

## Lagerlunda

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Histories of tests for colour vision deficiency often mention a fatal railway accident that occurred on the single-track trunk line from Malmö to Stockholm on the night of 14–15<sup>th</sup> November, 1875. The scene of the accident was the estate of Baron Lagerfelt in Östergötland, but the critical events of the night were played out at Linköping (the normal passing place for the northbound and southbound expresses) – and at Bankeberg (a small station to which the passing was reassigned at a few minutes notice). First to arrive at Bankeberg, the northbound express slowed almost to a halt, but then inexplicably accelerated forwards towards the Lagerlunda estate, despite signals from the stationmaster, Uno Björkelund, and a lineman, Oskar Johansson.

Under the regulations then in force (*Tjenstgörings-Reglemente vid Statens Jernvägar*, 1874), the night signals were: *Stop*: a red lantern light or any light moved up and down; *Caution*: a green light, or any light slowly moved from left to right; *All-clear*: a white light swung in a circle. Soon after the accident, the ophthalmologist Frithiof Holmgren suggested that the driver of the northbound, Andersson, or his oiler, Larsson, had been colour blind. Neither survived to be tested.

Using the manuscript records of Björkelund's trial and other archival materials, we have re-examined the role of colour blindness in the Lagerlunda incident. The accident definitely cannot be attributed to colour blindness alone: as with many railway accidents, a conjunction of several human errors and system weaknesses was required before the collision became possible. Yet it is a matter of record that the Lagerlunda accident attracted world-wide concern and had a central role in the introduction of colour vision testing in European railways. But to persuade the management of the Swedish State Railways, Holmgren used a dramatic *coup de theatre* and not a little subterfuge.