

GWR LOCOMOTIVES SAND PIPES

I was once asked a question, “What are those pipes for in front of the wheels of an engine”?

Locomotives require good adhesion through their wheels with the rail to be effective. Usually a dry rail, or a thoroughly wet rail, is good. Drizzly rain, foggy weather, or rails that have not been used often can be troublesome, also on a sharp curve if an engine is working hard, one must be prepared for it slipping. This is when sand is essential to give adhesion. The sand used is of a sharp type which has been thoroughly dried. It will then flow freely.

Usually a locomotive has four sand boxes, one above each front driving wheel and one above the rear driving wheels. Each sand box holds about three buckets full of sand. Inside of sand box is a fixed standpipe about 1” diameter with holes bored through. Over this pipe is another pipe which fits closely over standpipe, this also has holes bored through. This outer pipe can be turned from a lever in the cab, when turned the holes line up and sand falls from the sand box to the rails via the sand pipes.

Some Railway Companies used other methods to sand rails.

Peter Chater