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**BRITISH RAILWAYS**

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# **INSTRUCTIONS AND DIAGRAMS**

**FOR**

**LOADING AND SECURING  
LONG, PROJECTING AND  
OTHERWISE EXCEPTIONAL  
LOADS, ALSO PROCEDURE  
REGARDING ACCEPTANCE  
AND CONVEYANCE OF  
OUT - OF - GAUGE AND  
OTHERWISE EXCEPTIONAL  
LOADS**

**1st November, 1956**

**British Transport Commission,  
Railway Clearing House,  
203 Eversholt Street,  
LONDON, N.W. 1.**

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# **BRITISH RAILWAYS**

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## **INSTRUCTIONS AND DIAGRAMS FOR LOADING AND SECURING LONG, PROJECTING AND OTHERWISE EXCEPTIONAL LOADS**

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### **GENERAL INSTRUCTIONS.**

1. These Instructions, with accompanying diagrams, are for the guidance of staff loading and securing traffic to ensure safe conveyance.  
In cases of doubt, the appropriate District Officer should be consulted.
2. Particular care must be taken in loading and securing traffic to prevent it becoming displaced or falling from wagons in transit.
3. Securing and binding chains, ropes, bands, etc., must be made as tight as possible, except where otherwise provided herein. When loads are standing at Marshalling Yards or other staging points, the securing tackle must be examined and tightened as necessary.
4. Wagons must not be loaded in excess of carrying capacity or in excess of the permitted axle weights and other limits laid down herein. Regard must be paid to the distribution of weight to avoid risk of damage to the wagon or of wagon wheels lifting. When loads cannot be so distributed they must be dealt with as exceptional loads, as provided for in paragraph 6.
5. Before loads are accepted from private sidings or forwarded from stations they must be inspected by a competent member of British Railways' staff. Goods Agents, Yard Masters, Station Masters and others in charge will be held responsible for this duty or for its performance by an experienced deputy. They will also be expected to see that the instructions are understood both by their own loading staff and that of traders in their area.
6. The following must not be accepted or despatched except with the special authority of and by arrangement with the District Commercial Officer :—
  - (a) Traffic which cannot be loaded in all respects within the gauges of the lines over which it will pass.
  - (b) Loads more than 60 ft. in length.
  - (c) Articles which, when loaded, are equivalent to a load more than 60 ft. in length owing to the distance from the centre of carrying wagon to either end exceeding 30 ft.
  - (d) Loads which are within the gauge of the lines over which they will pass but exceptional by reason of awkward shape, heavy weight in relation to size, type of wagon used, or any other cause.

All such loads must be inspected and passed as properly loaded and must be ticketed with the special "Examine Load" label. This label must be signed

**In the space provided, by the member of the British Railways' staff making the inspection.**

**Note.**—The procedure for arranging conveyance of out-of-gauge and otherwise exceptional loads which operates in each Region is set out in Appendix "A" hereto.

Attention is also drawn to the following :—

**Appendix "B" hereto.**—Conditions under which the prior consent of the Chief Civil Engineer is not necessary for the passage of certain loads exceeding 60 ft. (or equivalent) but not exceeding 90 ft. (or equivalent) in length, occurring between 4 ft. and 10 ft. 3 ins. from rail.

**Appendix "C" hereto.**—Conditions under which the prior consent of the Chief Civil Engineer is not necessary for the passage of loads with widths below 3 ft. 6 ins. from rail, contained within the length of the well of the wagon.

7. Wagons constructed to carry long and projecting, heavy or bulky articles should not be loaded until it has been ascertained that they can be safely worked to and dealt with at destination.

8. These instructions are not to be considered as superseding or in any way interfering with those contained in Rule 158/(c).

It is not possible to give definite instructions such as will cover all classes of traffic, and it may be necessary for the staff supervising the loading to use their own discretion to a certain extent whilst conforming to the general instructions given above. Any variation made, however, to these instructions must be on the side of safety.

9. Wherever there is a possibility of securing ropes becoming frayed by contact with the load, suitable protection (e.g., sacking, old sheeting, etc.) must be afforded to avoid any chance of breakage.

## **SECURING OF CHAINS AND OTHER EQUIPMENT ON WAGONS**

10. (a) Chains, when not in use for securing a load must be stowed in the wagon pockets, where provided, or where there is no such provision, must be hooked and secured or fastened together across the vehicle in such a way as to prevent them moving or falling off during transit.

Fast and tethered chains must not under any circumstances be removed from wagons.

- (b) Securing pins or other equipment for securing beams, etc., on specially constructed wagons must be used, and, if further security is necessary, ropes or chains must be employed.
11. Before loading is commenced the chains, screws, stanchions and bolster swivels must be carefully examined and the iron plates upon which the bolsters turn greased. In the case of wagons fitted with bolster quadrant pins, the pins should be inserted in the outer holes, i.e., the holes nearer to the end of the quadrants.
12. Shackles or "D" links on bolster wagons must be kept within the stanchions except when, owing to the load extending to the full width of the bolsters, they cannot conveniently remain inside the stanchions.
13. Bolsters and pivot pins of runner wagons must be removed and placed at the end of the wagon away from the load, unless there is a clearance of at least 4 ft. at either end. Pivot pins must accompany the bolsters.

Where there is no space available to accommodate the loose bolsters, they must be placed in a separate wagon to accompany the load.

## **BOLSTER WAGONS.**

14. When long timber, iron, plates, etc., cannot be loaded in ordinary open wagons in accordance with the instructions regarding overhanging loads, then double bolster, bogie bolster, plate or bogie plate wagons or other similar stock must be used when available, in preference to sets of single bolster wagons.
15. Double bolster and bogie wagons should not be used in pairs, or in conjunction with any other wagon, to convey a load except as shewn on pages 24 and 25, or when a double bolster wagon is acting as runner.
16. **Iron of various lengths resting on one bolster of double bolster wagons.**

- (a) When making self-contained loads of iron of various lengths on wagons with fixed bolsters when such lengths are not long enough to overhang both bolsters, they should be loaded with half the quantity with one end overhanging the leading bolster, and the other end resting on the floor of the wagon close up against the trailing bolster; the remaining half to be loaded overhanging the trailing bolster with the other ends on the wagon floor, close up against the leading bolster, or
- (b) Loaded with one half overhanging one bolster as in (a) with the remaining half divided into two portions and each loaded on either side of first half and overhanging the opposite bolster, i.e., dovetail method.

*Note.*—Where space is available short pieces may be loaded on floors of wagons, below the rave and between the bolsters only.

The traffic must be secured by chaining to the bolster on which it rests. When loaded as in (b), chains must also be passed round each of the two portions resting on the bolster to prevent splaying.

The bolsters must be made rigid before loading, if necessary using wood packing on either side of bolsters at the centre.

The total weight must not exceed the carrying capacity of the wagon, and must be equally distributed over each of the axles, bolsters and floor of wagon between bolsters.

17. **Pig Iron, short steel billets, etc., in single bolster wagons.**

When single bolster wagons have to be used for loading these traffics, the following restrictions as to weight and distribution of load must be rigidly adhered to :—

- (a) Total weight must not exceed 6 tons, and traffic must be evenly distributed over wagon floor.
  - (b) Billets of irregular lengths must not exceed 5 cwts. per square foot of wagon floor space occupied, and must be evenly distributed over wagon floor.
18. The methods of loading on two or more single bolster wagons are indicated in diagrams 1 to 12, and the dimensions in these diagrams are based on wagons 15 ft. long over headstocks on a minimum curve of 6 chains.
  19. When two or more single bolster wagons are to be used for the conveyance of a load, wagons with bolsters of equal height should be selected as far as possible. If, however, all the bolsters are not of equal height, packing must be secured to the bolsters in such a manner as will ensure each wagon taking its proper proportion of the weight of the load. The provisions contained in instruction 29 concerning the minimum overlap of loads must be observed.
  20. In loading iron, steel rails, plates or similar traffic the bolsters on which the load is free to move should be steel-plated if possible. Where reversible bolsters are fitted one side is plated for this purpose.  
Where bolsters are not provided with iron plates or shoes the bolsters on which the load is free to move, must be well greased.
  21. Loads must have an adequate clearance above floors, sides and ends of single

bolster wagon sets, including runner wagons, having regard to the nature and flexibility of the load, but in every case there must be a minimum of clearance of 4 ins. above the floors and ends of the carrying wagons and runners.

22. In loading twin or single bolster sets not fitted with swivel bolsters a space of not less than 6 ins. between the stanchions on each side of the load must be left, and the length of the load must be at least 2 ft. less than the inside measurement of the wagons so as to allow freedom to negotiate curves safely and to prevent damage to the wagons.

## **OVERHANG.**

23. Twin bolster wagons with bolsters which do not swivel must only be used for the conveyance of self-contained loads without overhang.
24. Whenever possible self-contained loads must be made. Suitable runners at one or both ends may be employed provided the portion of the load projecting beyond the carrying wagon allows free movement of the runner. In every case there must be a minimum clearance of 4 ins., as specified in instruction 21.
25. A runner must be used when the projecting portion of the load extends more than 1 ft. 6 ins. beyond the wagon end. Wagons must not be coupled together with the overhanging portion of loads facing each other, when either overhang exceeds 1 ft.
26. In the case of material, loaded on double bolster wagons, which is not rigid enough to support an overhang, the length of the load must not exceed the length of the wagon.
27. Except where special provision is made in these instructions traffic projecting beyond the ends of wagons must in all cases be securely bound to prevent spreading.
28. When making self-contained loads all traffic loaded directly on to the bolsters of bolster wagons must have at least 1 ft. overhang beyond the outside edge of each bolster. The weight of the load must be distributed evenly as far as possible on each bolster.
29. All loads on sets of single bolster wagons must overlap the bolsters at ends by at least 2 ft. 6 ins. with wagon couplings fully extended. Sets of single bolster wagons should be so coupled as to limit the maximum possible movement between any two vehicles to 1 ft. 4 ins.

## **SECURING OF LOADS ON BOLSTER WAGONS.**

30. In loading timber, iron, etc., of unequal lengths the longer pieces should as far as possible be placed at the bottom of the load and the shorter pieces on the top, and all firmly bound together with chains and screw shackles, additional chains being used as necessary to secure the shorter pieces.
31. Loads must be made as solid as possible. The bolster chains of the carrying wagons must be wrapped round the load (not simply passed over the top) except when traffic is loaded to the full width between stanchions, and is permitted to be so loaded, the binding chains may be passed over the top of the load.
32. Chains are preferable for binding tapering ends of Round Timber but where chains are unobtainable, ropes may be used, provided a satisfactory binding can be made.
33. Where the ends of a load of a flexible nature exceed 9 ft. from the last bearing bolster, it is necessary to chain and bind the load clear of the wagon to prevent spreading.



## **PERMANENT WAY MATERIAL.**

34. Sets of points and crossings must not be loaded on single bolster wagons.
35. Double bolster wagons are not suitable for the conveyance of chaired and unchaired sleepers and the loading of such traffic on these vehicles is prohibited.
36. Wherever practicable, Bull Head rails should be loaded on their side and nested, and the subsequent layers after the first built up in pyramid fashion or in the form of an arc. Where the position of the end bolsters allows sufficient overhang to give rise to sag, thereby interfering with the required minimum clearance of 4 ins. over the end of runner wagons, the bottom layer of rails must be loaded upright on their base, subsequent layers being loaded on their side and nested. Where alternative positions are provided the stanchion must always be in the inner position. When single bolster sets are used the chains in the positions "free of wagon" must be tightened by means of screw portion. Securing by passing bolts through the links is prohibited.

## **ROUND TIMBER.**

37. In loading round timber, straight trees should be loaded at the bottom when practicable, and any of irregular shape on the top.
38. Timber, which owing to great length or peculiar shape forms an awkward load, must be so loaded that the outside trees are firmly held by the stanchions. Timber may be loaded above the level of the stanchions in the centre of the load, provided that such trees are held in position by the outside timber. The timber must not hang in the binding chains.
39. Trees and poles which are thicker at one end than the other, loaded on sets of single bolster wagons, must be tightly secured with chains at the butt ends, but at the other bearing and securing point the chains must be applied so as to permit of slight backward and forward movement.

## **PLATES AND BARS.**

40. Plates and Bars which can be accommodated in the beds of open wagons must be equally distributed over the floor and the tops of the loads must be kept at least 4 ins. below the top of the wagon sides.
41. A number of bars should, if the length permits, be placed across each wagon at the end when loading is commenced, and following this the traffic should be loaded lengthwise in between.
42. Where the pieces are of such length that they do not permit of loading across the wagon at each end, packing timber must be placed across the wagon at one or both ends as practicable, to make the load rigid and avoid movement in transit.
43. The load must not be placed diagonally across the floor as this produces uneven loading at the corner of the wagons.
44. When loaded flat on the floor on flat topped or armour plate wagons all armour plate or other steel plates must be chained lengthwise as well as crosswise to prevent any movement in transit. In no circumstances must steel plates be loaded on single bolsters or flat on the floor of end door wagons.
45. Plate traffic must not, in any circumstances, be loaded resting on the top of sides of wagons. In those cases where the dimensions of the plates preclude the traffic being loaded flat on the floor of the open goods wagons, trestles must be used. When loaded in this manner, heavy plates must be secured by binding chains fitted with screws but ropes may be used for thin plates of lighter type. When ropes are used they must be protected from the sharp

edges of the plates by sacking. Suitable timber packing must be placed at the base or sides and ends as may be necessary in order to ensure that no movement takes place and also keeps the traffic within gauge.

46. In loading plates of different widths upon the same bolster wagon, the whole of the plates must be gripped by the securing chains.
47. Armour plates or other thick plates not liable to flexure, may be loaded upright in trolley wagons, provided the longitudinal beams are firmly secured by chains to the opposite sides of the wagons and the base of the plates is firmly secured by suitable packing.
48. Flexible plates must not be loaded on trolley wagons. If such plates must be loaded on edge, trestle wagons should be used.
49. Where the plates or metal sheeting is too large to be loaded in open goods wagons either flat or on trestles, and in cases where trestles are not available, bogie bolster, trestle trolley or other suitable special vehicles must be used and the traffic firmly secured by chains to prevent the possibility of movement in transit.

### OVERHANGING LOADS OF FLEXIBLE PLATES.

50. When flat steel plates are loaded in, Plate or Bo-plate wagons, overhang AT ONE END ONLY may be permitted subject to the following conditions :—

(a) **Traffic loaded on Plate or Bo-plate Wagons other than Bo-plate "E"**

Where width of plates in wagon is	Maximum over- hang permitted	Method of securing
From 6 ft. to 8 ft.	6 ft.	No securing required. If adequately held in position by shorter plates on top, over- hang need not be secured.
From 4 ft. to 6 ft.	6 ft.	
From 2 ft. to 4 ft.	4 ft.	
Up to 2 ft.	4 ft.	Overhang to be secured irrespective of any shorter plates loaded on top.

(b) **Traffic loaded in Bo-plate "E" Wagons.**

From 6 ft. 4 ins. to 8 ft.	4 ft.	No securing required. If adequately held in position by shorter plates on top, over- hang need not be secured.
From 4 ft. to 6 ft. 3 ins.	6 ft.	
From 2 ft. to 4 ft.	4 ft.	
Up to 2 ft.	4 ft.	Overhang to be secured irrespective of any shorter plates loaded on top.

