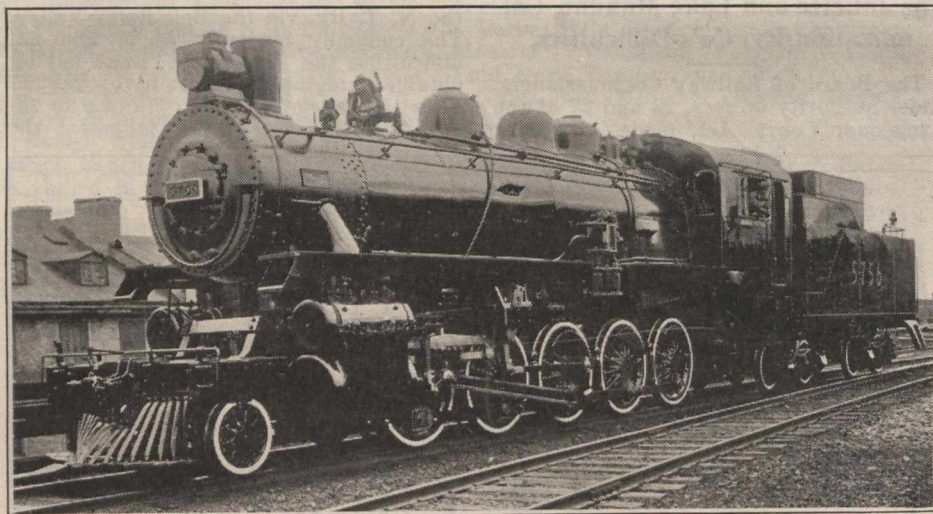


Decapod Locomotives for Canadian Pacific Railway.

The C.P.R., as previously announced in Canadian Railway and Marine World, is building 25 decapod locomotives at its Angus shops, Montreal, for mountain service. The principal general dimensions are as follows:

Capacity	275%
Boiler pressure	200 lb.
Cylinders	24 x 32 in.
Pulling face, rear tender coupler over pilot	76 ft. 10 3/8 in.



Decapod Locomotive, Canadian Pacific Railway.

Total wheel base	65 ft. 11 3/8 in.
Driving wheel base	22 ft.
Rigid driving wheel base	16 ft. 6 in.
Diameter of drivers	58 in.
Weight on drivers	112.5 tons
Weight on rigid drivers	90 tons
Total weight	120 tons
Total weight, engine and tender	210 tons
Tender water capacity	7,000 imp. gal.
Tender oil capacity	3,200 imp. gal.
Superheater	Locomotive Superheater Co.

One of the most noticeable features about these locomotives is the provisions

to cab in case of a collision. The windows are double sashed and a wind deflector is provided for the locomotive man while the fireman's eyes are protected by a deflector on the firedoor which eliminates the glare. A deflector is also located on the cab roof, which stops the back dust draught and keeps the cab free from dust. A safety clamp is carried to prevent the tender from sliding forward on

to cab in case of a collision.

