engine requires a new cylinder a special gang applies that, erecting shop doing balance of the work. After the apprentices are out of their time in rebuild gang they are then sent over to some other gang and become specialists until some further promotion takes place.

To make this system still more perfect it should be worked in conjunction with contract. All the gangs should be put on contract, and where possible, individual contract. By contract, I mean that every man should be guaranteed his day's pay or rate per hour, then when prices are fixed he should be able to make as much more as possible over his regular day's pay. In some cases the work may be such that it is necessary to work collectively in gangs, but a very large percentage of this work can be done on individual contract. This gives the best man an opportunity of making the best pay, and has a tendency to increase the output. It also has a tendency to maintain a good standard of work. Where any work is rejected or to be done over again it is a loss to the operator. Where our gangs are working on individual contract and have a chargeman, the chargeman is paid a high rate and does not receive any contract, so that his whole time is devoted to maintaining or increasing the output and particular attention paid to having work efficiently done.

To facilitate the work and help all the different gangs in the shop that are working along lines of output, a list is made up each week of locomotives that are to be turned out the following week and a preparatory list for the second week. These lists are issued to foremen of all the different gangs, showing dates of which engines are to leave the shop, and the date on which work from each department will be required. It not only enables them to get work ahead for engines to be turned out the following week, but also enables them to look ahead for preparatory list, and when special work is required or extra heavy work, they are enabled to advance it. The foremen in turn give each chargeman a copy of schedule (sufficient being made out for this).

When alterations to machinery or other work is necessary, circulars are sent to foreman, who sends one to each of his chargemen interested, this saves foreman office work, and insures chargemen being properly notified. Each chargeman keeps a circular book so that if he is absent or promoted, the next man in charge, or his successor may post himself on alterations, etc., by perusing former circulars.

All inspectors should report direct to the Master Mechanic. Not necessarily all minor matters, but all such cases as he thinks need special attention, and where a ruling is required in special work, and in working contract, inspectors are required, but not more so than when men are working day work.

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