Notes.—(i) Shorter plates loaded on top of overhang plates, must be kept at least 4 ins. below the rave of the wagon, whether the overhang is secured or not.

(ii) Overhanging plates in (a) and (b) above to be loaded centrally within the width of the wagon and the securing where necessary to be by means of chains, or ropes suitably protected at the plate edges by means of old sheeting (to be requisitioned from the Stores Department), whichever are available.

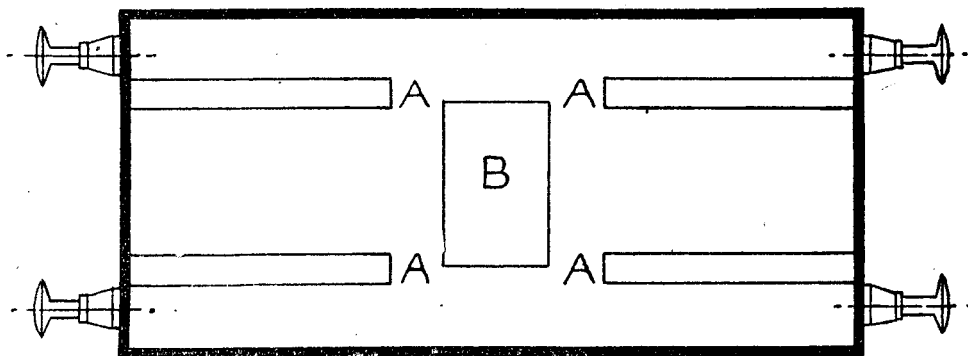
(c) Where there is an overhang, the maximum load to be conveyed to be as shown below :—

21 ton plate wagon	...	...	15 tons
30/32 ton bogie plate wagon	...	...	26 tons
40/42 ton bogie plate wagon	...	...	33 tons

(d) The loading of plates with overhang must not be permitted in wagons other than Plate or Bo-plate wagons.

### **CURVED PLATES.**

51. With self-contained loads of curved plates loaded on double bolster and bogie bolster wagons, a minimum overhang of 1 ft. over the outside edge of both bolsters, upon which the load rests, must be maintained, with the securing chains taken inside the stanchions and also inside the bolsters when the load is completely encircled by the chain. The curve should be downwards in these cases thereby cradling the loads between the bolsters.
52. Where a consignment of curved plates is of dimensions which permit it to be accommodated in a high sided open goods wagon, such wagons of steel under-frame construction (other than end or bottom door wagons) can be employed, subject to the plates being nested with the curve uppermost and an adequate measure of packing afforded. The method of loading and standard of packing must be a matter for discretion according to curvature and length of plates, but a method found upon tests to be satisfactory is given below. In any method of loading adopted, it is essential that the centre packing supporting the curve of the plates should be solid.
  1. The plates to be nested with curve uppermost.
  2. Four longitudinal timbers (A) to be nailed to the floor for edges of the plate ends to rest on (see sketch below).
  3. A solid timber baulk (B) to be placed under the centre of the plates to prevent flattening (see sketch below).



### **RESTRICTIONS UPON LOADING OF PLATE WAGONS.**

53. Except where specially authorised, tubes, billets, various rolled sections, etc., must not be loaded in Plate and Bo-plate wagons when the traffic is of such a length as to rest on one end and produce an overhang.

Such traffic must be loaded on suitable bolster stock, to provide as far as possible a self-contained load (see instructions in regard to Bolster wagons).

This restriction does not apply to plates which are flexible (see Instruction 50).

## **WAGONS WITH SIDE DOORS, HINGED VERTICALLY.**

54. Wagons with side doors, hinged vertically, are prohibited from use on ballast trains, and stations despatching material for unloading on main lines must take care such wagons are not used.

## **CONTINENTAL TRAIN FERRY WAGONS.**

55. Some wagons belonging to owners in other European countries work over the lines of British Railways via the Continental Train Ferries to and from Harwich and Dover and certain types of such vehicles are of exceptional dimensions, weight and wheel-base compared with wagons, railway or privately owned, which are registered in this country.

Continental wagons conforming to the loading gauge agreed by the International Union of Railways as suitable for working in this country will bear on the left-hand end of the body on each side of the wagon an anchor surrounded by a rectangle :



Vehicles so marked will not need any special examination or acceptance and will not require to be fitted with an R.C.H. approval plate. The vehicles have a wide route availability in this country but will be subject to the prohibitions and restrictions prescribed for them.

These vehicles and certain other types which have previously been approved for operation in this country subject to qualifications and restrictions which have or will be notified from time to time, may be conveyed on any type of freight train under the same regulations applicable to British Railways' stock, i.e., vacuum or partly fitted (piped) wagons may (all other conditions having been met) travel in the same types of freight trains as British Railways' fitted or piped vehicles and an unfitted wagon may work on freight trains under the same conditions as British Railways' non-fitted wagons.

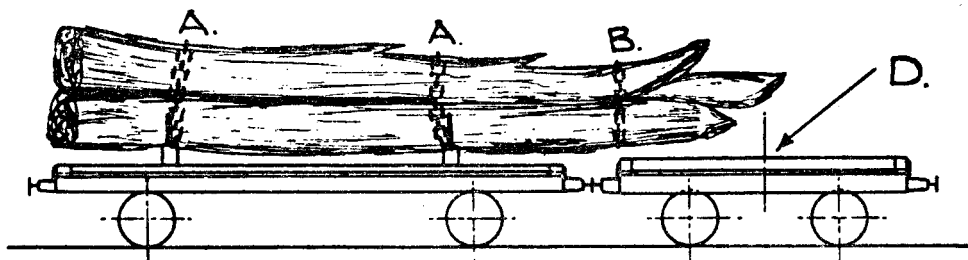
All other types of continental ferry train wagons which are not covered by the special instructions issued must be dealt with as exceptional loads.

## **LOADING OF MOTOR VEHICLES AND TRAILERS ON OPEN WAGONS.**

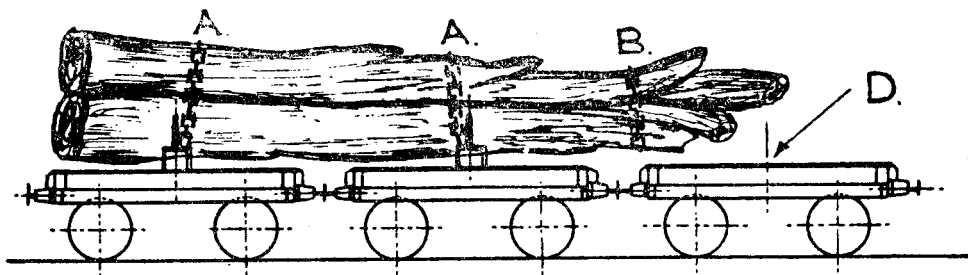
56. When loading motor vehicles or trailers all red reflectors and/or lamps must be covered in such a manner as to ensure that they are obscured without damage to the accessories.

## METHODS OF CARRYING RIGID ROUND TIMBER

### Self Contained Load



### 2 Wagon Set

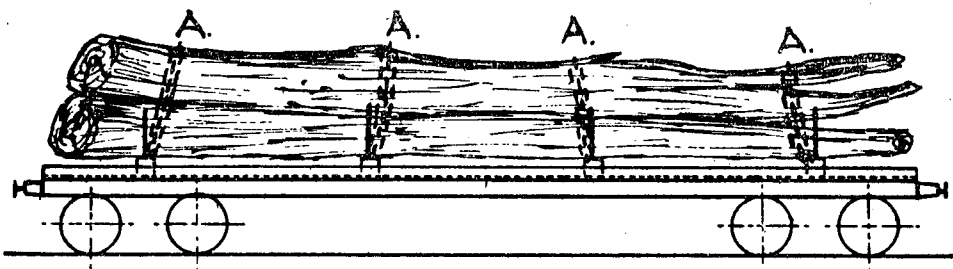


Loads requiring two wagons must be bound tightly to the bolsters of the wagons and stanchions used. If the load exceeds the length of two wagons, a runner wagon must be used.

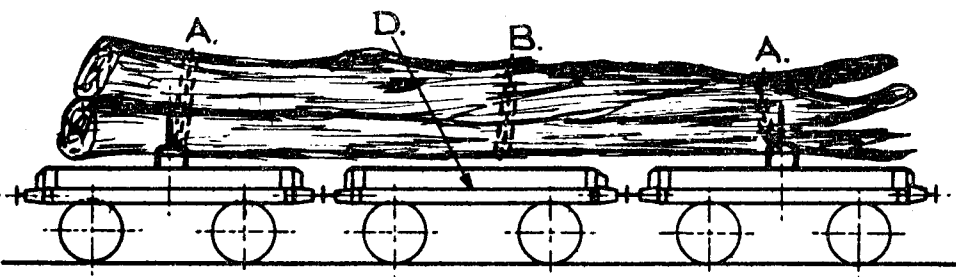
- A. Load chained to bolsters. Stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- D. See General Instruction No. 13.

# METHODS OF CARRYING RIGID ROUND TIMBER—Cont.

## Self Contained Load



## 3 Wagon Set



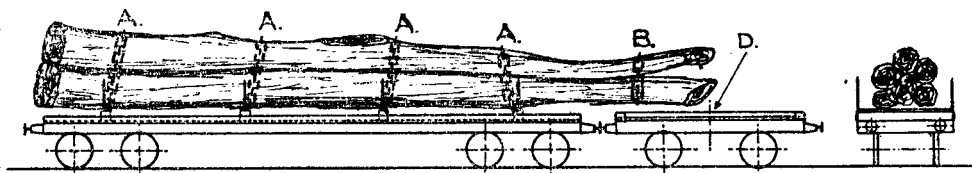
Loads requiring three wagons, exclusive of runner wagon, must only be bound to the bolsters of the first and third wagons and stanchions used. In the event of the centre wagon being a bolster wagon, the bolster must be removed and the load tightly chained free of wagon, about the centre.

In certain cases where timber is of irregular shape, it may be undesirable to remove the bolster of the second wagon. It would then be better to bind the load on the bolsters of the butt-end and second wagons, the stanchions remaining on both these wagons; the bolster and chain on the third wagon to be left in position, but stanchions removed and load chained free of wagon. The width of the load on this wagon not to exceed 5 ft.

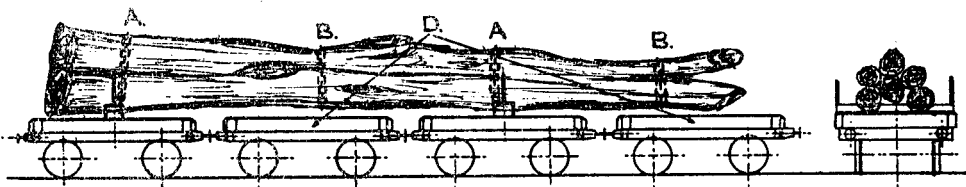
- A. Load chained to bolsters, stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- D. Bolster to be removed.

# METHODS OF CARRYING RIGID ROUND TIMBER—Cont.

## Self Contained Load



## 4 Wagon Set



Loads requiring four wagons must only be bound to the bolsters of first and third wagons from the butt-end and stanchions used. The bolsters of the second and fourth wagons to be removed. The load to be chained free of wagons midway between the bearing points and also at the narrow end, and the width of the load at the tapering end must not exceed 5 ft. at a maximum overhang of 24 ft. In the case of wagons 13 ft. over headstocks, the overhang must not exceed 21 ft. but the width of the overhang may be increased to 5 ft. 10 ins.

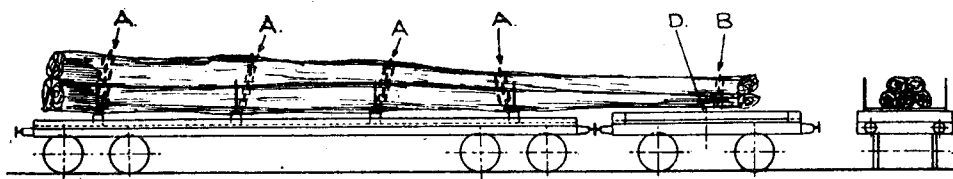
- A. Load chained to bolsters. Stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- D. Bolsters to be removed.

**Note.**—Attention is specially drawn to General Instruction No. 6.

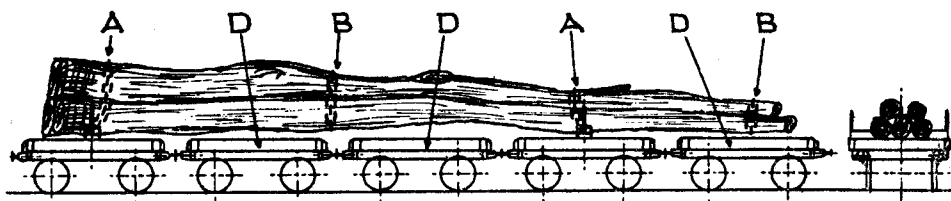
## DIAGRAM No. 4

### METHODS OF CARRYING RIGID ROUND TIMBER—Cont.

#### Self Contained Load



#### 5 Wagon Set



Loads requiring five wagons must be chained to the bolsters of first and fourth wagons from the butt-end and stanchions used. The load to be chained free of wagons midway between the bearing points and also at the narrow end. In the event of the intermediate and runner wagons being bolster wagons, the bolsters to be removed. The width of the load at the tapering end must not exceed 4 ft., at a maximum overhang of 24 ft. In the case of wagons 13 ft. over headstocks, the overhang must not exceed 21 ft., but the width of the overhang may be increased to 5 ft.

Long loads of this description can be loaded as shown in Diagram No. 3, a long flat wagon being substituted for the second and third wagons shown in Diagram No. 4.

- A. Load chained to bolster, stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- D. Bolsters to be removed.

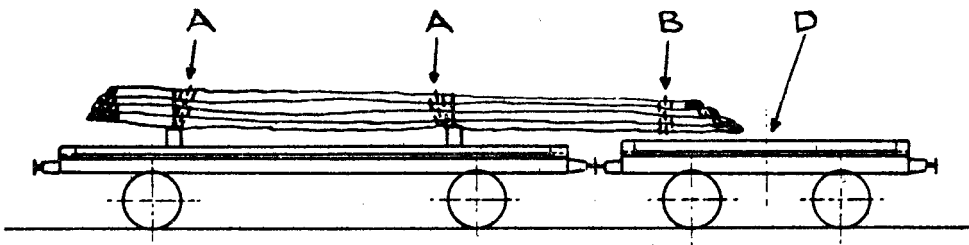
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**Note.**—Attention is specially drawn to General Instruction No. 6.

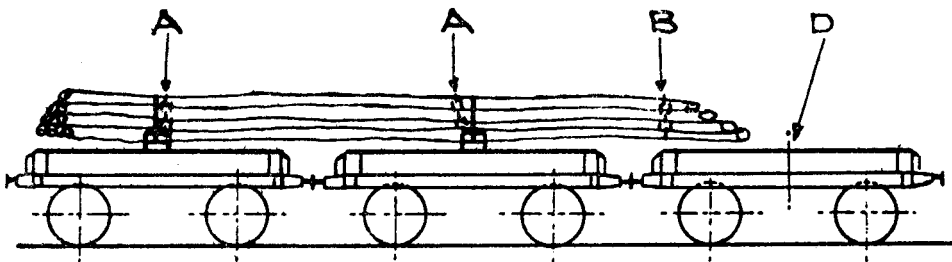


**METHODS OF CARRYING FLEXIBLE LOADS, SUCH AS  
RAILS, ROLLED SECTIONS, POLES, PLATES, ETC., OTHER  
THAN TELEGRAPH POLES.**

**Self Contained Load**



**2 Wagon Set**



Precaution to be observed with all flexible loads. Wagons with bolsters of equal height should be used, as far as possible, in each set.

