

means of batteries of pipes in the pits and along the walls. In the pits along each wall there are four lengths of pipe, with similar units along the outer wall. Exhaust steam is employed, supplied through a pipe in the circular pit. The pit also contains a 2 in. steam main, 3 in. water main, and a 1½ in. air main. These all have connections to the columns between the pits.

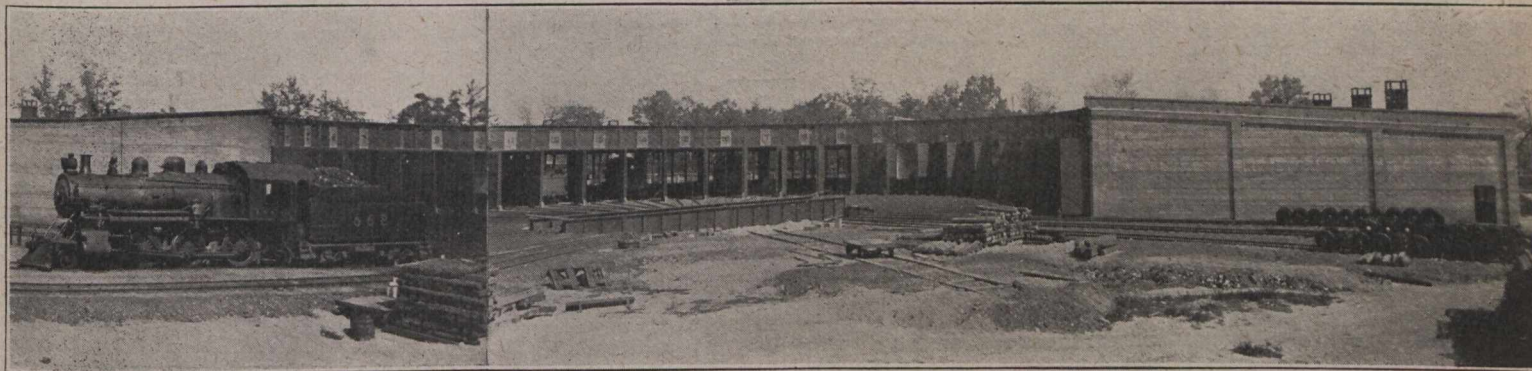
Near the entrance from the locomotive house into the machine shop there is a Miller washout plant which is found very useful. Three sets of piping run from this plant, suspended from the roof, to a column between every other pit. All the column

register trips. This section of the machine shop building is only half the height of the shop, and over the offices, open to the machine shop, there is an air brake testing department, and accommodation for the electricians.

The machine shop contains the following equipment: 16 in. double punch and shear, small press, large press, 2 in. bolt machine, heavy drilling machine, small drilling machine, 26 in. shaper, 18 and 36 in. lathes, grindstone and double emery. The tool room for the shop is in the V corner, adjoining the door into the locomotive house. In the opposite corner is the power equipment,

these rooms are in the charge of an attendant. This man's duties also consist in recording departures, detentions, etc., a system that has been found valuable in locating the cause of delays. Along the west wall in this building there is a small room for the ashpit men, and in the northwest corner of the building there is a room used as a general storing room by the locomotive department, in which are kept winter stores out of season, patterns of buffer beam and other parts, curtains, and such material.

Charcoal is employed for lighting fires, and is contained in a frame building to the



Panoramic View, Lambton Freight and Mechanical Yards, C.P.R., East End.

