

through the other cross tracks. There are no retrograde movements.

The erecting shop machine department occupies the upper half of bays 20 to 23, and contains a complete line of equipment for such erecting work as requires to be performed on the spot, without passing on to any special department. It is well equipped with the following machinery:

Double head screw machine.
Triple head screw machine.
Slotter, 12 in. stroke.
500 lb. pneumatic power hammer.
4 blacksmith fires.
Oil furnace.
24 in. engine lathe.
24 in. shaper.
Colburn drill.
20 in. drill.
Three 36 in. drill presses.
Two 30 by 30 in. by 4 ft. planers.
Double end punch and shear, 16 in. gap.

In addition, there are four benches and a marking off table. Both the blast and exhaust for the blacksmith fires are under the floor.

The jacket shop occupies the same bays of the new addition to the south of the through shop tracks as the erecting shop machine department. It is divided into two sections, for the new work and for the repair work, and contains the following equipment:

Multiple punch.
Bar folder.
Circular shears.
Small punch, 18 in. stroke, 3-8 in. capacity.
Bending rolls.
Bending vise.

For the new work, there are in addition a template bench, three ordinary benches, and a rivetting table, while for the repair work there is a row of benches. To the south of this latter row there is a small overhead storage platform, 9 ft. above the floor level, for headlight storage, with a bench beneath.

Bays 25 to 28 inclusive contain the tube departments, the upper portion for the small 2 in. tubes, and the lower section for the 5 in. superheater flues. At the east end of this department there is a through track on which the tube lorries may be brought from the erecting shop directly, or from outside storage in the yard to the south. Just inside the door there is a flue rattler, used for all tubes, from which point the tubes pass through either of two paths, depending on size. The 2 in. tube section contains an unloading pit, in which the tube lorries are set, and from which they pass to the tube cutter alongside. From here they pass in succession through the oil furnaces to the welding machine, pneumatic hammer, tube cutter, oil furnace and tube tester, finally coming out complete for loading on lorries in a similar loading pit to that on which they were unloaded. The passage of the 5 in. tubes through that section is in a similar manner. There are no retrograde movements with either the 2 or 5 in. tubes, in both cases the sequence of steps being in order so as to pass the tubes from end to end of the department.

Most of the balance of the shop is occupied by the light plate department, which contains the following equipment:

Two double blacksmith fires.
100 in. gate shear.
Angle iron shear.
Automatic punch and shear for tank plates.
Bending rolls, 12 ft. housings.
Three 36 in. drill presses.
Bending rolls, 6 ft. housings.
Double horizontal punch.
Punch, 42 in. throat.
Two punches, 48 in. throat.
Punch, 36 in. throat.

This department is served by several jib cranes, all as shown.

The plate storage is outside the building, adjoining the track passing out from bay 30. On this track the plate is brought into the shop, where it is first of all handled by the large gate shears, which cut it up to the desired sizes, and then pass it on for the subsequent operations, the central location

of these large shears facilitating the handling of the plate work.

Bay 37, above the through track, is reserved for cab work.

The lower part of bays 35 and 36 contains the store order section, and is equipped with a double punch and shear, 24 in. gap, and also a plate clamp and two rivet furnaces. It is served by two jib cranes. The

balance of the lower side of the shop contains the ash pan work section, equipped with:

Stake punch and rivetter.
Punch, 18 in. throat.
Single shear.
Rivet furnace.

We are indebted to W. Peterson, Shop Engineer, Angus Shops, for the data on which this article is based.

Proposed Increases for Exclusive Use of Drawing Rooms and Compartments.

Commissioner McLean, of the Board of Railway Commissioners, has given the following judgment, concurred in by three of the other Commissioners, Messrs. Drayton, Scott and Goodeve:—

Following the hearing in Montreal of January 23 and 24, 1911, orders went approving of the basis of maximum sleeping and parlor car tolls on railways subject to the Board's jurisdiction. These orders made provision for publication of tariffs so approved in at least two consecutive weekly issues of the Canada Gazette. These tariffs,

George Bury on the General Situation.