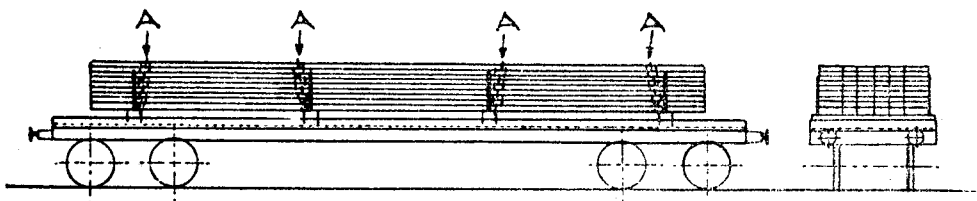
**Two-Wagon Set.**—Loads requiring two wagons must be bound tightly to the bolsters of the wagons and stanchions used. If the load exceeds the length of two wagons, a runner wagon must be used. Neither wagon must be loaded beyond its registered carrying capacity.

- A. Load chained to bolsters, stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- D. Bolster to be removed.

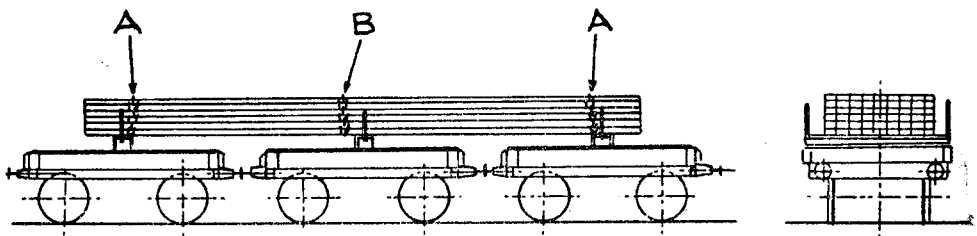
DIAGRAM No. 6

**METHODS OF CARRYING FLEXIBLE LOADS, SUCH AS RAILS, ROLLED SECTIONS, POLES, PLATES, ETC., OTHER THAN TELEGRAPH POLES—Contd.**

**Self Contained Load**



**3 Wagon Set**



Loads requiring three wagons must be chained to the bolsters of first and third wagons and stanchions used. The load to be also chained free of wagons about the centre and the stanchions of centre bolster to be left in *outer* position. The clearance between the load and stanchions on centre wagons must not be less than 6 ins. at each side.

In the case of poles and tapering timber, the butt-end wagon to be loaded to the full width of the bolster, stanchions to be used on butt-end and second wagons and load chained to these wagons. The stanchions must be removed from the third wagon and load chained free of wagon.

**Total weight of load not to exceed carrying capacity of two wagons.**

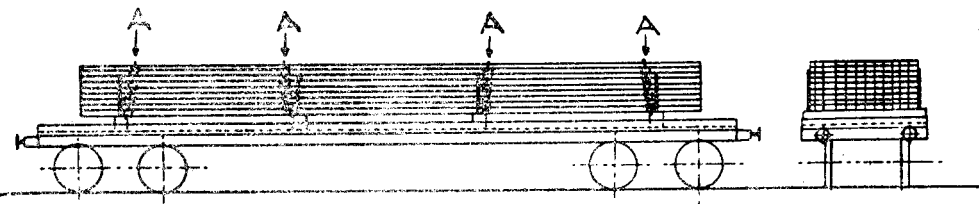
A. Load chained to bolsters, stanchions in position, shackles *inside* stanchions.

In the case of a self-contained load, shackles *outside* stanchions, when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.

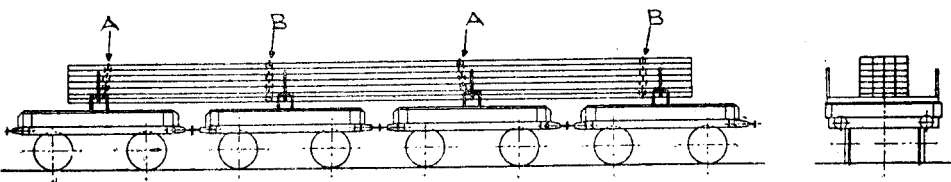
B. Load chained free of wagon.

**METHODS OF CARRYING FLEXIBLE LOADS, SUCH AS RAILS, ROLLED SECTIONS, POLES, PLATES, ETC., OTHER THAN TELEGRAPH POLES—Contd.**

**Self Contained Load**



**4 Wagon Set**



Loads requiring four wagons must be carried on all bolsters and chained to the bolsters of first and third wagons. The load must also be chained, free of wagons, near centre of second and fourth wagons and the stanchions left in *outer* position on all wagons. The load to be centrally placed and the clearance between the load and the stanchions must not be less than 1 ft. 8 ins. at each side.

In the case of wagons 13 ft. over headstocks, the clearance between load and stanchions may be 1 ft. 5½ ins. at each side.

**Total weight of load not to exceed two-thirds of the carrying capacity of the four wagons.**

A. Load chained to bolsters, stanchions in position, shackles *inside* stanchions.

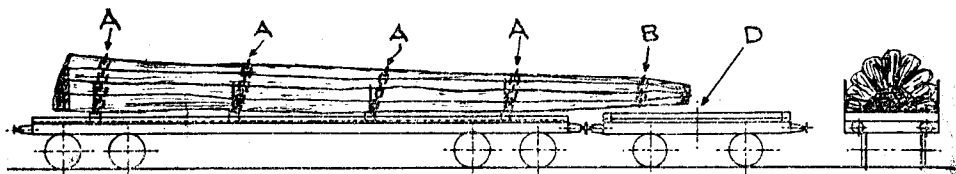
In the case of a self-contained load, shackles *outside* stanchions, when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.

B. Load chained free of wagon.

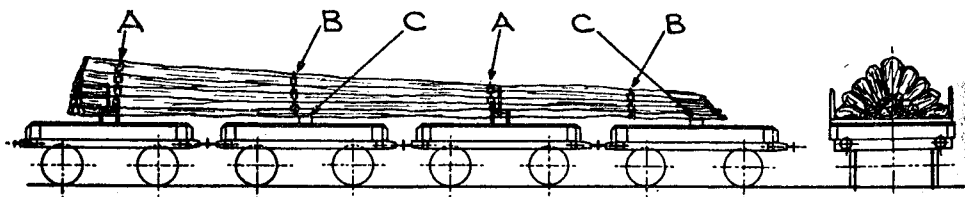
**Note.**—Attention is specially drawn to General Instruction No. 6

**METHODS OF CARRYING FLEXIBLE LOADS, SUCH AS RAILS, ROLLED SECTIONS, POLES, PLATES, ETC., OTHER THAN TELEGRAPH POLES—Contd.**

**Self Contained Load**



**4 Wagon Set**



Poles and tapering timber may be loaded to the full width of bolster on the butt-end wagon, but the width should not exceed 4 ft. 6 ins. on fourth wagon. Stanchions to be removed from second and fourth wagons and load chained free of wagons.

**Total weight of load not to exceed two-thirds of the carrying capacity of the four wagons.**

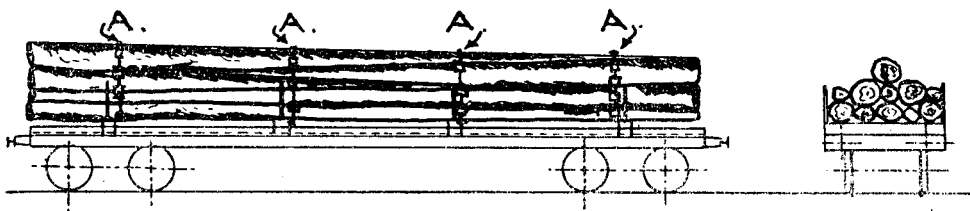
- A. Load chained to bolsters, stanchions in position, shackles *outside* stanchions when, owing to load extending to the full width of the bolsters, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- C. Bolsters to be retained.
- D. Bolster to be removed.

**Note.**—Attention is specially drawn to General Instruction No. 6

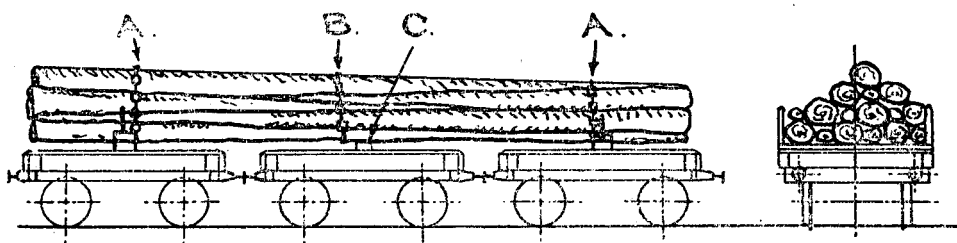
## METHODS OF CARRYING TELEGRAPH POLES

(Tip to Butt Loading)

### Self Contained Load



### 3 Wagon Set



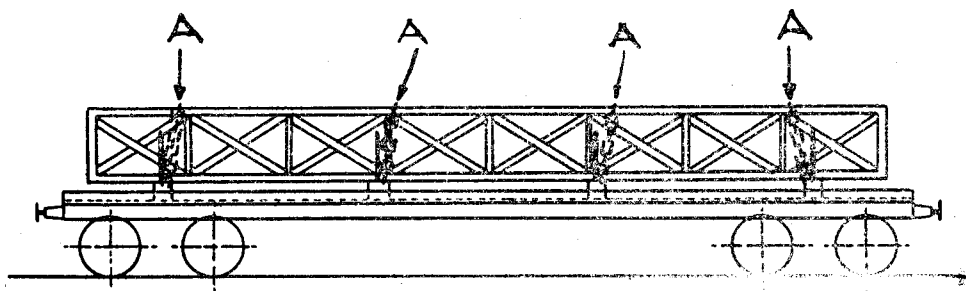
May be loaded to full width of bolster. Stanchions to be removed from centre wagon and load chained free of wagon.

**Total weight of load not to exceed capacity of two wagons.**

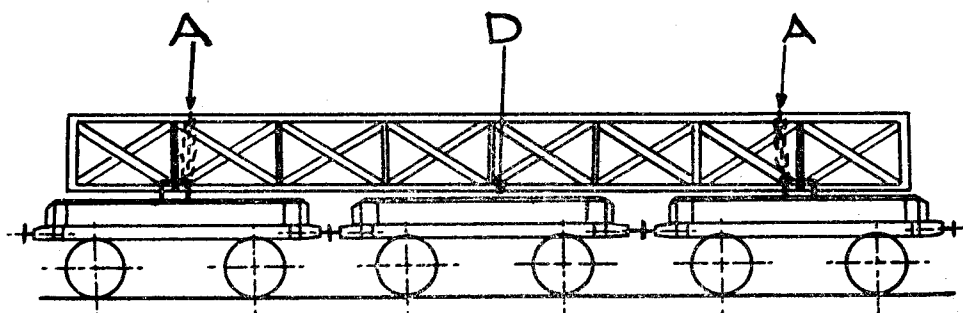
- A. Load chained to bolsters, stanchions in position, shackles *outside* stanchions when, owing to load extending to full width of bolsters, they (the shackles) cannot conveniently be placed *inside* the stanchions.
- B. Load chained free of wagon.
- C. Bolster to be retained.

## METHODS OF CARRYING RIGID LOADS, SUCH AS GIRDERS LARGE SQUARED TIMBER, ETC.

Self Contained Load



3 Wagon Set



Loads requiring three wagons must be chained to the bolsters of first and third wagons and stanchions used. The bolster on centre wagon to be removed. The load to be centrally placed and the weight on either wagon not to exceed its registered carrying capacity.

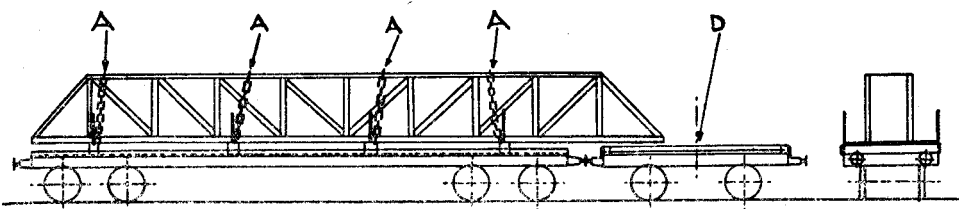
A. Load chained to bolsters, stanchions in position, shackles *inside* stanchions.

In the case of a self-contained load, shackles *outside* stanchions, when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.

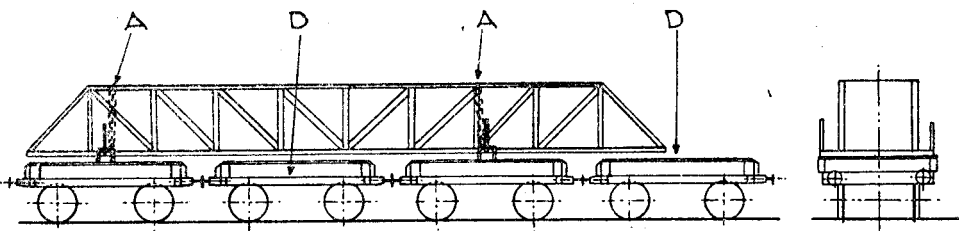
D. Bolsters to be removed.

# METHODS OF CARRYING RIGID LOADS, SUCH AS GIRDERS, LARGE SQUARED TIMBER, ETC.—Cont.

## Self Contained Load



## 4 Wagon Set



Loads requiring four wagons must be chained to the bolsters of first and third wagons and stanchions used. The bolsters of second and fourth wagons to be removed. The load to be centrally placed, the width at the overhang ends not to exceed 5 ft. at a maximum overhang of 24 ft. Neither of the two carrying wagons to be loaded beyond its registered carrying capacity.

In the case of wagons 13 ft. over headstocks the overhang must not exceed 21 ft., but the width of the overhang may be increased to 5 ft. 10 ins.

- A. Load chained to bolsters, stanchions in position, shackles *inside* stanchions.

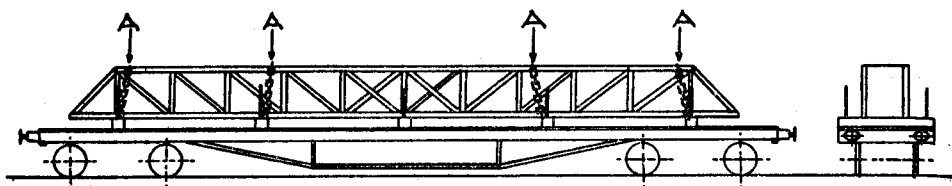
In the case of a self-contained load, shackles *outside* stanchions, when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.

- D. Bolsters to be removed.

