engineer running local trains too fast between stations, and then waiting for time, and working steam longer than necessary and then checking speed with brakes.

These meetings were held weekly for several months, and as a drawing card other subjects of direct interest to the engineers and firemen were taken up.

RECLAIMING SCRAP MATERIALS.

A. A. Burkhard, Assistant General Foreman, Car Department, New York Central & Hudson River Ry., West Albany, says: "There is a wide difference of opinion as to the economy in working up and using scrap and second-hand iron. To the writer there does not appear to be any question from a saving standpoint or from the standpoint of safety when stock is used for certain classes of work."

In this car department they have a scrap platform with suitable buildings in connection, where the reclaiming of materials for freight car repair work is handled by a man thoroughly familiar with all requirements. In these buildings are installed the necessary machines for reclaiming the scrap, such as hammers, riveters, shearing machines, forges, etc. It is remarkable how many freight car parts can be made from second-hand materials. Some of the scrap materials that can be economically reclaimed are: scrap bolts, which can be reclaimed at an average cost of 1.3 cents per pound; truss rods, which can be straightened and used over again, or cut up and made into standard bolts; brake levers, which, if the holes are worn large, can have the holes plugged and new ones drilled; axles, which can be forged into parts such as follower plates; arch bars, which can be forged into coupler carry irons and draft timber ties: cross tie rods, which can be forged into bolts, brake hangers and grab irons; old jacket iron, which can be cut to proper shape and used for tacking on pilots to prevent snow going through the pilot; scrap lagging can be ground up and used again, the cost of grinding sufficient old lagging to cover one boiler being about \$1.25. Many more cases might be enumerated.

Canadian railways are doing this class of work to some extent. Illustrations are here shown of the method adopted by the G.T.R. of preventing any spoilt materials being wasted. Twenty bins are arranged and above each in large easily read type is printed the name of the material to be piled in the particular bin. These are:

1. Cast Iron Borings.

- 2. Mixed Turnings.
- 3. Steel Turnings.
- 4. Tank Plate.
- 5. Iron Pipe.

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