

spective view of the interior, which is certainly pleasing to the trained eye of the travelled engineer. A better lighted shop it would be difficult to imagine; in fact, the lack of definition in the photographic views is due to the almost excessive light, which streams into the building through sides, ends and roof; while the air of orderly arrangement, up-to-date tools, large and small, and general commodiousness, impresses one with a sense of entire adaptability and completeness.

trucks. And we found installed within the stores two powerful hydraulic machines, viz., a splitting shear for one-inch plates on one side, and a compound bar and angle shear on the other, both made by R. D. Wood, of Philadelphia.

The provision of these machines is a typical example of the foresight and economy which characterizes the whole plant; for plates, bars, and angles can be delivered to the workmen of the precise lengths called for by requisition, thus saving the double handling of material, and localizing

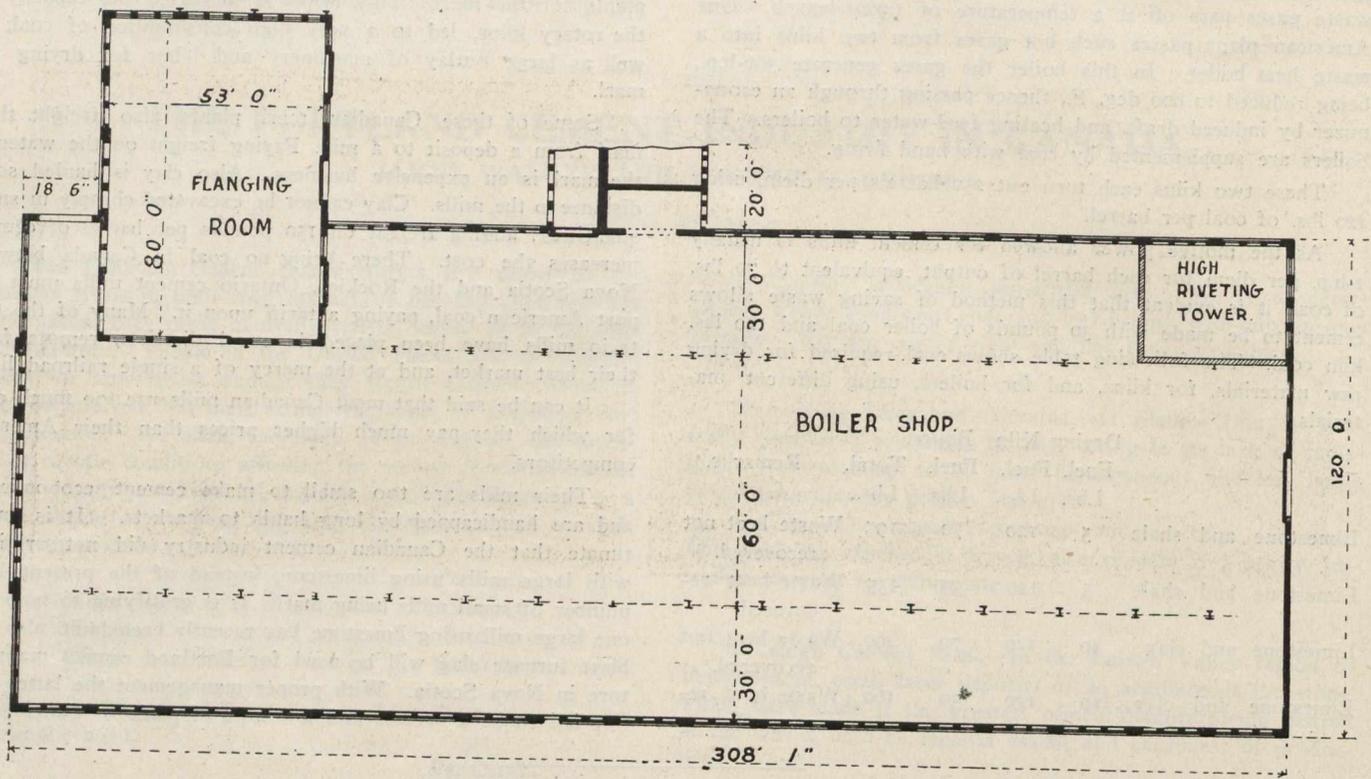


Fig. 3—General Plan.