**Note.**—Attention is specially drawn to General Instruction No. 6

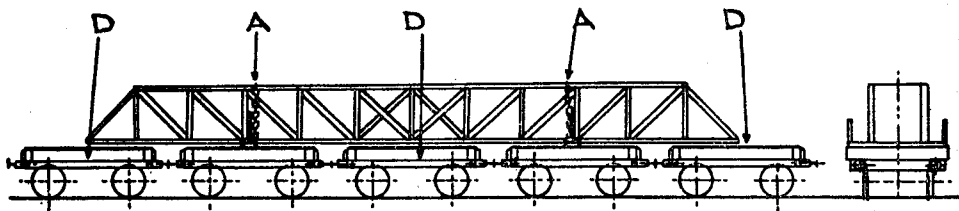
# METHODS OF CARRYING RIGID LOADS, SUCH AS GIRDERS, LARGE SQUARED TIMBER, ETC.—Cont.

## Self Contained Load



Note.—If the length of load is such that there will be an equal overhang over the headstocks of the wagon, an empty runner wagon should be provided at both ends, but in such cases the width of the load will have to be reduced accordingly—See Table in Appendix “B” hereto.

## 5 Wagon Set



Loads requiring five wagons must be chained to the bolsters of second and fourth wagons and stanchions used. Where bolster wagons are used as under runners, the bolsters to be removed from the first, third and fifth wagons. The load to be centrally placed and the width at the overhang ends not to exceed 5 ft. at a maximum overhang of 24 ft. Neither of the two carrying wagons to be loaded beyond its registered carrying capacity.

In the case of wagons 13 ft. over headstocks, the overhang must not exceed 21 ft. at a width of 5 ft. 10 ins.

A. Load chained to bolsters, stanchions in position, shackles *inside* stanchions.

In the case of a self-contained load, shackles *outside* stanchions, when, owing to load extending to the full width of the bolster, they (the shackles) cannot conveniently be placed *inside* the stanchions.

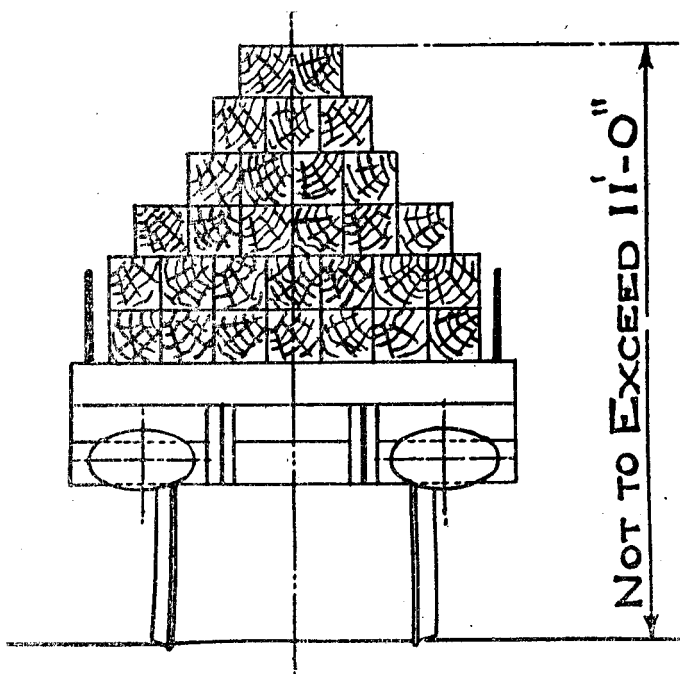
D. Bolsters to be removed.

Note.—Attention is specially drawn to General Instruction No. 6



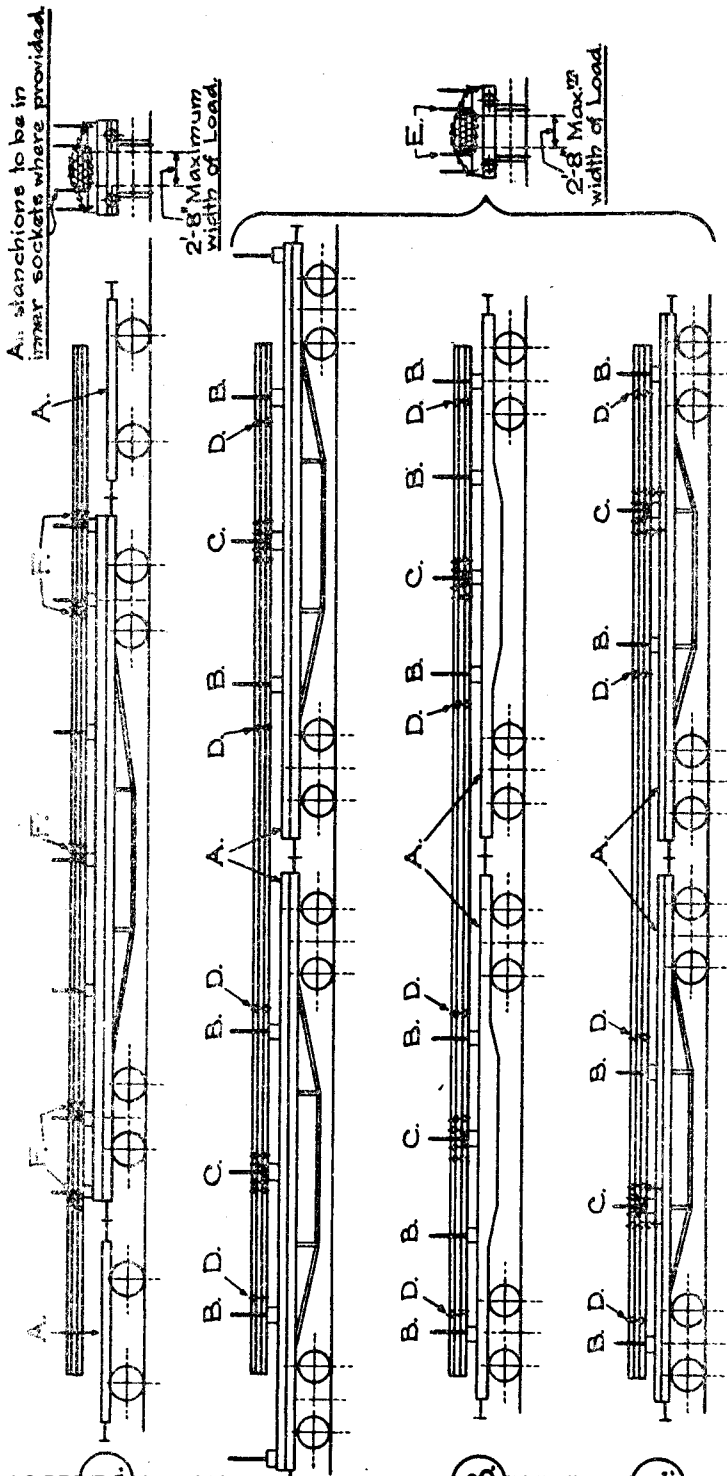
## METHOD OF LOADING BULK TIMBER ON BOGIE BOLSTER WAGONS

(i.e., Timber with Cross Section Dimensions of 12 Ins. and over)



Loads may extend to full width of bolsters between stanchions within length of wagon body. Base of top full width tier to be below top of stanchions. When above stanchions, timber to be recessed, pyramid fashion, to a height not exceeding 11 ft. from rail and securely chained. Loads to be built up, as far as possible, with the largest baulks at the base.

# METHODS OF LOADING AND SECURING 90 FT. RAILS



- A. Bolsters removed.
- B. Bolsters placed and greased.
- C. Securing bolsters with timber packing  $\frac{1}{2}$  in. in excess of thickness of plates on bolsters B and load to be double-chained.
- D. Load chained free of wagon.
- E. Stanchions in inner sockets (where provided) of securing bolsters C.
- F. Load chained to bolsters.

\* Note.—Ex L. & N.E. Co's. 40-ton (old type) quintuple bolster wagons with five fixed bolsters (bolsters not removable) may be used.

## **LOADING AND SECURING RAILS 90 FT. IN LENGTH.**

The following instructions must be observed in connection with the loading and securing of rails 90 ft. in length.

### **Types of Wagons.**

When rails 90 ft. in length cannot be loaded to make a self-contained unit (No. 1 on diagram) they must be loaded with two similar bogie bolster wagons (Nos. 2, 3 or 4 on diagram). The wagons must not be less than 45 ft. nor exceed 52 ft. in length over headstocks, and must have fixed bolsters of equal height from rail level.

### **Weight of Loads.**

The maximum weight must not exceed half the combined carrying capacity of the two wagons, and in no case exceed 30 tons.

The weight must be evenly distributed over the two wagons, and as far as practicable, the load must be equal ended and central.

### **Securing of Loads.**

The securing must be at the centre bolster of each wagon, where centre bolsters are provided (C, Nos. 2 and 3 on diagram), or, in the case of four-bolster type wagons, at the second bolster from the ends of the load (C, No. 4 on diagram).

Suitable steel plates (skids), well greased, must be fixed on bolsters other than securing bolsters (B, Nos. 2, 3 and 4 on diagram).

Packing on securing bolsters (C, Nos. 2, 3 and 4 on diagram) must be of timber approximately  $\frac{1}{2}$  in. thicker than the steel plates on other bolsters.

Stanchions must be placed in the inner sockets (where provided) of securing bolsters (E, Nos. 2, 3 and 4 on diagram).

Two chains must be used at each securing bolster (C, Nos. 2, 3 and 4 on diagram).

One chain must commence at one end of the bolster and the other chain at the opposite end, passed round the load, one chain each side of bolster, and secured at the opposite end from which started, leaving the tightening screws on opposite sides.

To prevent spreading, such loads must in all cases be chained at suitable points (D, Nos. 2, 3 and 4 on diagram), and the chains used for this purpose must be "free," i.e., must not be attached to the vehicle or its fittings in any way.

### **Width of Loads.**

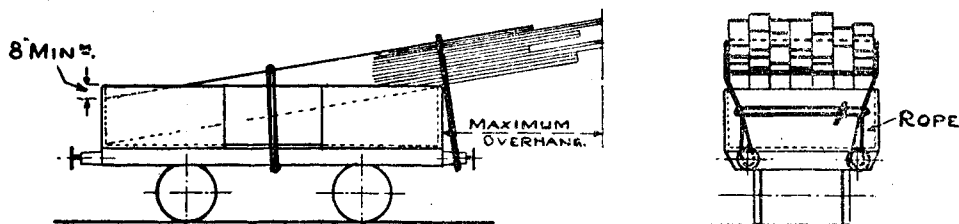
The width of each load must not exceed 2 ft. 8 ins.

### **Coupling.**

Each set must be coupled so as to limit the maximum possible movement between the two wagons to 1 ft. 4 ins.

DIAGRAM No. 15

**MAXIMUM LOADS AND OVERHANGS OF TIMBER, PIPES, ANGLES, BARS, ETC., WHICH MAY BE LOADED IN ORDINARY 8, 10, 12 AND 13 TON WAGONS, TO FULL WIDTH OF WAGON**



**TABLES FOR LOADS OVERHANGING ONE END.**

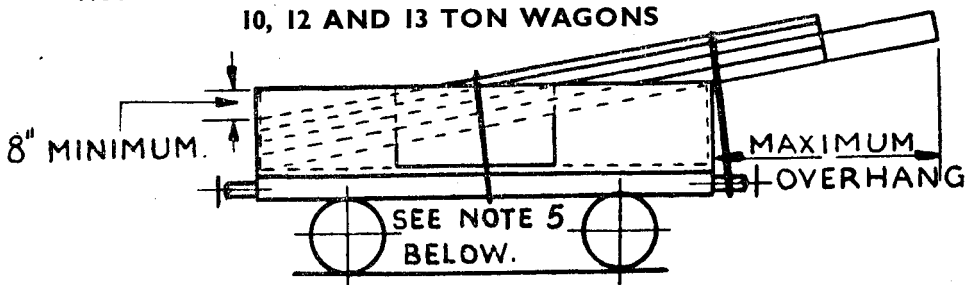
Max. Overhangs with Equal Lengths (Solid Load)	Maximum Load In Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
1 ft.	5	5	6	6	6	6
2 ft.	4	4	5	5	6	6
3 ft.	4	3	5	4	6	5
4 ft.	3	2½	5	3	6	4
5 ft.	2	2	4	2½	5	3
6 ft.	2	1½	3	2	4	2½

Max. Overhangs with Unequal Lengths (Not Exceeding 50% of Load to be Solid)	Maximum Load In Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
6 ft. and under	4	3	5	4	6	5
7 ft.	3	2½	5	3½	6	4½
8 ft.	3	2½	4	3	6	4

- Notes.—1. Length of load must in no case exceed length of wagon body by more than 8 ft. (See Note 3 for End Door Wagons).  
 2. Any load exceeding 25 ft. 6 ins. in length must be loaded flat on other suitable stock other than ordinary wagons.  
 3. End-door wagons may be used providing the doors are properly secured. The overhanging portion must rest on the door hinge bar and not exceed 2 ft. nor the maximum load 2 tons.  
 4. Overhang to be at trailing end where possible.  
 5. A rope must be used to secure the overhanging part of the load, as indicated, and an additional rope used at the centre of the wagon when the load is above the rave of the wagon at this point, also indicated above.  
 In the case of sawn timber the bracing rope or ropes across the end of the wagon may be dispensed with provided the rope or ropes are adequately secured by side bracing. In these circumstances the rope or ropes need only be passed once round the load.  
 6. Loads not to overhang wagon by less than 9 ins.  
 7. Loads must be laid longitudinally and not diagonally across the wagon.  
 8. Drop-side wagons must not be used where there is an overhang.

DIAGRAM No. 16

**MAXIMUM LOADS AND OVERHANGS OF TIMBER, PIPES, ANGLES, BARS, ETC., NOT LOADED TO FULL WIDTH OF WAGON WHICH MAY BE CONVEYED IN ORDINARY 8, 10, 12 AND 13 TON WAGONS**



**TABLES FOR LOADS OVERHANGING ONE END**

Max. Overhangs with Equal Lengths (Solid Load)	Maximum Load in Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
1 ft.	5	5	6	6	6	6
2 ft.	4	4	5	5	6	6
3 ft.	4	3	5	4	6	5
4 ft.	3	2½	5	3	6	4
5 ft.	2	2	4	2½	5	3
6 ft.	2	1½	3	2	4	2½

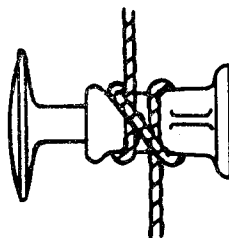
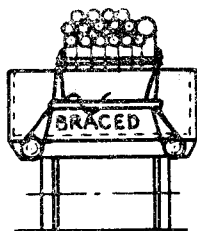
Max. Overhangs with Unequal Lengths (Not Exceeding 50% of Load to be Solid)	Maximum Load in Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
6 ft. and under	4	3	5	4	6	5
7 ft.	3	2½	5	3½	6	4½
8 ft.	3	2½	4	3	6	4

- Notes.—1. Length of load must in no case exceed length of wagon body by more than 8 ft. (See Note 3 for End Door Wagons).  
 2. Any load exceeding 25 ft. 6 ins. in length must be loaded flat on suitable stock other than ordinary wagons.  
 3. End-door wagons may be used providing the end doors are properly secured. The overhanging portion must rest on the door hinge bar and not exceed 2 ft. nor the maximum load 2 tons.  
 4. Overhang to be at trailing end where possible.  
 5. Rope or ropes must be used to secure the overhanging end of the load as indicated on Diagram 16A, and the additional rope shown at the centre of the wagon is to be used when the load is above the rave of wagon at this point.  
 6. Loads not to overhang less than 9 ins.  
 7. Loads must be laid longitudinally and centrally and not diagonally across the wagon  
 8. Drop-side wagon must not be used where there is an overhang.