George Bury, Vice President, C.P.R., in charge of Western Lines, has issued the following message to the people of Western Canada:—"My personal advice is that this is a time when people should above all things hold their heads. Through life our greatest sufferings are through anticipating troubles that never come. The West this year will receive more for its crops, cattle, etc., than last year. Foreign capital will not come in until the war is over, but I do not know that this is an unmixed evil. It may hold back some development, but we have been borrowing recklessly, and it had to come to an end anyway. I believe legitimate business will not suffer on account of the war, and that the effective steps taken by the Government will make a monetary crisis impossible. The Empire's existence is at stake, and every one must present a bold and cheerful front and be prepared for every sacrifice should the worst come, which at present appears impossible."

therefore, covered the maximum rates legally applicable on lines subject to the Board's jurisdiction. To take the G.T.R. tariff C.R.C. E-1989 as typical, the provision contained as to drawing room and compartment car fares is as follows:—

"Drawing rooms in standard sleeping cars—Three and a half times charge for lower berths, sufficient being added to make the charge end in a multiple of \$1. Minimum charge, \$6.

"Compartments in standard sleeping cars—Two and four-fifths times charge for lower berths, sufficient being added to make the charge end in a multiple of 50c. Minimum charge, \$5.

"Drawing room in parlor cars or for day runs in standard sleeping cars—Six times charge for seats, not exceeding charge for drawing room in night service between same points.

"Compartments on day runs of standard sleeping cars—Four times charge for seats, not exceeding charge for compartment in night service between same points."

This accommodation was available, on the payment of the above fares, to the holder of one passenger ticket.

In Feb., 1914, tariffs were filed by the railways providing for additional passenger fares in case of exclusive occupancy of a compartment or of a drawing room. The following from G.T.R. tariff C.R.C. E-1989 is typical of the arrangement:—"A minimum of 1½ passage tickets (including 1½ extra fare tickets on extra fare trains between points where extra fares apply) will be required for the exclusive occupancy of a compartment and 2 adult passage tickets (including 2 extra fare tickets in extra fare trains between points where extra fares apply) for the exclusive occupancy of a drawing room, in addition to proper sleeping and parlor car tickets."

Following this the Board, by its order 21413 of Feb. 27, 1914, suspended, as to their operation between points both of which were in Canada, the tariffs of certain railways subject to its jurisdiction.

The matter was heard on Mar. 17, 1914. The position put forward by the railways at the hearing was in substance that there was not an adequate payment being made for the use of the compartment, or of the drawing room. It was further stated that under existing arrangements an individual could, on payment of the appropriate compartment or drawing room fare, have the use of this exclusive accommodation on one passenger ticket, and it was stated that this worked detrimentally, in that on occasion two individuals might desire to have the accommodation in question, but would be prevented from doing so on account of its already being purchased by one traveller. The effect of this, from the railway's standpoint, was that where two passenger tickets might have been sold in connection with the accommodation in question only one had been sold. From what was said such an occurrence must be relatively infrequent. In the course of the investigation, which ended in Jan., 1911, it was testified that only about 5½% of the total passenger traffic of the C.P.R. was carried in sleeping cars. It was stated by Mr. Flintoft, for the C.P.R., at the present hearing, that about 3% of the sleeping car traffic was represented by the case where an individual had the exclusive occupancy of the drawing room. These are mere averages, of course, and cannot be taken as being necessarily final. It would, however, appear on these computations that the grievance complained of was concerned with only a small fraction of 1% of the total passenger traffic. It does not appear that the hypothetical two individuals who would use the accommodation, if it were not already occupied exclusively by one person, will, on this account, abstain from travelling; and if they do not abstain from travelling the railway will be in the same position as to passenger fares. Whether two passenger fares are received in connection with the use of a section and one for a drawing room, or vice versa, will not affect the passenger returns of the railway since in either case three passenger tickets are purchased.

There was not at the hearing an application by the railways to raise the standard sleeping car rates. There was in effect an application to increase the passenger rate