Wheel Slipping Indicator for Electric Locomotives

Referring to Sketch, Circuits 1 and 2 should be connected to opposing motions on an alternating current milli-voltmeter or device having ability to move when supplied with a small A. C. voltage. The excess voltage of one circuit over the other would indicate slipping and deflection of pointer would indicate on which pair of wheels slipping occured. Instead of a needle, contacts cour be used to turn on colored lights or to ring a bell.

The principle is tha t variation of flux density in the coil due to the passing of the gear or pinion teeth under a permanent Magnet. Magneto elements would be place in recesses in gear covers. In the case of gearless motors, a small rotating element resembling a gear could be placed on the axd or motor shaft.

The indicating element should represent a resistance load on the magneto, that is, the inductance should be low.

31 October, 1928

Paul W. Klipsch

Paul W. Klipsch
Locomotive Electrician
Anglo-Chilean Cons. Nit, Crp.
Tocopilla, Chile

Witnesses:

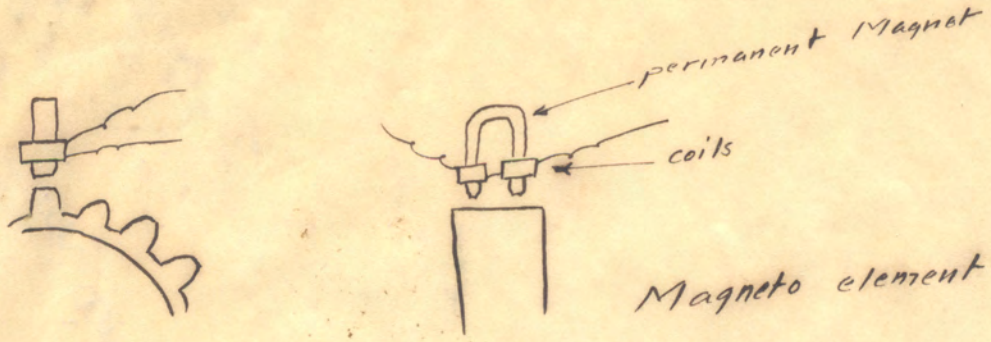
A H Paul

A. H. Paul
Master Mechanic, Railway
A. C. C. N. C.
Tocopilla, Chile

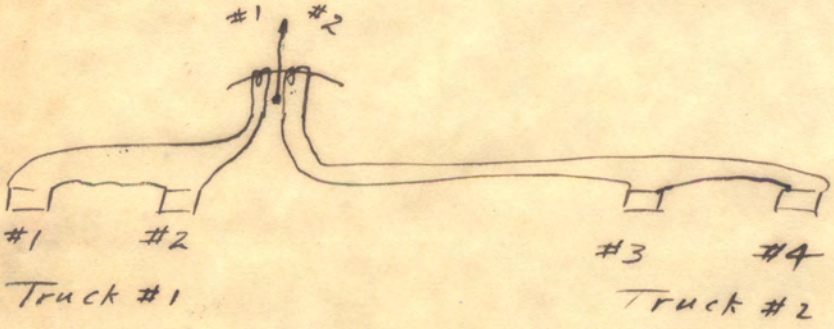
R E Dawn.

R. E. Dawn
Port Electrician
A. C. C. N. C.
Tocopilla, Chile

Wheel ~~Slipping~~ indicator.



One magneto would be placed over each gear (a pinion): Half the total number would be connected in series & to on element of the ~~two~~ indicator, the other half in series to the other element, the two elements to be in opposition



31 October 1928

Paul W Klipsch

Witnessed
R Edwards
31/10/28

A L Pane
1/11/28