DIAGRAM No. 16A

**MAXIMUM LOADS AND OVERHANGS OF TIMBER, PIPES, ANGLES, BARS, ETC., NOT LOADED TO FULL WIDTH OF WAGON WHICH MAY BE CONVEYED IN ORDINARY 8, 10, 12 AND 13 TON WAGONS—Cont.**

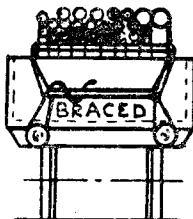
**METHODS OF SECURING OVERHANG.**



CLOVE HITCH

**When one rope will suffice.**

Rope to be first secured to buffer casting, then passed over and round overhang tightly, at least 3 times and secured to opposite buffer by clove hitch or other suitable knot which will hold rope in position. Then back over and round overhang tightly, at least 3 times, and secured to first buffer casting by clove hitch or other suitable knot which will hold the rope in position. Finally, taken up midway between buffer casting and overhang and braced across to opposite side.



**When one rope will not suffice, use two ropes as under.**

Rope to be first secured to buffer casting, passed over and round overhang tightly, at least three times, and secured to opposite buffer casting by clove hitch or other suitable knot which will hold the rope in position. Then taken up midway between overhang and buffer and braced across to opposite side.

Second rope to be applied in a similar manner but starting from the opposite buffer casting.

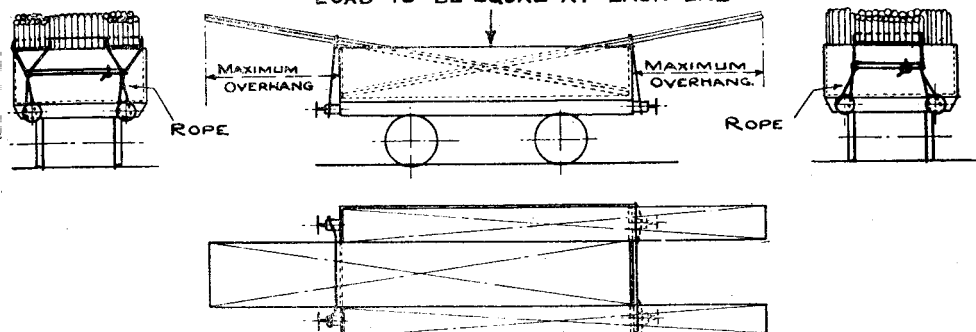
**Note.**—In no case may the rope ends be tucked under the round turns under the overhang and tied down as this reduces the grip of the rope on the overhang.

The object of this instruction is to provide security for the load in the event of a part of a rope failing due to chafage, etc.

DIAGRAM No. 17

# **MAXIMUM LOADS AND OVERHANGS OF TIMBER, PIPES, ANGLES, BARS, ETC., OVERHANGING BOTH ENDS OF WAGON—8, 10, 12 AND 13 TON WAGONS**

LOAD TO BE EQUAL AT EACH END.



**TABLES FOR LOADS OVERHANGING BOTH ENDS.**

Max. Overhangs with Equal Lengths (Solid Load)	Maximum Load in Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
1 ft.	5	4	8	7	10	8
2 ft.	5	4	7	6	9	8
3 ft.	5	4	6½	5½	8	7
4 ft.	4	3	6	5	7½	6½
5 ft.	3	2	5	4	7	6
6 ft.	3	2	4	3	6	5

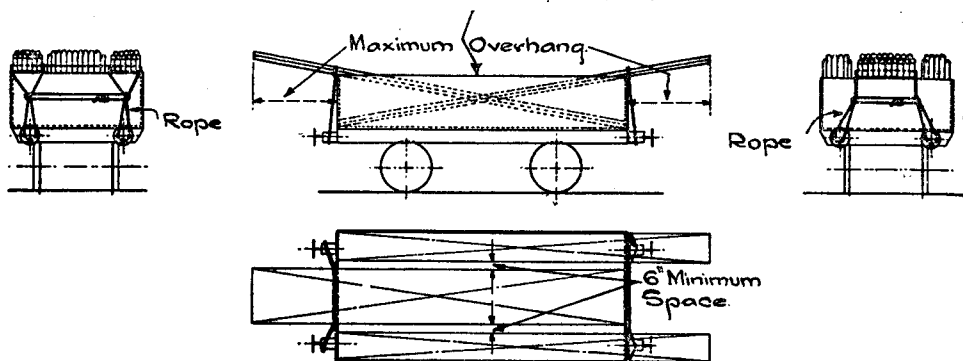
Max. Overhangs with Unequal Lengths (Not Exceeding 50% of Load to be Solid)	Maximum Load in Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
6 ft. and under	5	4	6½	5½	8	7
7 ft.	4½	3½	6½	5½	8	7
8 ft.	4	3	6	5	7½	6½

- Notes.**—1. Length of load must in no case exceed wagon body by more than 8 ft. (See Note 3 for End Door Wagons.  
2. Any load exceeding 25 ft. 6 ins. in length must be loaded flat on other suitable stock other than ordinary wagons.  
3. End Door wagons must not be used for loads overhanging at both ends.  
4. Rope must be used to secure the load on the principle indicated on diagram 16A.  
5. Loads not to overhang wagon by less than 9 ins.  
6. Loads must be laid longitudinally and not diagonally across the wagon.  
7. Drop-side wagons must not be used where there is an overhang.

DIAGRAM No. 18

**MAXIMUM LOADS AND OVERHANGS (FOR "DOVETAIL" MARSHALLING) OF ANGLES, BARS, BILLETS, PIPES, ETC., OVERHANGING BOTH ENDS OF WAGON—8, 10, 12 AND 13 TON WAGONS**

LOAD TO BE EQUAL AT EACH END



**TABLE FOR LOADS OVERHANGING BOTH ENDS (for "Dovetail" Marshalling).**

(Not less than 6 ins. space between side and centre load)

Max. Overhangs with Equal Lengths (Solid Load)	Maximum Load in Tons					
	8 ton Wagon		10 ton Wagon		12 and 13 ton Wagon	
	Steel Frame	Wood Frame	Steel Frame	Wood Frame	Steel Frame	Wood Frame
1 ft.	5	4	8	7	10	8
2 ft.	5	4	7	6	9	8
3 ft.	5	4	6½	5½	8	7
4 ft.	4	3	6	5	7½	6½
5 ft.	3	2	5	4	7	6

Notes.—1. Length of load must in no case exceed length of wagon body by more than 5 ft. at either end.

2. End door wagons must not be used for overhanging loads.

3. Rope must be used to secure the load on the principle indicated on diagram 16A.

4. Load (weight) to be equal at both ends of the wagon.

5. Drop-side wagons must not be used where there is an overhang.



# APPENDIX "A"

## INSTRUCTIONS IN REGARD TO THE ACCEPTANCE AND CONVEYANCE OF OUT-OF-GAUGE AND OTHERWISE EXCEPTIONAL LOADS

*Note.*—For instructions relating to the "Acceptance and Conveyance of Privately-owned Locomotives and Travelling Cranes running on their own wheels," see General Appendix or separate publication.

### EASTERN REGION

#### A. Consignments originating and terminating within the Eastern Region.

1. Goods Agent or Station Master to advise the District Commercial Officer, nature and dimensions of the traffic—who in turn will submit the details to the Commercial Manager, Liverpool Street.

*Note.*—In cases of extreme urgency, Goods Agent or Station Master to report direct to the Commercial Manager, Liverpool Street.

The Commercial Manager, if necessary, will decide whether his Inspector will inspect and supervise subsequent loading. Any rates aspect (See also Clause 6) to be advised to Commercial Manager's Rates and Charges Section by the District Commercial Manager.

2. Commercial Manager, when necessary, will ask Chief Civil Engineer for conditions of travel.
3. Prior to or upon receipt of conditions of travel from Chief Civil Engineer, Commercial Manager will advise the District Commercial Officer, authorising loading and confirming type of wagon to be requisitioned by the Goods Agent or Station Master.
4. Commercial Manager will advise, as necessary, Operating Superintendent nature and dimensions of the traffic and conditions of travel; the Operating Superintendent then advises District Operating Superintendents involved.
5. Commercial Manager and Operating Superintendent jointly to agree if an Inspector should accompany the load, and, where necessary, the Operating Superintendent will issue Train Notice, sending copy to the Commercial Manager. Operating Superintendent will keep District Operating Superintendents fully advised, and inform the Commercial Manager of the full arrangements made with request for provision of an Inspector to accompany the load when necessary.
6. Commercial Manager's Out-of-Gauge Section to advise Rates and Charges Section where any special arrangements are made (see also Clause 1) and latter will advise the District Commercial Officer of any additional charges to be raised and he in turn will inform the Goods Agent or Station Master.
7. District Operating Superintendent will advise the District Commercial Officer and/or Goods Agent or Station Master forward service to be used.
8. The Goods Agent or Station Master to advise both the District Commercial

and Operating Officers when the consignment is ready and passed as fit to travel by an out-of-gauge Inspector or other responsible person—consignments must not be moved before this assent has been given.

9. District Operating Superintendent will move the traffic, advising all concerned, and District Controls will ensure that all stations have received the advice of the passage of the out-of-gauge loads.

**B. Consignments originating in the Eastern Region and passing to another Region.**

The procedure under "A" generally will apply : EXCEPTIONS :—

- (a) Commercial Manager will advise and ascertain from the appropriate Officer of the other Region concerned if the load can be accepted.
- (b) Upon receipt of acceptance and conditions of travel by the other Region, Commercial Manager will advise E.R. Operating Superintendent, who will inform the District Operating Superintendent concerned.

E.R. Operating Superintendent will then arrange service himself, or through his District Operating Superintendent, with the next intermediate or terminating Region, advising Commercial Manager the arrangements made. Commercial Manager to advise the appropriate Commercial Officer of the next Region concerned.

**C. Consignments originating in another Region and passing to the Eastern Region.**

**(A) Intermediate (B) Terminating.**

1. Chief Commercial Manager or Chief Operating Superintendent of the other Region will approach E.R. Commercial Manager's Out-of-Gauge Section, Liverpool Street, for acceptance of the load and the Commercial Manager will obtain from the Chief Civil Engineer the conditions of travel. Upon receipt of this information, the Commercial Manager will then advise the originating Region of acceptance and the E.R. Operating Superintendent, the full dimensions of the traffic and conditions of travel. The originating Region will approach all other Regions concerned direct for acceptance. The Commercial Manager's Out-of-Gauge Section will, as necessary, advise Rates and Charges Section.
2. Chief Operating Superintendent of the other Region to consult E.R. Operating Superintendent for service in all cases and when the service is arranged the Commercial Manager will be fully advised by the E.R. Operating Superintendent. Commercial Manager to advise the appropriate Commercial Officer of the next Region concerned.
3. E.R. Operating Superintendent advises District Operating Superintendent nature and dimensions of the traffic, conditions of travel and service.
4. Adjacent District Operating Superintendent of the other Region to advise forward to E.R. District Operating Superintendent passing times and E.R. District Operating Superintendent to advise the next District Operating Superintendent up to the District Officer responsible for the terminating point in the E.R.

In the case of loads passing through the E.R. the Operating Superintendent will advise the service to the Chief Operating Superintendent of the receiving Region.

## LONDON MIDLAND REGION

1. In no circumstances must any article be accepted which, when properly loaded and secured, will exceed the maximum dimensions of a carriage or wagon load of the lines over which it has to pass as defined in the Special Instructions relating to Goods, Mineral and Live Stock Traffic (Pink Pamphlet) and the Coaching Arrangements Book, issued by the Railway Clearing House, either in respect of length, load gauge dimensions, or which produces an excessive load per axle, until it has been ascertained it will travel safely and authority has been given by the appropriate District Goods Manager for it to go forward. All railway carriages and wagons offered by manufacturers for conveyance on their own wheels and all carriages and wagons on temporary bogies or underframes must be dealt with as exceptional loads and the same procedure followed as for loaded consignments.
2. In all cases where an Agent is asked to accept such traffic for conveyance he must communicate immediately with his District Goods Manager giving the dimensions and approximate weight of the article. The greatest care must be exercised in ascertaining the exact shape and measurements, and as far as possible the actual weight. Consideration should also be given as to whether the article is required to arrive at destination with a particular end leading.
3. The District Goods Manager in whose District the traffic originates must submit full particulars to the Carriage and Wagon Engineer, Derby, in order to obtain his approval of or his direction as to the choice of vehicles, method of loading, securing, conveyance, special marshalling and speed restrictions where required, etc. This procedure must also be followed in respect of applications from other Regions.
4. The District Goods Manager originating the enquiries must also obtain the assent of the Chief Civil Engineer as well as that of other Regions who may be concerned in the transit.
5. When submitting these matters the normal route to be travelled throughout the journey must be clearly stated. If for any reason the normal route is not available, alternative routes must be considered, and in no case must traffic be declined without reference to the Chief Commercial Manager, Euston.
6. The replies received from the Chief Civil Engineer will include the conditions affecting the Signal and Telecommunications Engineer's Department, such as the removal and refixing of ground signals, etc.
7. In all cases where the assent to passage of exceptional loads has been held more than three months the District Goods Manager must re-submit to the Chief Civil Engineer and any other Region concerned for confirmation of the certificate previously obtained before the traffic is despatched.
8. A copy of the District Goods Manager's submitting communication to the Chief Civil Engineer must be sent to all the Divisional Operating Superintendents concerned. These preliminary advices must be followed as early as possible by the conditions of working, restrictions, etc., laid down by the Technical Departments and/or other Regions, with a request that a working be arranged complying with these conditions. An indication should be given when the load is likely to be despatched.
9. In addition to the foregoing procedure, full particulars must be submitted by the District Goods Manager to the Chief Commercial Manager, Euston, in the following cases :—
  - (a) Where the dimensions of the load necessitate the blocking of the adjoining line or lines for the whole or a portion of the journey.
  - (b) Where railway carriages and wagons are offered for conveyance on their

own wheels or on temporary bogies, Irrespective of dimensions (see clause 1).

(c) Where the following types of vehicles are selected for use :—

Type	British Railways or Regional Diagram Book. Page No.	Telegraph Message Code
50-ton Twin Girder Set	... M. 137	Girdwag MA
60-ton Side Girder Trolley	... M. 135.A.	Transformer MA
65-ton Bogie Well Trolley	... M. 135.B.	Weltrol MS
65-ton Bogie Flat Trolley	... M. 135.C.	Flatrol MRR
70-ton Twin Girder Set	... M. 137.A.	Girdwag MB
70-ton Side Girder Trolley	... E. 118	Transformer EA
80-ton Bogie Well Trolley	... M. 136	Weltrol MU
110-ton Bogie Well Trolley	... E. 140	Weltrol EN
120-ton Side Girder Trolley	... M. 136.A.	Transformer MB
120-ton Side Girder Trolley	... W. 8	Transformer WL
120-ton Bogie Well Trolley	... W. 8	Weltrol WL
120-ton Bogie Flat Trolley	... B. 519	Flatrol EAA
135-ton Side Girder Trolley	... B. 470	Transformer MC
Twin Girder Set	... W. 2	Girdwag WB,
(When used with bogies	... W. 3	WC, WE, WF,
extended under load)	... W. 4	WG.
Heavy Gunsets	... M. 139	Gunset MB
	... M. 140	Gunset MC
	... E. 118	Gunset EA

and the loads must not be accepted without the authority of the Chief Commercial Manager, Euston.

