railway has the matter of complete and careful inspection and examination of incoming engines developed to a considerable extent. A chief inspector is assigned, with one or more assistants, to go over the engine with a surface examination, before stripping and during dismantling. These men select all of the parts to be removed and make out regular inspection forms (see fig. 10), giving sizes of all fits, clearances and tolerances for renewals and repairs of all parts requiring same which may develop during the stripping operation. They use micrometer calipers, giving all dimensions in decimal parts of an inch reading to thousandths, thereby ensuring correct and accurate fitting and alignment. These practices result in less movement of parts from one machine to another for fitting, also considerably less movement of men or foremen from one shop to another and discussion between them as to methods of making the repairs in question. Less spoiled work, standardization of parts and a prolonged life of engines will also develop.

The practical operation of this scheduling and routing system may be described as follows: An engine awaiting shop is thoroughly examined by boiler and ma-

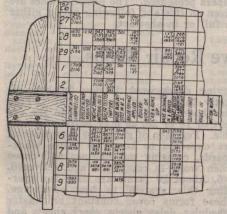


Fig. 1. Detail corner of Schedule Board.

chinery inspectors, who make report as to condition. One copy of this report goes to supervisor of shop schedules, enabling him to define the classification of repairs needed, and assign the proper schedule and number of working days required for completing repairs. The engine is next forwarded to the stripping pit and an itemized list of repairs needed is then forwarded by pit inspectors to supervisor of shop schedules, who is then in a position to assign exact dates and issue sheets to all departments concerned. These dates are posted by supervisor on the schedule boards. At least once a day the supervisor and his assistant visit each foreman, with the check sheets, and examine the work on the engines under repair in the shop on that date. Returning to the schedule office a daily sheet is made out and issued to the supervision, calling their attention to the material and operations delayed, the number of days delayed in the schedule and the cause. These delays are then posted in red ink on the schedule boards, where foremen and workmen can see quickly how their department stands, and determine the status of their delays for the month. An excessive number of red marks in any one vertical column on the schedule board indicates forcibly that this job or department, represented by that particular vertical column, is probably the cause for delaying the engine. The supervisor of schedules has other duties, such as weekly output sheets, re-

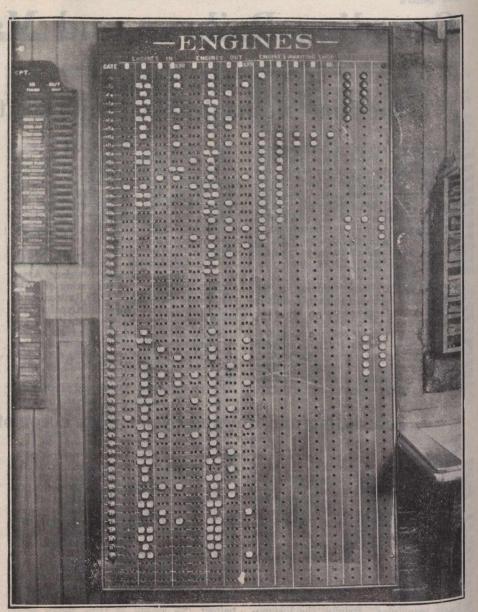


Fig. 2. Planning Board.



Fig. 3. Shop Blackboard.