A standard double railroad track runs through the centre of the shop, above which travels a 30-ton "Morgan" electric crane, having 25 feet lift, so that a boiler can be picked up at one end and carried over 300 feet to the other. In the north-east bay are four, and in the south-west bay are five, hand-power cranes, each fitted with three-ton Yale & Towne "Triplex" hoisting blocks; and these travel the whole length, whilst the conveyance of material from the semi-detached forge at the north corner is effected by

the scrap. This conveniently arranged Stores Department is undoubtedly a model of its kind.

In the south-west wing is a large, side, plate planing machine, 26 feet long, made by J. Bertram & Sons, Dundas, Ont. On this modern tool anything can be planed up to five inches thick. It is electrically driven. In close proximity are three useful hydraulic machines, made by R. D. Wood Co., Philadelphia, viz., vertical punch, vertical shear, and horizontal plate and bar punch; maximum capa-

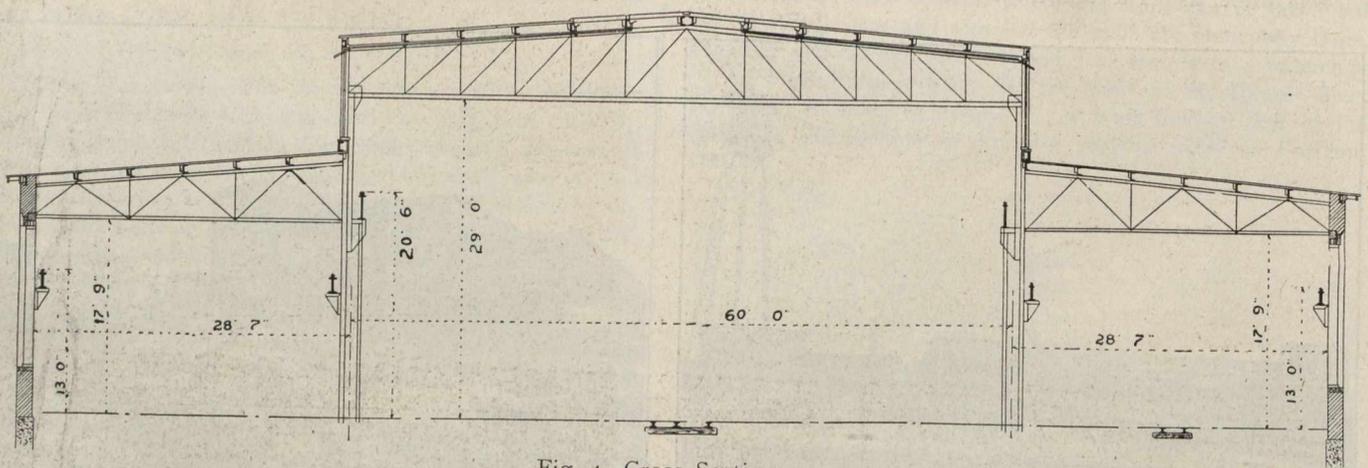


Fig. 4—Cross Section.

means of a narrow gauge track, with turntables and light ball-bearing trucks. In Fig. 2 a yard locomotive is shown hauling a C.P.R. freight truck into the main building. Thus, general transportation is provided for adequately.

About 117 feet of the north-west end is railed off, and reserved as a general store department. Here, in stacks, racks, and bins, are stocked in systematic order plates, sheets, flanged ends, flue tubes, angles, bars, rivets, bolts, etc., all under the middle bay and side wing travelling cranes, or, within easy reach of the narrow gauge floor

city, 1¼-inch plates and 1¼-inch holes. In the southern corner of this wing we found two ingenious machines, made by Goldie & McCulloch Co., i.e., adjustable vertical drills, each spindle having four cutters, for drilling tube holes in flanged end plates for boilers. Nearby, on the first column of middle bay, is a nine-foot triplex, vertical roll, for half-inch plates, also made by themselves. An additional appliance of this type is in course of construction.

Another section of considerable interest is the high rivetting Tower at the eastern corner, which has a floor