10. Whenever it is necessary to despatch from or effect delivery of an exceptional load at a private siding, the District Goods Manager in whose area the siding is situated must :—

- Satisfy himself that there is ample clearance from structures in the siding.
- Obtain an assurance from the firms concerned that their siding is in a safe condition to permit of the passage of the load from or to the point of loading or unloading.
- Consider any other feature involved in the layout (radius of curves, gradients, etc.) of the siding.
- Consult the appropriate officer where doubt arises on any of these points before movement of the load takes place.

The District Goods Manager who makes these enquiries must see that suitable instructions are issued for the guidance of the men who will eventually have charge of the load and who will be held responsible for its safety.

11. When the traffic arises on another Region the application must be dealt with similarly by the District Goods Manager in whose district it is proposed to effect transfer to the L.M. Region. The District Goods Manager concerned must also satisfy himself that the necessary arrangements have been made by the sending Region with the Region beyond the L.M. line, if passing beyond, and must advise the Divisional Operating Superintendent that the assent of the accepting Region has been obtained.

12. The District Goods Manager concerned must take steps to ensure that all loads of exceptional dimensions or weight, or which present any unusual features, originating on the L.M. Region, are examined by an experienced person before despatch and passed as safe to travel before they are allowed to go forward. The appropriate Special "Examine Load" label must be used. In the case of

carriages or wagons on their own wheels, or on temporary bogies (see clause 1) a special examination by the Carriage and Wagon Engineer's Department must also be made to ensure they are fit to travel.

13. In cases where some relaxation is required from the working conditions prescribed by the Chief Civil Engineer, owing to the necessity for working over loops, goods lines, etc., excluded by the original conditions, the Divisional Operating Superintendents at Crewe, Derby and Manchester will refer the matter direct to the Chief Civil Engineer whose authority confirmed in writing may be accepted by the Divisional Operating Superintendents concerned. Any such modified conditions must be notified by the Divisional Operating Superintendents to the District Goods Manager concerned.

14. The Divisional Operating Superintendent will issue a special notice to all concerned in connection with the transit of all loads EXCEEDING 9 ft. 6 ins. in width.

A similar notice must be issued for other exceptional loads, where considered necessary for safe working, whether or not such loads are out-of-gauge. Instructions in regard to the conveyance of all exceptional loads where a special notice is not issued, must be given by telegram.

Copies of all Special Notices to be sent also to :—

Chief Commercial Manager, Euston ;  
Chief Operating Superintendent, Euston ;  
Chief Civil Engineer, Euston ;  
Carriage and Wagon Engineer, Derby ;

and the following as affected :—

District Engineers,  
Divisional Signal and Telecommunications Engineers,  
Signal and Telecommunications Engineers' Area Assistants,  
District Goods Managers.

15. The arrangement with regard to the supervision of exceptional loads during transit to be as follows :—

- (a) Loads up to and including 9 ft. 6 ins. wide or not more than 3 ins. out-of-gauge on either side will be worked under the careful supervision of the trainmen. They will not be accompanied by an Inspector, except in particular cases such as heavy or awkward loads requiring constant supervision during transit, when the District Goods Manager at starting point or transfer point if from another Region, must provide for a Goods Inspector to accompany, who must be acquainted with the nature and dimensions of the load and any special restrictions imposed.
- (b) Loads over 9 ft. 6 ins. wide will be accompanied by a Goods Inspector, and the Divisional Operating Superintendent will not send a Traffic Inspector with such loads, except as provided for in clause (d), unless exceptional conditions of working, in his opinion, render it necessary.
- (c) All loads requiring an excess width or any overhanging portion to be kept to the 6 ft. side with stipulations to be kept clear of single line arched openings, station platform awnings, etc., must in every instance be accompanied by a Goods Inspector. Before such overhanging loads are despatched the District Goods Manager initiating the arrangements must ascertain whether or not there is any likelihood of their being turned en route, and take such action as will comply with the Engineer's conditions.
- (d) Where the dimensions of a load involve the blocking of the adjoining line throughout such loads must be accompanied by a Goods and a Traffic Inspector. Where the blocking of the adjoining line covers parts of the journey the Traffic Inspector must accompany over the sections so involved and a Goods Inspector should also accompany should the nature of the load require it.

*As an Exception to Clause (d)*

Subject to the restrictions with regard to dimensions of loads that can be allowed to pass between Saltney Junction, and Chester Station and through Chester Yard in the ordinary course of working, contained in the Special

Instructions relating to Goods, Mineral and Live Stock Traffic (Pink Pamphlet) and Coaching Arrangements Book issued by the Railway Clearing House, under the heading "Great Western and London Midland and Scottish Joint Lines," loads up to a maximum width of 4 ft. 10 ins. from the centre of the vehicle on either side can be worked over the former Joint Lines between Warrington and Chester, Chester and Birkenhead, Helsby and Hooton, Hooton and West Kirby, and Shrewsbury and Wellington, and over the former L.M. & S. Line between Saltney Junction and Chester including the former Joint Fork Lines in Chester Yard (to and from Birkenhead) without an Inspector in charge, provided the width in question occurs at a height of between 5 ft. and 9 ft. 10 ins. above rail level.

- (e) Exceptional loads not accompanied by an Inspector must be marshalled next the guard's brake van in order that they may be carefully watched by the guard, but where an Inspector accompanies, unless instructions are issued to the contrary, the load must be marshalled next but one to the engine with a brake van in front in which the Inspector or Inspectors must ride.

16. When the traffic is despatched the District Goods Manager at the forwarding point must advise all other District Goods Managers along the route, as well as at the terminal point on the L.M. Region in order that Inspector's relief may be provided as necessary, and if the traffic is to be transferred to another Region, the District Goods Manager making the arrangements must ensure that the receiving Region is given timely notice of the proposed working into their possession in accordance with the terms of acceptance, and the agreed loading.

Where loads are to pass in L.M. Region trains over a section of line maintained or controlled by another Region the originating District Goods Manager must advise such other Region of the despatch of the consignment.

17. The following instructions must be observed in regard to loads producing an excessive weight per axle :—

The Chief Civil Engineer must be consulted—

- (a) In all cases where the axle spacing is less than 4 ft. 6 ins.  
(b) When the axle weights exceed the following limits—

Other than excepted lines				Excepted lines (see following list)	
Trolleys with 2 axles	...	...	...	17½ tons	13 tons
Trolleys with 3 axles	...	...	...	12½ "	10 "
* Trolleys with 4 axles (2 axled bogie vehicles)					
Axle spacings 4 ft. 6 ins. to 7 ft. inclusive				14 "	10 "
Axle spacings exceeding 7 ft.	...			16½ "	12½ "
* Note.—When travelling in series an Empty Runner Wagon must be placed between each load where the maximum axle weight exceeds 11 tons (excepted lines—9 tons)					
Trolleys with 6 axles (3 axled bogie vehicles)					
Axle spacings 4 ft. 6 ins. to 5 ft. 6 ins. inclusive	...	...	...	11 tons	9 tons
Axle spacings 5 ft. 9 ins. to 7 ft.	...			13 "	10½ "

**Cases coming within the following categories must also be submitted to the Chief Civil Engineer.**

Loads on gun trucks or on other vehicles having more than 6 axles. Where it is desirable to take heavy loads into sidings where there are bridges, coal drops or tips over which engines or wagons in general are prohibited or to turntables for the purpose of turning loads.

Note.—In calculating the gross axle load care must be taken to include an allowance for packing or extra fittings as well as the tare of the vehicle and the weight of the load.

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**17. List of Excepted Lines.**

Maryport Docks Branches.  
Derwent Junction to Keswick.  
North Lonsdale to Plumpton Junction.  
Barrow (Loco Junc.)—Ramsden Dock South Side—Cavendish Dock Sluice.  
Horrocksford Branch (Clitheroe).  
Middleton Station—Middleton Junction East (Lancs.).  
Liverpool Great Howard Street, Timber Incline.  
Liverpool (North Docks Branch) Gulf Colonnade and Regent Road Lift Bridge.  
Birkenhead Bridge No. 2 leading to Abbey Street Coal Yard.  
Birkenhead Sidings Portion of Bridge No. 59 at Town Station leading to Monks Ferry and Coal Yard.  
Helsby (West Cheshire Junc.) Siding Bridge No. 195.  
Buckley Junction to Connahs Quay Docks.  
Hawarden Bridge Junction to Connahs Quay Docks.  
Connahs Quay South Junction to Connahs Quay West Junction.  
Blaenau Festiniog Siding Bridge No. 68.  
Newfield Colliery Branch (Tunstall).  
Longton—Sidings Portion of Bridges Nos. 12 and 13.  
Burton-on-Trent Bridge No. 2 leading to Messrs. Marstons Brewery.  
Brampton Branch (Chesterfield).  
Mansfield Woodhouse Sidings Portion of Bridges Nos. 41 and 42.  
Denby Sidings Portion of Bridges Nos. 15 and 15A.  
Beggartree Branch (Langley Mill).  
Blackwell Branch (Alfreton).  
Radford to Bulwell. All Siding Bridges between Stations.  
Cinderhill Branch (Nottingham).  
Leicester—Humberstone Road Siding Portion of Bridge No. 13.  
West Bridge Branch (Leicester)  
Hampton—Whitacre Junction.  
Ravenstone Wood Junction—Hardingstone Junction.  
Wolverton Carriage Works Yard. Bridges Nos. 171C and 171E.  
Camden. Messrs. Gilbeys Siding. Bridges Nos. 9A, 9B and 9C.  
St. Pancras Goods Depot Siding Bridge No. 10.  
Haydon Square Depot.  
Poplar (High Street Bridge) to Poplar Docks.  
Bow Sidings Portion of Bridge No. 249 leading to Gas Works.

## **NORTH EASTERN REGION**

### **Consignments originating and terminating within the North Eastern Region.**

1. Goods Agents or Station Masters receiving enquiries for the conveyance of out-of-gauge or otherwise exceptional loads should obtain full details and dimensions of the traffic and pass these forward to the District Commercial Manager with (in appropriate cases) recommendations as to the method of loading and type of wagon required. When necessary the District Commercial Manager will arrange for his Loading Inspector to decide or give advice as to the method of loading and type of wagon which should be used. When the type of wagon and method of loading have been decided the District Commercial Manager should submit the information with loaded dimensions of the traffic to the Chief Commercial Manager, York.

In cases where a satisfactory method of loading cannot be decided locally the District Commercial Manager should submit full dimensional details of the traffic with drawings to the Chief Commercial Manager who will ask the Carriage and Wagon Engineer to indicate how best the traffic can be loaded.

2. The Chief Commercial Manager will when necessary ask the Chief Civil Engineer for conditions under which the traffic may be conveyed, giving the following data :—
  - (a) Dimensions of load as placed and secured on the vehicle on which it will be conveyed together with particulars of the vehicle including the number of the page on which it appears in the appropriate reference book of Freight Rolling Stock.
  - (b) Location of Terminal points between which the load is to be conveyed and the route to be followed between these points.
  - (c) The actual weight of the load to be conveyed, or failing that, the approximate weight or anticipated axle loads, the last named of which must be obtained from the Carriage and Wagon Engineer's Department.
3. When conditions of travel have been decided the Chief Commercial Manager will advise the District Commercial Manager authorising him to proceed with the agreed loading.
4. The Chief Commercial Manager will advise the Chief Operating Superintendent details of the traffic and conditions of travel. The Chief Operating Superintendent will then advise all District Operating Superintendents concerned and the Chief Outdoor Carriage and Wagon Engineer, and arrange for the issue of the necessary working instructions.
5. The District Operating Superintendent will advise the District Commercial Manager and/or Goods Agent or Station Master of the services by which the traffic will be conveyed and advise all other staff concerned of restrictions and conditions of working which have been imposed.
6. A competent District Inspector will be provided when necessary to accompany out-of-gauge and otherwise exceptional loads whether conveyed by ordinary service or special trains.

When special working is required the Chief Commercial Manager will arrange for the appropriate additional charges to be raised.
7. The Goods Agent or Station Master will advise the District Commercial and District Operating Officers when the consignment is ready and passed as fit to travel by a responsible local official or an out-of-gauge Load Inspector.



### **Consignments originating in the North Eastern Region and passing to another Region.**

The procedure in regard to the submission of details of out-of-gauge and otherwise exceptional loads set out above will apply with the following additions :—

1. The Chief Commercial Manager will advise and ascertain from the appropriate Officer of other Regions concerned whether the traffic can be accepted and under what conditions it may travel.
2. Upon receipt of acceptance from other Regions the Chief Commercial Manager will advise the North Eastern Region Chief Operating Superintendent and the latter will, in conjunction with the other Operating Officers concerned, determine the service by which the traffic will be conveyed to the point of exchange, and advise the Chief Commercial Manager and the Chief Outdoor Carriage and Wagon Engineer and District Operating Superintendents accordingly. The Chief Commercial Manager will then advise the proposed working arrangements to the Commercial Officer of the Region to which the traffic is to be exchanged.

### **Consignments originating in another Region and passing to or through the North Eastern Region.**

1. The Chief Commercial Manager or Chief Operating Superintendent of the originating Region will approach the North Eastern Region Chief Commercial Manager for acceptance of the load and the Chief Commercial Manager will obtain from the Chief Civil Engineer, York, the conditions of travel. On receipt of this information the Chief Commercial Manager will advise the originating Region of acceptance and give full details to the Chief Operating Superintendent of the North Eastern Region in order that he can make the necessary arrangements for transit. The originating Region will approach direct all other Regions who may be concerned with the passage of the particular load for conditions of acceptance.
2. The Chief Operating Superintendent of the adjoining Region will advise the North Eastern Region Chief Operating Superintendent of the proposed service and when the forward service is arranged the Chief Operating Superintendent will advise the Chief Commercial Manager. The Chief Commercial Manager will then advise the appropriate Commercial Officer of the next Region concerned.

If special working is involved the Chief Commercial Manager will arrange for the appropriate special working charges to be raised.

3. The North Eastern Region Chief Operating Superintendent will advise the District Operating Superintendents and the Chief Outdoor Carriage and Wagon Engineer of the nature and dimensions of the traffic, conditions of travel and services by which the traffic should be conveyed.

The Chief Operating Superintendent will arrange for the issue of any special working advices in compliance with the conditions of travel which have been laid down by the Chief Civil Engineer.

4. The District Operating Superintendent of the adjacent Region will advise forward to the North Eastern Region District Operating Superintendent the time the traffic may be expected and corresponding information will be passed forward from District to District throughout the journey in the North Eastern Region.

In the case of loads passing through the North Eastern Region to another Region the Chief Operating Superintendent will give prior advice of the service to the Chief Operating Superintendent of the receiving Region.

