

Firebox water space at ring ..... side 4½ in., throat 5 in., back 3½ in.  
 Tubes, number and outside diameter ..... 154-2 in., 14-2½ in.  
 Superheater flues, number, diameter and thickness ..... 22-5¼ in. No. 8 I W G  
 Superheater pipes, number, diameter and thickness ..... 88-1 in. 00 5/32 thick  
 Tubes and flues, length ..... 18 ft. 7½ in.  
 Heating surface, tubes and flues ..... 2390 sq. ft.

## Toronto Union Station Construction Progress.

Sufficient progress has been made on the new Toronto union station, being built on the Front St. site by the Toronto Terminals Ry. Co. to enable a definite

building is well advanced. The floors are all completed in the west wing, and the outside walls in the west wing are completed to the second story. The stone for the remaining portion of the walls is practically all cut and on the site, so that when spring opens, it will be possible to proceed at a rapid rate with getting it into position as the conditions of the labor market will allow. The work at present being gone on with is largely in the interior, but there is a shortage of labor, and progress is being made to it not as rapid as it otherwise would be.

The total quantity of concrete poured in the foundation work to the end of January was 4,511 cu. yds. In addition to this a large quantity of concrete has been used in other parts of the building. The total weight of steel to be used is approximately 5,000 tons, of which 4,601 tons had been erected to Jan. 30. In connection with the putting in of the stone, some interesting work will be the getting into position of the larger pieces, the largest of which, a part of the frieze, weighs 27 tons.

The carrying out of the work is in charge of R. W. Ambrose, Chief Engineer, Toronto Terminals Co.; H. K. Ferguson, representing the architects, Ross & Macdonald, and H. G. Jones, Montreal, with whom is associated J. M. Lyle, Toronto. W. T. Griffiths, represents the contractors, the Lyall Construction Co., Montreal.

C.P.R. Ontario District employees have made their 17th contribution, \$500, to the Toronto and York County Patriotic Fund Association. The total contributed since Sept., 1915, is \$12,850.

Agricultural Course Trains.—The C.P.R. put on a special train, starting from Medicine Hat, Jan. 29, and arriving at Loughheed, Alta., Feb. 24, visiting Ret-

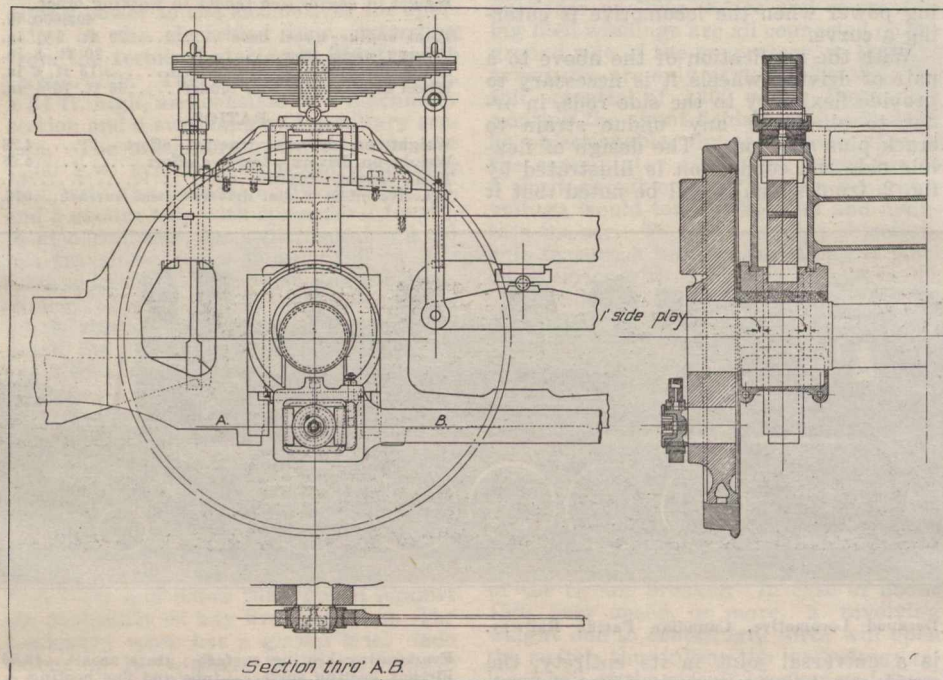


Fig. 1—Decapod Locomotive, C.P.R. Arrangement of Leading Driving Wheels.