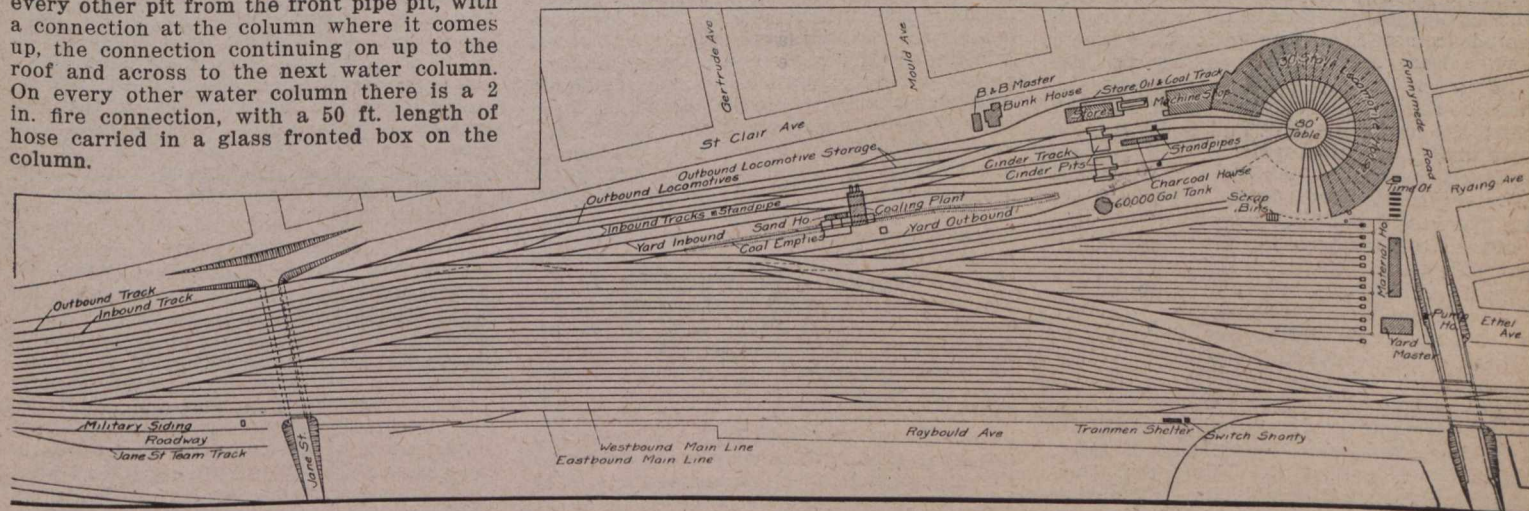
connections are 2 in., branching from 4 in. mains. Through these connections, the blow off water can be drawn off to the washout plant, where it is held in one compartment of the large tank, and is used over again for washout purposes, one line being provided for this purpose. The third line is for filling the locomotive boiler with clear water at about 200 degrees. The temperature of the washout water is automatically regulated to 125 degrees for convenience of the men in handling.

On every water column there is an air connection for blowing purposes, this connection coming up through the floor between every other pit from the front pipe pit, with a connection at the column where it comes up, the connection continuing on up to the roof and across to the next water column. On every other water column there is a 2 in. fire connection, with a 50 ft. length of hose carried in a glass fronted box on the column.

consisting of a small vertical high speed engine for shop drive, and a 16 by 16 by 9 in. air compressor. The westerly section of the shop is divided off for the boiler room, containing three 120 h.p. locomotive boilers carrying 120 lbs. of steam. Outside the boiler room there is a 95 by 10 ft. stack. Adjoining the stack there is a standard C.P.R. air storage tank, with a similar one at the opposite end of the locomotive house for supplying air to the freight car repair yards, which are piped for air. The pressure carried is 100 lbs.

To the west of the machine shop is the stores building, equipped in the usual man-

southeast of the stores building. The east end of this building is a window sash storing room, in which all the double windows of the locomotive house are stored in summer, all the windows in the plant being provided with double storm sashes. The charcoal house portion, which comprises the westerly three quarters, is divided into two equal rooms, both of which have a storage capacity of about one carload of charcoal. The practice followed is to draw from the one room at a time, completely emptying it before commencing on the second. In this manner, better check is kept on the material, and the charcoal is kept in a better



Plan Lambton Freight and Mechanical Yards, C.P.R., East End.

In addition to the foregoing special facilities, in the shop end of the locomotive house there is a small forge for general work, with iron rack adjoining. These are both located in the space between adjoining pits. Here are about 100 expanded metal lockers for the employees in the building, ranged along the partition walls.

The machine shop is contained in a 50 by 90 ft. addition to the west end of the locomotive house. The south side of this building is separated from the machine shop, and contains the offices for the locomotive foreman and his staff, and a room for the men to

ner with racks, etc., for the accommodation of the stock material, and a Bowser equipment for the oil, with storage tanks in the basement. The floor is on a level with that of a car, with a platform along two sides of the building for unloading stores. At the east end of the platform there are stores bins for the rough supplies.

The west end of the stores building is used by the locomotive department, a room in the southwest corner of the building containing racks for the enginemen's clothes and tool boxes. An adjoining room contains the enginemen's oil cans, etc. Both

form for use than if it were constantly being trampled over as in a single room store.

To and from the locomotive house, there are 2 inbound and 4 outbound tracks, with four immediate tracks connecting with the turntable pit. For the handling of the ashes on the locomotives there are two Ord ash handling plants of the type described in Canadian Railway and Marine World, Oct., 1911. Over each there are two tracks, with a blind track between for spotting ash cars. In the accompanying panoramic view of the mechanical terminals a locomotive is shown on the left dumping ashes.