## SCOTTISH REGION.

1. In no circumstances must any article be accepted which, when properly loaded and secured, will exceed the maximum dimensions of a carriage or wagon load of the lines over which it has to pass as defined in the Special Instructions relating to Goods, Mineral, and Live Stock Traffic (Pink Pamphlet) and the Coaching Arrangements Book, either in respect of length, load gauge dimensions, or which produces an excessive load per axle, until it has been ascertained it will travel safely and authority has been given by the District Goods or Commercial Manager, or Traffic Superintendent, as the case may be, for it to go forward. Locomotives, Steam Cranes, Railway Carriages and Wagons offered for conveyance on their own wheels, or on temporary bogies, must be dealt with as exceptional loads and the same procedure followed as for consignments loaded up.
2. In all cases where an Agent is asked to accept such traffic for conveyance he must communicate immediately with his District Goods or Commercial Manager, or Traffic Superintendent, giving the dimensions and approximate weight of the article. The greatest care must be exercised in ascertaining the exact shape and measurements, and as far as possible the actual weight. Consideration should also be given as to whether the article is required to arrive at destination with a particular end leading. The District Officer will in all cases submit these matters to the Chief Commercial Manager, Glasgow.
3. The Chief Commercial Manager must submit full particulars to the Carriage and Wagon Engineer in order to obtain his approval of or his direction as to the choice of vehicles, method of loading, securing, conveyance, special marshalling and speed restrictions where required, etc.
4. The Chief Commercial Manager will obtain the assent of the Chief Civil Engineer as well as that of other Regional Officers who may be concerned in the transit.
5. When submitting these matters, the normal route to be travelled throughout the journey must be clearly stated. If for any reason the normal route is not available, alternative routes must be considered but in no case must traffic be declined without reference to the District Commercial Officer.
6. The replies received from the Chief Civil Engineer will include stipulations made by the Signal and Telecommunications Engineer's Department.
7. In all cases where the assent to passage of exceptional loads has been held more than three months prior to the passing of the load the Chief Commercial Manager will re-submit to the Carriage and Wagon Engineer, the Chief Civil Engineer, and Chief Commercial Manager, etc., of other Regions when concerned. In this connection Agents will require to re-submit to their District Commercial Officer particulars of exceptional traffic for which loading authority has been held more than three months prior to despatch.
8. A copy of the Chief Commercial Manager's submitting communication to the Chief Civil Engineer must be sent to the Chief Operating Superintendents concerned. These preliminary advices must be followed as early as possible by the Conditions of working, restrictions, etc., laid down by the Technical Departments and/or other Regions, with a request that a working be arranged complying with these conditions.
9. In addition to the foregoing procedure, full particulars must be submitted to the

District Goods or Commercial Manager, or Traffic Superintendent, where the following types of vehicles are selected for use :—

Types			British Railways or Regional Diagram Book. Page No.	Telegraph Message Code
20-ton Case Wagon	...	...	<div> <div>M. 66.B ...</div> <div>W. 38 ...</div> <div>E. 148 ...</div> </div>	Parrot
20-ton Bogie Flat Trolley	...	...	B. 515	Flatrol MUU
40-ton Twin Girder Set	...	...	<div>W. 2 ...</div> <div>W. 3 ...</div>	Girdwag WC, WF, WG
50-ton Twin Girder Set	...	...	M. 137	Girdwag MA
60-ton Flat Wagon	...	...	E. 48	Flat EQ
60-ton Twin Girder Set	...	...	<div>W. 2 ...</div> <div>W. 4 ...</div>	Girdwag WB, WE
60-ton Bogie Flat Trolley	...	...	M. 135	Flatrol MPP
60-ton Side Girder Trolley	...	...	M. 135.A	Transformer MA
65-ton Bogie Well Trolley	...	...	M. 135.B	Weltrol MS
65-ton Bogie Flat Trolley	...	...	M. 135.C	Flatrol MRR
70-ton Twin Girder Set	...	...	M. 137.A	Girdwag MB
70-ton Side Girder Trolley	...	...	E. 118	Transformer EA
80-ton Bogie Flat Trolley	...	...	<div>M. 133.E ...</div> <div>E. 129 ...</div> <div>W. G48 ...</div>	Flatrol MLL Flatrol ELL Flatrol WLL
80-ton Bogie Well Trolley	...	...	M. 136	Weltrol MU
81-ton Bogie Well Trolley	...	...	E. 140	Weltrol EK
100-ton Bogie Flat Wagon	...	...	E. 50	Flat EU
110-ton Bogie Well Trolley	...	...	E. 140	Weltrol EN
120-ton Side Girder Trolley	...	...	M. 136.A	Transformer MB
120-ton Bogie Well Trolley	...	...	W. 8	Weltrol WL
120-ton Side Girder Trolley	...	...	W. 8	Transformer WL
120-ton Bogie Flat Trolley	...	...	E. 134	Flatrol EAA
120-ton Bogie Flat Trolley	...	...	B. 519	Flatrol EAA
135-ton Side Girder Trolley	...	...	B. 470	Transformer MC
Heavy Gun Set	...	...	<div>M. 139 ...</div> <div>M. 140 ...</div> <div>E. 118 ...</div>	Gunset MB Gunset MC Gunset EA

and the loads must not be accepted without the authority of the Chief Commercial Manager.

10. Whenever it is necessary to despatch from or effect delivery of an exceptional load at a private siding, the District Goods or Commercial Manager, or Traffic Superintendent, in whose area the siding is situated must :—

- Satisfy himself that there is ample clearance from structures in the siding.
- Obtain an assurance from the firms concerned that their siding is in a safe condition to permit of the passage of the load from or to the point of loading or unloading.
- Consider any other feature involved in the layout (radius of curves, gradients, etc.) of the siding.
- Consult the appropriate Officer where doubt arises on any of these points before movement of the load takes place.

The District Officer who makes these enquiries must see that suitable instructions are issued for the guidance of the men who will eventually have charge of the load and who will be held responsible for its safety.

11. All loads of exceptional dimensions or weight, or which present any unusual features, must be examined by the Agent or other responsible person and passed as safe to travel before they are allowed to go forward. The appropriate special "Examine Load" label must be used. In the case of locomotives, carriages or wagons on their own wheels or on temporary bogies, a special examination by the Motive Power Superintendent, Mechanical or Carriage and Wagon Engineer's Department concerned must be made to ensure they are fit to travel.
12. In cases where some relaxation is required from the working conditions prescribed by the Chief Civil Engineer, owing to the necessity for working over loops, goods lines, etc., excluded by the original conditions, the Chief Commercial Manager will obtain the authority of the Chief Civil Engineer, Glasgow, in writing and advise the Chief Operating Superintendent.
13. The Chief Operating Superintendent will issue a special notice to all concerned in connection with the transit of all loads 9 ft. 6 ins. in width or over.

A similar notice must be issued for other exceptional loads, where considered necessary for safe working, whether or not such loads are out-of-gauge. Instructions in regard to the conveyance of out-of-gauge loads where a special notice is not issued, must be given by telegram.

Copies of all Special Notices to be sent to :—

Chief Commercial Manager,  
Chief Civil Engineer,  
Carriage and Wagon Engineer,  
Motive Power Superintendent,

and the following as affected :—

District Goods and Commercial Managers and Traffic Superintendents,  
District Operating Superintendents,  
District Motive Power Superintendents,  
District Engineers,  
Signal and Telecommunications Engineer,  
District Signal and Telecommunications Assistants.

14. The arrangements with regard to the supervision of exceptional loads during transit to be as follows :—
  - (a) Loads up to and including 9 ft. 4 ins. wide or not more than 2 ins. out of gauge on either side will be worked under the careful supervision of the trainmen, and will not be accompanied by an Inspector, except in particular cases such as heavy or awkward loads requiring constant supervision during transit, when the Chief Operating Superintendent or District Operating Superintendent at starting point or transfer point if from another Region, must provide an Inspector to accompany, who must be acquainted with the nature and dimensions of the load and any special restrictions to be complied with.
  - (b) Loads over 9 ft. 4 ins. wide will be accompanied by an Inspector when necessary and the District Operating Superintendent will not send a Traffic Inspector with such loads, except as provided for in Clause (d), unless exceptional conditions of working render it necessary.
  - (c) All loads requiring an excess width of any overhanging portion to be kept to the 6 ft. side with stipulations to be kept clear of single line arched openings, station platform awnings, etc., must in every instance be accompanied by an Inspector.  
 Before such overhanging loads are despatched the District Officer initiating the arrangements must ascertain whether or not there is any likelihood of their being turned en route, and take such action as will comply with the Engineer's conditions.
  - (d) Where the dimensions of a load involve the blocking of the adjoining line, such loads must be accompanied by a Goods and Traffic Inspector.

- (e) Exceptional loads not accompanied by an Inspector must be marshalled next to the guard's brake van in order that they may be carefully watched by the guard, but where an Inspector accompanies, unless instructions are issued to the contrary, the load must be marshalled next but one to the engine with a brake van in front in which the Inspector or Inspectors must ride.
15. When the traffic is despatched, the Chief Operating Superintendent must advise all District Operating Superintendents along the route in the Scottish Region, and if the traffic is to be transferred to another Region the Chief Commercial Manager will arrange for the receiving Region to be given timely notice of the proposed working into their possession in accordance with the terms of acceptance, and loading agreed upon.

Where loads are to pass in Scottish Regional trains over a section of line maintained or controlled by another Region the Chief Commercial Manager must advise such other Region of the despatch of the consignment.

16. The following instructions must be observed in regard to loads producing an excessive weight per axle :—

The Chief Commercial Manager must be consulted :—

- (a) In all cases of loads producing axle weights in excess of 14 tons.  
(b) Where the axle spacing is between 4 ft. and 5 ft. 6 ins. if the axle weight exceeds  $12\frac{1}{2}$  tons.

In regard to the following Sections of the line the Chief Civil Engineer must be consulted :—

- (c) In all cases of loads producing axle weights in excess of  $11\frac{1}{2}$  tons.  
(d) Where the axle spacing is between 4 ft. and 5 ft. 6 ins. if the axle weights exceed  $10\frac{1}{2}$  tons.  
(e) Where the axle spacing is less than 4 ft.

Note.—The cases covered by (b), (c), (d) and (e) are for two axle bogies. Where three axle bogies are used the Chief Civil Engineer should be consulted when the axle spacing is less than 5 ft. 6 ins.

#### SCOTLAND

Carmyllie Branch  
Lauder Branch  
Gifford Branch  
St. Combs Branch  
Dornoch Branch  
Mayfield Colliery Branch (near Hurlford)  
Hamilton and Ferniegair Line at Barncluith Tunnel  
Greenock, Regent Street  
Greenock, Arthur Street  
Drumbowie Branch—Mannieshall and Salsburgh Sidings  
Souterhouse Branch  
Gartverrie Branch

Cases coming within the following categories must also be submitted to the District Goods or Commercial Manager, or Traffic Superintendent.

Loads on gun tracks or on other vehicles having a large number of axles.

Single articles weighing over 30 tons.

Where it is desirable to take heavy loads into sidings where there are bridges, coal drops or tips over which engines are restricted or to turntables for the purpose of turning loads.

Note.—In calculating the gross axle load, care must be taken to include an allowance for packing or extra fittings as well as the tare of the vehicle and the weight of the load.

## **SOUTHERN REGION**

1. In all cases where it is considered that traffic offered for conveyance will, when loaded, exceed the gauge dimensions of the lines over which it is to pass, as shown in the book of Special Instructions relating to Goods, Mineral and Livestock Traffic (Pink Pamphlet), or is otherwise of an exceptional nature, the Station Master or Goods Agent, must before accepting, submit full details as to shape, measurements and weight to his District Traffic Superintendent who will in turn pass the information to the Chief Operating Superintendent, Waterloo.
2. The Chief Operating Superintendent will take action as under :—
  - (a) Arrange examination should this be considered necessary.
  - (b) Decide and provide type of wagon to be utilised.
  - (c) Arrange supervision of loading.
  - (d) Obtain conditions of passage from Chief Civil Engineer.
  - (e) Obtain agreement to passage from other Regions concerned.
  - (f) Advise District Traffic Superintendent conditions of passage and route and whether load is to be accompanied by an Inspector, also obtain particulars of proposed service, for conveyance.
3. District Traffic Superintendent will issue notice giving full particulars of load, services by which to be conveyed and conditions of passage to all concerned and will ensure that the notice has been received by all stations concerned.
4. Chief Operating Superintendent will advise other Regions particulars of service by which load will be exchanged.
5. Loads emanating from stations on other Regions will be advised to the Chief Operating Superintendent, Waterloo, by the appropriate officer on the originating Region and the procedure will then be as in paragraph 2 clauses (d) and (f) and paragraph 3 above. Chief Operating Superintendent will advise originating Region acceptance of the load.
6. In no case must these loads be moved until authority has been given by the Chief Operating Superintendent.
7. Questions relating to charges must be submitted to the Chief Commercial Manager, Waterloo.
8. Railway carriages and wagons offered for conveyance on their own wheels, or on temporary bogies, must be treated as exceptional loads and dealt with as above.

## WESTERN REGION

### ARTICLES EXCEEDING THE PUBLISHED GAUGE DIMENSIONS

1. The Goods Agent at the forwarding point will submit to his District Officer full details (including whenever possible a scaled drawing or sketch showing side and end elevations with full overall dimensions and weight inserted) of all out-of-gauge and otherwise exceptional consignments expected to pass.
2. The District Goods Officer, will submit full details to the Chief Commercial Manager, who will advise him upon the wagon to be used and the loading to be adopted, after consulting the Carriage and Wagon Engineer as may be necessary.
3. The Chief Commercial Manager will at once furnish the Chief Operating Superintendent with a preliminary advice, and obtain assent for the passage from the Chief Civil Engineer, other Departments and other Regions affected by the passing of the traffic, the routing to be specified in all cases.
4. The Chief Operating Superintendent will then advise the District Operating Officers concerned, the preliminary details of the load, on receipt of which the Operating staff at the originating point or junction point with another Region must be immediately notified. In no circumstances may an out-of-gauge or exceptional load having special conditions of passage be forwarded without the written consent, in the form of a Notice, from the District Operating Officer.
5. After the assent for passage has been obtained, the Chief Commercial Manager will advise the Chief Operating Superintendent and the District Goods Officers concerned. The Chief Operating Superintendent will then advise the District Operating Officers concerned.
6. The Certificate for passage issued by the Chief Civil Engineer is available for a period of two months only unless otherwise stated. Every out-of-gauge and exceptional load must be certified and assent to the passage of the load similar in all respects to a previous load must not be assumed.
7. The District Goods Officer from whose District a consignment is being forwarded, must give the District Operating Officer the longest possible advance notice of the time and date the consignment will be ready to travel and the District Operating Officer will then issue in the form of a Notice, the necessary instructions, and advise the other District Operating Officers concerned, on what train the traffic will be despatched. Where a consignment is forwarded on a train terminating in an Intermediate Operating District, the District Operating Officer of that District must advise the other District Operating Officers concerned details of the proposed connecting service.
8. In the case of loads passing to another Region, the District Operating Officer responsible for the point of exchange, must give the necessary advices as laid down by the Chief Operating Superintendent.
9. The District Goods Officer must also advise the other Regions concerned, of the despatch, and the District Operating Officer must advise the District Engineers concerned only when this action is stipulated in the conditions of passage by the code word "DELOD" (Engineers should be advised in ample time of the arrangements made for passage of loads).
10. The points between which loads exceeding 10 ft. in width may not pass nor be passed by coaching stock or out-of-gauge loads on principal routes are laid down

in the "1932 Schedules for Loads 10 ft. (exclusive) to 10 ft. 9 ins. (inclusive) in Width." It must be understood, however, that no load exceeding the standard gauge dimensions for sections of line concerned will be allowed to travel until a certificate for passage has been given by the Chief Civil Engineer to the Chief Operating Superintendent through the Chief Commercial Manager which certificate will specify particular restrictions and requirements in each individual case.

