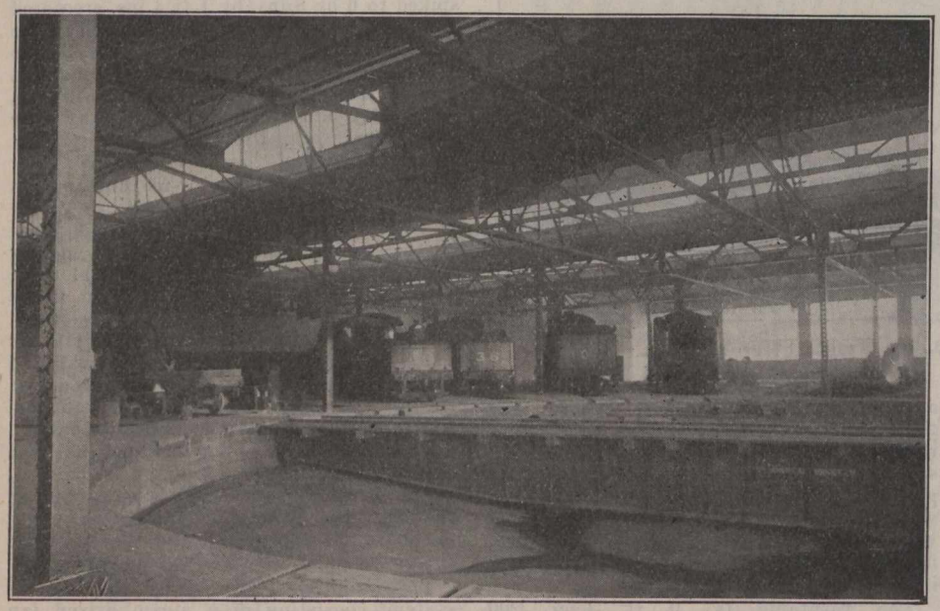
stalls. One set of drops fitted with double valves and connections serves every two stalls.

THE MACHINE SHOP is 112 by 221 ft. long, the long way being in an east and west direction, and is directly adjacent to the locomotive house, the west wall of the machine shop being the east wall of the locomotive house. All foundations are of concrete, as are the base walls to the sill lines, the same as described for the locomotive house. Brick is used for the walls



Interior of A.C. & H.B. Ry. Locomotive House.

above the sill line, and extends to under side of roof, being supported over window and door openings by steel lintels. The building consists of two bays, the one on the north side being 66 ft. and the one on the south side 44 ft. wide. Lengthwise of the building there are 10 bents at 22 ft. each.

Over the 44 ft. bay is a single pitch steel truss, supported by steel columns at each end with a clearance below to floor line of 18 ft. 2 ins. This truss carries I beam purlins, which in turn carry the concrete slab roof. Over the 66 ft. bay, with a clearance of 32 ft. above the floor line, is a steel truss with steel monitor framing, which is about 33 ft. wide and extends the full length of the building. I beam purlins are carried on both truss and monitor for the support of concrete roof slabs. These trusses are supported at the inside by the same columns that support the 44 ft. trusses and by steel columns at the wall. The inside and the north wall columns are of heavy construction, and at the height of 24½ ft. above the floor support a crane rail girder on which a 10 ton, 63 ft. 4 in. span, electric travelling crane operates.

Steel sash are used exclusively, both sides of the monitor, and that portion of the wall where the roof over the 44 ft. bay is lower than the one over the 66 ft. bay is equipped with two rows of 3 ft. high, Pond continuous sash, for approximately the full length of the building, one row being fixed in each case and the other operated by gang operator from the floor. The steel sash set in the brick walls are of the unit type, which, in the south wall, are 19 ft. wide by 14 ft. high in one horizontal row, and in the north wall are two rows, the lower one being of units 19 by 14 ft., and the upper 19 by 11 ft. All the sash have pivoted sections, which may be swung to secure the desired ventilation.

The roof is of reinforced cement tile, 1¾ ins. thick, cast in slabs about 5½ ft. long and 2 ft. wide. These slabs bear directly on the steel purlins and on the wall at the outside, and are covered with 5 ply Barrett specification roofing, which is finished off at the edges with copper gravel guards. Drainage from this roof is allowed to run off edges to the ground. The floor of this building is to consist of a 5 in. concrete subbase and 1 in. sand cushion, on top of which will be laid 3 in. creosoted maple paving blocks.