Heating surface, firebox ..... 180 sq. ft.  
 Heating surface, total, including superheater ..... 3076 sq. ft.  
 Superheating surface ..... 506 sq. ft.  
 Grate area ..... 59 sq. ft.  
 Smoke stack diameter ..... 16½ sq. ft.

### TENDER.

Wheels, diameter ..... 36 in.  
 Journals, diameter and length ..... 5½ x 10  
 Water, capacity ..... 7,000 gals.  
 Coal capacity ..... 10 tons

The tender is equipped with 45 degree coal space, which eliminates the necessity of fireman having to shovel coal ahead on tender. In converting the tender from 5,000 to 7,000 gall. capacity, the tank was lengthened 6 ft. at the back portion and the frame was spliced at the front end, the splice being made to extend beyond the bolster of the leading truck, and the draft gear fastening at the rear was not touched.

The engine is equipped with two sand-boxes, to insure proper gravitation of sand to desired points. Flange lubricators are applied to front and rear driver. The engine is also equipped with straight line Walschaert valve gear and self centering valve stem guide. The link is supported at each side with bearings on mill plate supports, which also support reversing crank arms. The crosshead arm has been eliminated and the union link is connected to the collar, which is welded to the crosshead as per fig. 3, thereby making the wrist pin fit independently of union link bearing.

The specialties include:—Casey-Cavin reverse gear; McCord force feed lubricator; Franklin butterfly type 8 fire door; Security brick arch.

Indian Railways Curtail Service.—A Delhi press dispatch says that among the new war measures adopted by the Indian Government is the severe curtailment of railway services.

A Bill Consolidating the Railway Act was read a second time in the House of Commons recently, and referred to a special committee.

idea to be obtained of its general size and form, and to gauge its effect upon the district. A complete description of the building, with perspective, main floor and other plans were given in Canadian

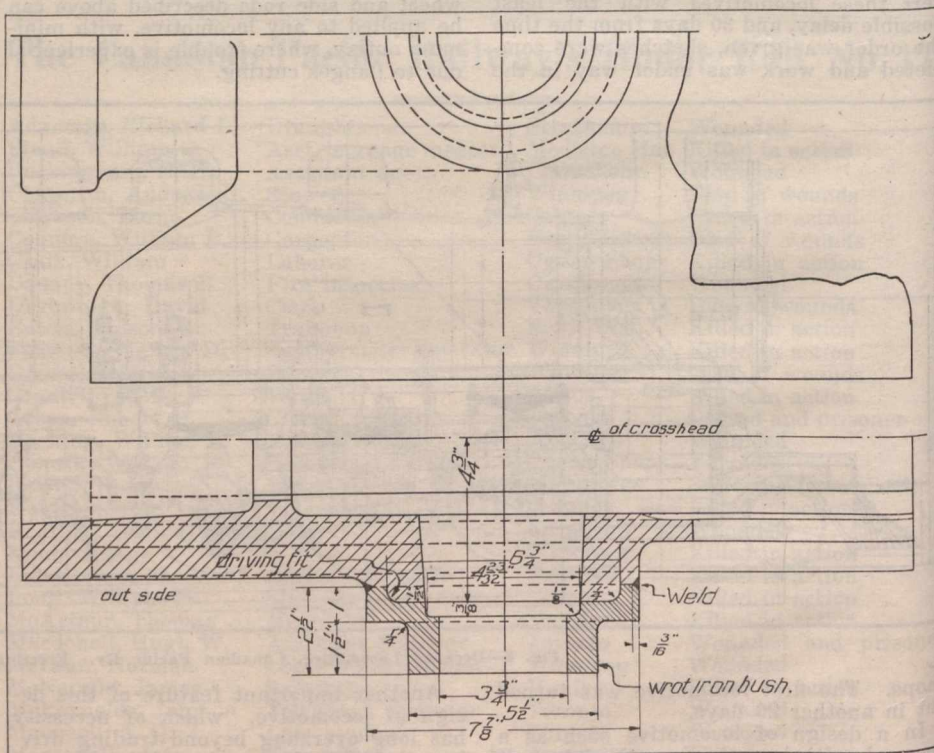


Fig. 3—Decapod Locomotive, C.P.R. Crosshead, Wrist Pin Bearing Bush.

Railway and Marine World for June, 1914.

The foundation work, including the tunnels, spaces for mechanical equipment, etc., is fully completed. The steel framework in both wings is completed, and that for the central portion of the

law, Travers, Black Falls, Stettler and Veteran, for the purpose of providing short courses in agriculture in those districts. During March and April the Canadian Northern will operate a special train for similar purposes over its Alberta lines.