11. The instructions in respect of loads exceeding 10 ft. in width passing coaching stock must be issued to the Operating staff concerned, in the following form :—

" Must not pass or be passed by a train conveying passengers (catered for by the Code CONFLICT "A," CONFLICT "B" or CONFLICT "C") or by any freight train conveying an out-of-gauge load (catered for by Code AJAX), on the adjoining line between the following signal boxes."

The District Operating Officers must make such arrangements as will ensure that this instruction is observed, especially in regard to the passing of freight trains conveying coaching stock on the adjoining line.

12. Out-of-gauge loads up to and including 10 ft. in width, may be conveyed by ordinary trains, unless otherwise stipulated, provided certificates have been furnished in the usual way by the Chief Civil Engineer that they may travel.
13. Loads exceeding 10 ft. in width, may, in certain circumstances, and where practicable, be conveyed by ordinary freight trains, providing the authority of the Chief Operating Superintendent is first obtained. When special train working is necessary on a weekday or Sunday, a throughout schedule must be agreed beforehand, at the point to point times laid down for ordinary freight trains, subject to all permanent, temporary and special speed restrictions being observed. The working of the special train must be so arranged as to comply with the restrictions imposed by the Chief Civil Engineer and/or Carriage and Wagon Engineer.

The loads of such special trains may, unless instructions are given to the contrary, be made up with through traffic only to the maximum single engine load.

14. All wagons used for the conveyance of exceptionally heavy machinery or any other article exceptionally heavy or lengthy must be placed next in front of the rear brake van, but when **very** exceptional loads are conveyed by trains carrying other traffic and accompanied by a Carriage and Wagon Engineer's Swindon Inspector, the Carriage and Wagon Engineer will stipulate whether the out-of-gauge or exceptional load must be marshalled at the front or rear of the train, and if in front a second brake van must be provided next to the engine. (Such loads must be carefully watched while running).
15. Special trains on a Sunday conveying out-of-gauge or exceptional traffic must be booked for examination en route. If an examiner is not on duty, special arrangements to be made by the District Operating Officer in conjunction with the District Carriage and Wagon Engineer, unless the load is accompanied by a Carriage and Wagon Engineer's Swindon Inspector, in which case he will be responsible for examination of the wagons. In the event of ordinary traffic being conveyed on the out-of-gauge or exceptional load special train on a Sunday, examination must be made in the normal way by Carriage and Wagon Examiners.
16. Girders loaded on "Girdwag" class wagons extended, must be conveyed by special train with no other traffic attached, and a Carriage and Wagon Engineer's



Swindon Inspector must accompany the train to destination, or point of exchange with another Region.

17. Loads which exceed the width of the truck on the 6 ft. side must not be conveyed through any section where single line working is in operation, or through a station where there are platforms on each side of the line over which the loads will be conveyed, or where there is an island platform on double roads, until proper enquiries and arrangements for working have been made.
18. A Carriage and Wagon Engineer's Swindon Inspector may be required to examine and, where considered necessary, travel with out-of-gauge consignments up to 10 ft. wide. A Carriage and Wagon Engineer's Swindon Inspector must always examine loads exceeding 10 ft. wide, and travel with these consignments.
19. The special examination of the loads by the Carriage and Wagon Engineer's Swindon Inspector at the exchange junction may be dispensed with in the case of out-of-gauge or otherwise exceptional consignments arising on other Regions lines.
20. In all cases care must be exercised to see that the train is not shunted on to the opposite line for refuging or single line working purposes unless this can safely be done.
21. Operating Department Inspectors thoroughly conversant with the working in each District to travel with all loads exceeding 10 ft. in width. The Inspectors must make themselves acquainted with all special arrangements applicable to the safe working of all trains, and must see that these instructions and any other special instructions issued are carried out. Should an Operating Department Inspector not be readily available, the District Operating Officer may arrange for a competent man to undertake the duty in order to obviate delay to the traffic.
22. In the case of loads not exceeding 10 ft. in width but which through exceptional length or other peculiarity, stringent conditions of passage, etc., in the opinion of the District Operating Officer, require the services of an Operating Department Inspector, such to be provided by the District Operating Officer. Should an Operating Department Inspector not be readily available, arrangements to be made for a competent man to undertake the duty.
23. To avoid failure of wagons due to hot boxes in consequence of the bulk of the load being placed at one end of the vehicle, it is important that loads of all descriptions be as evenly distributed as the circumstances will allow.
24. In no circumstances must any specially constructed wagon be loaded with a consignment exceeding 75 per cent. of the marked carrying capacity of the vehicle, e.g., a wagon marked to carry 20 tons must not be loaded with more than 15 tons except under the special supervision of an Inspector from the Carriage and Wagon Engineer's Department.
25. Articles exceeding the published gauge dimensions must not be conveyed through the Severn Tunnel (See Appendix to No. 4 Section of the Service Time Tables).
26. It is essential that the greatest care be exercised at loading points in connection with out-of-gauge and exceptional loads, to ensure that the dimensions do not exceed those for which passage authority has been given.

## APPENDIX "B"

### CONDITIONS UNDER WHICH THE PRIOR CONSENT OF THE CHIEF CIVIL ENGINEER IS NOT NECESSARY FOR THE PASSAGE OF CERTAIN LOADS EXCEEDING 60 FT. (OR EQUIVALENT) BUT NOT EXCEEDING 90 FT. (OR EQUIVALENT) IN LENGTH, OCCURRING BETWEEN 4 FT. AND 10 FT. 3 INS. FROM RAIL.

When loads conform to the following table it will not be necessary to obtain the assent of the Chief Civil Engineers to their passage, but all other instructions relating to the passage of out-of-gauge and otherwise exceptional loads remain in force and must be complied with.

Table of central widths for long loads exceeding 60 ft. (or equivalent) but not exceeding 90 ft. (or equivalent) in length, occurring between 4 ft. and 10 ft. 3 ins. from rail, which when loaded on one wagon with equal overhangs or with unequal overhangs producing an equivalent length as shown in the first column, and suitably checked, may travel without reference to the Chief Civil Engineers subject to the axle weights not being excessive and providing the bogie centres of vehicles are not less than 28 ft. nor more than 48 ft., where a load gauge of 9 ft. width operates between the above heights (vide Special Instructions relating to Goods, Mineral and Livestock Traffic—Pink Pamphlet or Coaching Arrangements Book) and at the following special places :—

8 ft. 10 in. wide, Maryport and Carlisle Sections L.M.R.

8 ft. 9 in. wide, through Shildon Tunnel N.E.R.

Length of Load or equivalent length	Central widths or equivalent central widths on bogie centres between 28 ft. and 35 ft. both inclusive		Central widths or equivalent central widths on bogie centres exceeding 35 ft. but not exceeding 42 ft.		Central widths or equivalent central widths on bogie centres exceeding 42 ft. but not exceeding 48 ft.	
	ft.	ins.	ft.	ins.	ft.	ins.
Between 60 and 61 ft.	6	4	6	8	7	3
61 " 62 "	6	3	6	7	7	1
62 " 63 "	6	1	6	6	7	0
63 " 64 "	6	0	6	4	6	10
64 " 65 "	5	10	6	3	6	9
65 " 66 "	5	9	6	1	6	7
66 " 67 "	5	7	6	0	6	6
67 " 68 "	5	6	5	10	6	5
68 " 69 "	5	4	5	9	6	3
69 " 70 "	5	3	5	7	6	1
70 " 71 "	5	1	5	5	6	0
71 " 72 "	5	0	5	4	5	10
72 " 73 "	4	10	5	2	5	8
73 " 74 "	4	8	5	0	5	7
74 " 75 "	4	6	4	11	5	5
75 " 76 "	4	5	4	9	5	3
76 " 77 "	4	3	4	7	5	2
77 " 78 "	4	1	4	6	5	0
78 " 79 "	3	11	4	4	4	10
79 " 80 "	3	10	4	2	4	8
80 " 81 "	3	8	4	0	4	6
81 " 82 "	3	6	3	10	4	5
82 " 83 "	3	4	3	8	4	3
83 " 84 "	3	2	3	6	4	1
84 " 85 "	3	0	3	5	3	11
85 " 86 "	2	10	3	3	3	9
86 " 87 "	2	8	3	1	3	7
87 " 88 "	2	6	2	11	3	5
88 " 89 "	2	4	2	9	3	3
89 " 90 "	2	2	2	7	3	1

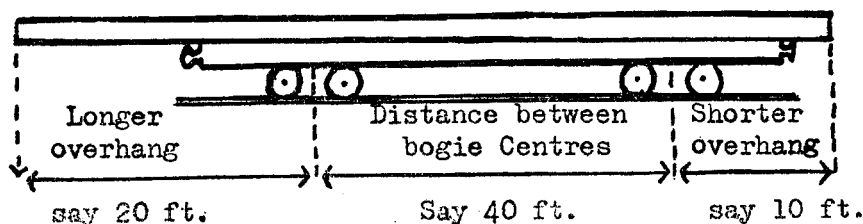
Note.—The above widths may be increased by 3 ins. each side for binding chains within the length of the vehicle, subject to the height of 10 ft. 3 ins. above rail level not

being exceeded. A load having equal overhangs is one with the same length from bogie centres each end. The equivalent length of a load having unequal overhangs is arrived at as follows:—

The longer overhang measured from the bogie centre multiplied by 2 and added to the distance between the bogie centres, as example following, gives the equivalent length of the load.

Overhang to be suitably checked.

Overhang to be suitably checked.



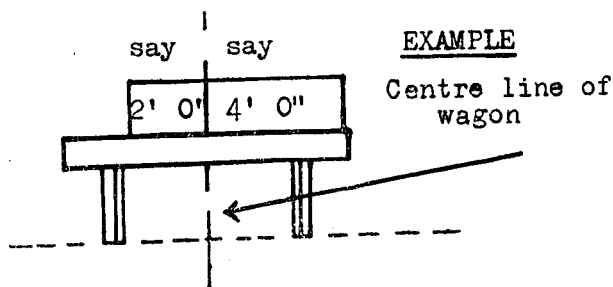
Equivalent length of above load equals:—

Longer overhang 20 ft. multiplied by 2 equals	40 ft.
Add distance between bogie centres	40 ft.

Equivalent length	...	80 ft.
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Equivalent central width means twice the greater width from centre of wagon, i.e., in this example—

$$4 \text{ ft.} \times 2 = 8 \text{ ft.}$$

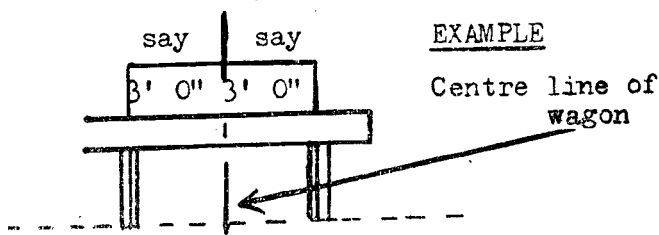


EXAMPLE

Centre line of wagon

Central width means twice the distance from centre of wagon, i.e., in this example—

$$3 \text{ ft.} \times 2 = 6 \text{ ft.}$$



EXAMPLE

Centre line of wagon

Note.—Careful working must be observed when passing from main lines to sidings and vice versa and to the usual precautions being observed throughout.

It should be noted that the table only purports to give the lengths and widths, relative to the other factors stated therein, which may travel without a certificate from the Chief Civil Engineers, and will not alter any of the restrictions and arrangements in force relating to other factors, such as choice of vehicles, loading features, axle weights, difficulties at destination, etc., whether affecting loads under or over 60 ft. in length.

## APPENDIX "C"

### CONDITIONS UNDER WHICH THE PRIOR CONSENT OF THE CHIEF CIVIL ENGINEER IS NOT NECESSARY FOR THE PASSAGE OF LOADS WITH WIDTHS BELOW 3 FT. 6 INS. FROM RAIL, CONTAINED WITHIN THE LENGTH OF THE WELL OF THE WAGON

#### WIDTHS OF LOADS BELOW 3 FT. 6 INS. FROM RAIL, CONTAINED WITHIN THE LENGTH OF THE WELL OF THE WAGON.

- (i) Except as shown on the table below loads must not exceed the width of the wagon below 3 ft. 6 ins. from the rail as shown on page 141 of the Pink Pamphlet.
- (ii) When loads conform to the table shown below it will not be necessary to obtain the assent of the Chief Civil Engineers to their passage, but all other instructions relating to the passage of out-of-gauge and otherwise exceptional loads remain in force and must be complied with.
- (iii) Except as otherwise shown in the Pink Pamphlet, the permissible maximum equivalent central widths of any load including packing and securing tackle below 3 ft. 6 ins. from rail down to 12 ins. from rail, are shown below :—

Maximum permissible central widths or equivalent central width of load					Bogie centres of wagons or wheelbase in case of 2 axled vehicles	
ft.	ins.					
8	8	...	...	...	...	20 ft. and less
8	7	...	...	...	Between	20 ft. 0 ins. and 23 ft. 0 ins.
8	6	...	...	...	"	23 ft. 0 ins. and 26 ft. 0 ins.
8	5	...	...	...	"	26 ft. 0 ins. and 29 ft. 0 ins.
8	4	...	...	...	"	29 ft. 0 ins. and 31 ft. 6 ins.
8	3	...	...	...	"	31 ft. 6 ins. and 34 ft. 0 ins.
8	2	...	...	...	"	34 ft. 0 ins. and 36 ft. 0 ins.
8	1	...	...	...	"	36 ft. 0 ins. and 38 ft. 0 ins.
8	0	...	...	...	"	38 ft. 0 ins. and 40 ft. 0 ins.
7	11	...	...	...	"	40 ft. 0 ins. and 42 ft. 0 ins.
7	10	...	...	...	"	42 ft. 0 ins. and 44 ft. 0 ins.
7	9	...	...	...	"	44 ft. 0 ins. and 46 ft. 0 ins.

**Note.**—Loads to the above widths must be worked with caution when travelling through connections and from main line to sidings and vice versa, and the usual precautions and careful handling observed throughout and caution exercised when taken past landings and loading docks.

It should be noted that the table only purports to give the width of load, and bogie centres or wheelbase on which it can be loaded, which may travel without a certificate from the Chief Civil Engineers, subject to paras. (i), (ii) and (iii) hereof, and will not alter any of the restrictions and arrangements in force relating to other factors, such as choice of vehicles, special features, axle weights, difficulties at destinations, etc.

The existing arrangements between Regions for the acceptance and/or passage of the loads covered by the table remain unaltered.

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**J. & C. Moores Ltd., Liverpool 7.**