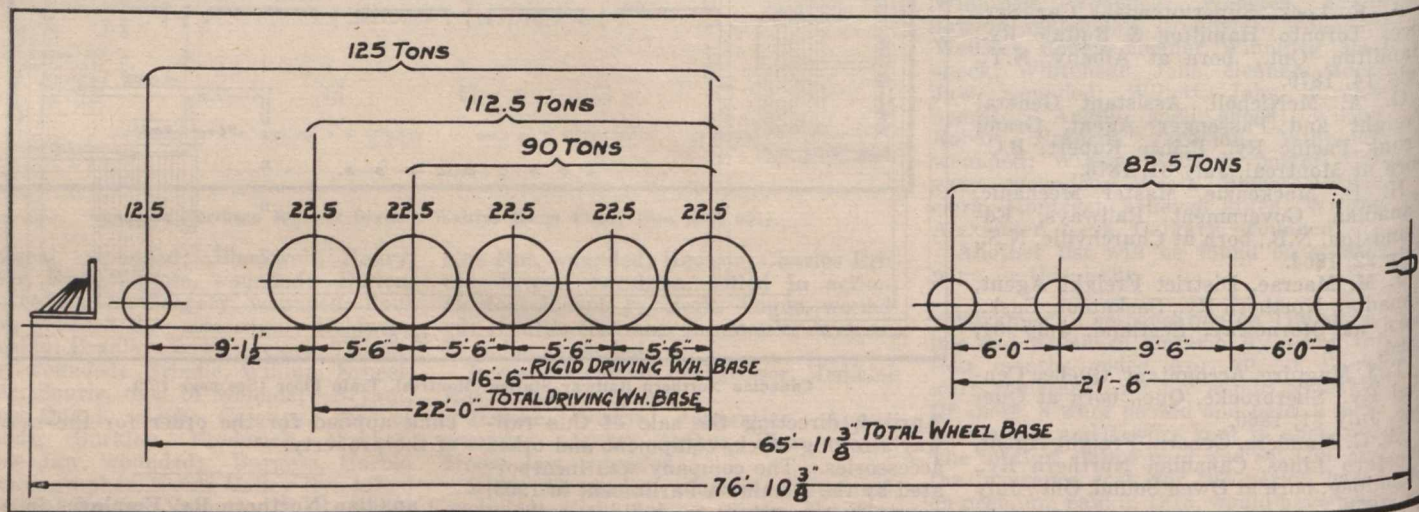
The Laird crosshead, an old type revived, has been used because it ensures excellent lubrication and is easy to maintain. The leading driving wheels are provided with a flexible arrangement so that a lateral displacement may take place on curves. This reduces the wheel space of the engine to 16 1/2 ft., which is practically the same as used on locomotives with only one leading pair of driving wheels.

Increases in the Cost of Railway Supplies.

E. J. Chamberlin, President G.T.R. and Grand Trunk Pacific Ry., has issued the following circular to officers and employees.—On April 15, 1916, I issued a circular to officers and employees, calling attention to the abnormal increase in the cost of the principal materials and supplies used by these railways as compared with the prices ruling in 1914 before the outbreak of war. I have now had this statement revised showing the prices prevailing in April, 1917, from which it will be noted that practically all of the items shown have still further increased in cost, with no indication as yet that they have reached their maximum. The matter is again brought to your attention, so that you may be informed as to the constantly increasing expense to which the company is put, and further, that you may keep your requisitions for materials and supplies down to the lowest point possible during the present abnormal market conditions. The prices that prevail necessitate partial repairs to structures and facilities rather than general renewals, and in so far as possible, the deferring of new or improvement work until conditions are again normal. This, of course, does not apply to repairs or renewals which are absolutely necessary for the safety of the public and the employees."

The following table shows the increases in cost of material in April, 1917, over July, 1914:

	United States %	Canada %
Acids	—	73
Antimony	386	290
Batteries and renewals	20	27 1/2
Bolts, machine and carriage	150	123
Bolts, track	149	—
Brake beams	86	120
Brass, rod	210	217 1/2
Brass, sheet	221	228 1/2
Brushes	10	17 1/2
Castings, brass	115	124
Castings, malleable	142	223
Castings, steel	149	119
Cement	36	40



Decapod Locomotive, Canadian Pacific Railway.

which are made in the cab for the comfort and safety of the locomotive man and fireman. This is especially required on a mountain division on account of the severe climatic conditions which sometimes prevail. The cab is roomy and well ventilated and is heated in winter by having part of the insulation which covers the boiler in the cab made in sections which can be easily removed. The seats are exceptionally well cushioned and a coat cupboard is provided with swinging

To accomplish this the leading side rods are articulated by means of a ball joint. A power reverse gear operated by air is also an improvement. The main object achieved in the construction of these locomotives, is maximum power for minimum weight.

The Colchester Coal and Ry. Co. has leased its Debert coal areas to another Nova Scotia concern for three years, on a royalty basis.

Chain	83	122
Copper, rod	147	154 1/2
Copper, sheet	147	154 1/2
Copper, ingot	107	114 1/2
Couplers, car and locomotive	126	134
Draft gear	55	55
Drills, carbon	80	59
Drills, high speed	160	167 1/2
Duck cotton	71	52
Fence wire	80	117
Ferrules, copper	107	80
Files	80	96 1/2
Frogs and switches	89	137
Fusees	140	58
Gasoline	—	90
Glass	50	—