In the southwest corner is located the foreman's office, approximately 12 by 12½ ft., with maple floor and partitions of sheet metal and sheet metal ceiling, all of which are supported on rolled steel sections. North of, and adjacent to this office, is the tool room, 22 by 22½ ft., with creosoted block floor and steel framed partitions of sheet metal and wire mesh, 8 ft. high. North of the tool room is a space about 11½ by 22 ft., which is provided for a general and private lavatory. This lavatory is to be equipped with seven automatic compression closets, inclosed in Brown sanitary water closet shields.

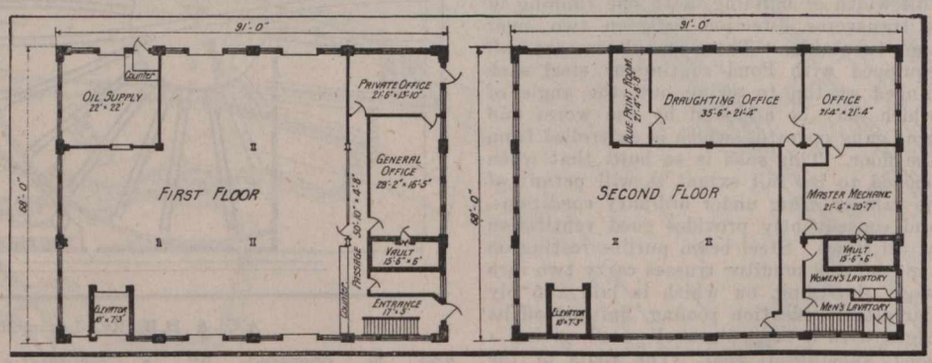
The erecting pits are located on the two through tracks leading from the locomotive house through the erecting shop. These tracks are on 21 ft. centres in the erecting shop. An electrically operated locomotive screw jack hoist is provided on one of these pits for unwheeling and mounting locomotives. The hoist consists of a pair of stationary screw jacks, and a pair of movable jacks mounted on rails outside of the pit rails. Each pair of jacks is provided with a lifting beam, which extends across the track from one jack to the other. The vertical movement of the beam is such as to permit the passage of a 72 in. driver underneath the beam when lifted to its full height. The jacks are all operated together.

The overhead 10 ton electric crane in this bay affords a method of handling heavy parts for repair work in any part of this section of the shop. A 24 in. gauge industrial track, running in the centre between the two standard gauge tracks, connected to the circular track in the locomotive house by a small turntable, extends to within 55 ft. of the east end of the machine shop. Two narrow gauge tracks are connected to this at right angles by turntables, one in the centre of the third bay from the east end and one in the sixth. These tracks run south through the machine tool department and through doors out into the yard.

The space used for the machine tools and blacksmith shop comprises the 44 ft. bay and about a 10 ft. strip of the 66 ft. bay, with the exception of the space allotted for office, tool room and lavatory, and space for the fan and heater. This building is heated in the same manner as the locomotive house, except the hot air is partially distributed through overhead galvanized sheet metal ducts.

THE STORE HOUSE is located in a position of easy access from all the present and proposed buildings, and has necessary facilities for the receiving and shipping of material, having platforms on each side adjacent to tracks. The building is 68 by 91 ft., and provision is made for an extension on the west end. It has three floors, a basement, first floor and second floor, and their heights are 10 ft., 13 ft., and ranging from 12 to 14 ft. on the second floor, respectively. The entire building, from foundation to first floor line, is of concrete, reinforced where necessary, including the 5 ft. permanent platforms and walls of same, in which are steel sash for the admission of light and ventilation to basement. The use of this space under platforms gives additional floor space in basement. The first floor is of reinforced concrete of the mushroom or flat slab type. The stairs to the basement, from the first floor in the southeast corner, are of reinforced concrete, and are inclosed in walls of expanded metal and cement plaster, with steel door and frame into basement.

Directly alongside of the stair well is located a lavatory room with light from the windows in the outside wall. A door from this room furnishes access to the janitor's closet under the stairs. At the east end, a little to one side of the centre, is a brick vault 6 by 16 ft., which is directly underneath the vaults on first and second floors. In the northwest corner of the basement is the oil storage room, approximately 27 by 22 ft. The walls of this room are of expanded metal and cement plaster, with one doorway 4½ by 7 ft., equipped with double sliding automatic fire doors. Light and ventilation are admitted through windows in north and west walls to this room. The entire basement floor is intended for the storage of heavy materials, and consists of



A.C. & H.B. Ry. Store House.