end of the line being snubbed around a pole in the line at a distance of not less than 50 feet from the position where the pole is to be delivered, in order to lessen the side pull on the pole. Drive truck slowly and the pole is dragged out of the load and drops to the ground when the pole clears the load.

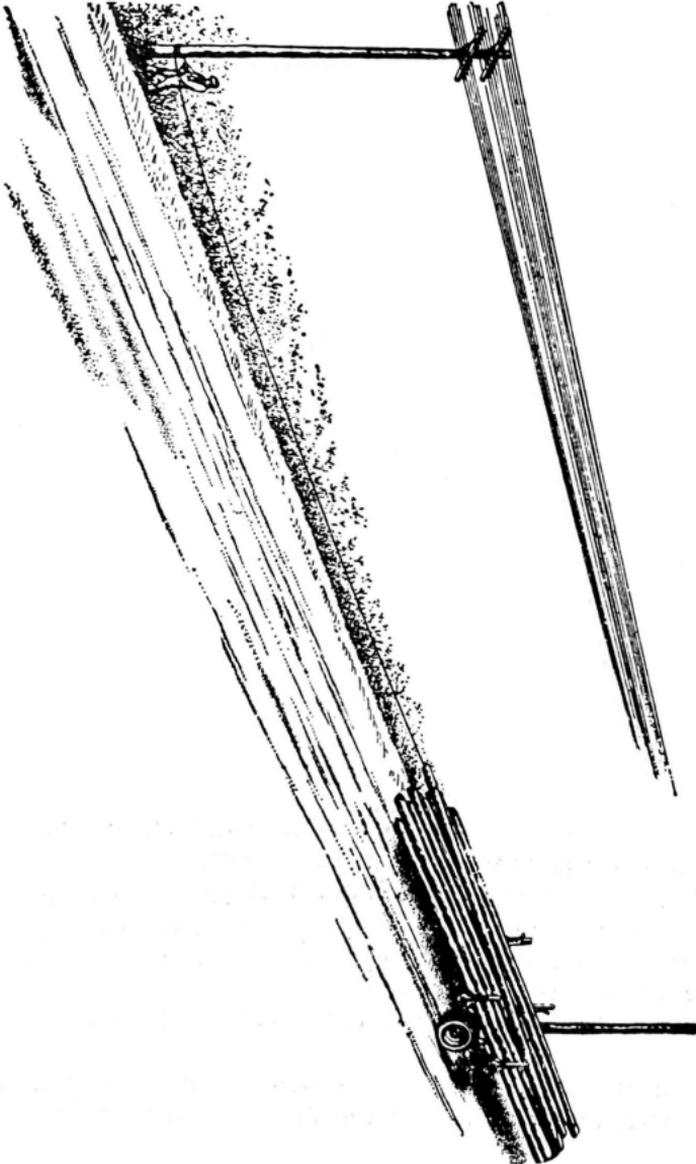


Fig. 10

## **11. SAFETY PRECAUTIONS**

11.01 In snaking a pole, always watch end of the pole to make sure it does not catch on an obstruction which will cause it to swing around. If it is necessary for workmen to guide the pole it should be done from the rear end.

11.02 In loading, when poles are being raised with a derrick or gin pole or by rolling them up skids with a winch line, the workmen guiding the pole shall stand at the ends of the pole so that they will be in the clear if the pole should get out of control.

11.03 In rolling poles off a trailer, in so far as practicable, the workmen shall roll the poles away from themselves and not toward themselves. When necessary to stand on the load, men shall be careful to have a firm footing. Make sure when moving a pole on the load that other poles are not dislodged by taking away the support provided by the pole being moved.

11.04 Before starting a pole hauling job, the foreman shall check the equipment to make sure that all parts are in place and in safe operating condition. When in doubt as to whether the equipment is in a safe condition, or when in doubt regarding the proper method for handling special work, take up the matter with your supervisor.

## **12. GENERAL MAINTENANCE AND LUBRICATION**

12.01 Examine trailer to make sure bolts and rivets are tight and especially the bolts holding the springs to the axle.

12.02 When necessary, lubricate spring shackles and other points requiring it.

12.03 The lubrication of wheel bearings is covered in the instructions "Care of Trailer Axle Bearings."