

July 29, 1914.

**IN RE: INVESTIGATION OF ACCIDENT ON THE SOUTHERN PACIFIC COMPANY
NEAR CONLEY, CALIF., ON JUNE 15, 1914.**

On June 15, 1914, there was a derailment on the line of the Southern Pacific Company near Conley, Calif., which resulted in the death of 1 passenger and the injury of 25 passengers. After investigation of this accident, the Chief Inspector of Safety Appliances reports as follows:

Westbound passenger train No. 131 consisted of 1 loaded box car, 1 combination baggage and smoking car, 1 coach and 1 combination baggage and express car, hauled by locomotive No. 1337, and was in charge of Conductor Davis and Engineman Small. It left its terminal at Ione, Calif., at 9:20 a.m., passed Cicero, the last station east of Conley and 3.5 miles distant therefrom, at 10:32 a.m., and at about 10:45 a.m. was derailed at a point one-half mile east of Conley while running at a speed estimated to have been about 20 miles per hour.

The locomotive and tender were not damaged and only the rear pair of tender truck wheels was derailed. The box car was derailed but remained upright close to the track. The remaining 3 cars in the train were thrown over to the right on their sides, the first car falling from a short trestle, located just beyond the initial point of derailment, which was 9 or 10 feet high.

The Ione Branch of the Southern Pacific Company, on which this accident occurred, is a single-track line. No block signals are in use, trains being operated by train orders and time-card rights. The track is laid with 50-pound steel rails, 30 feet in length, with an average of about 16 ties under each rail. At the point of derailment, there is no ballast. This track was in fairly good condition and safe for the operation of trains at the maximum speed allowed on this branch, 25 miles per hour.

Conductor Davis stated that he was at his desk in the combination baggage and smoking car when he heard a noise indicating that the freight car immediately ahead was derailed. He at once applied the brakes by means of the conductor's emergency valve.

Examination of the trucks of the box car showed that there was a broken flange on one of the forward wheels of the forward truck, about 48 inches of the flange being missing. Ten fragments of this flange as well as several marks on the rail, were found for a distance of 2 miles east of the point of derailment.

This defective wheel was cast iron, with a chilled rim, and was manufactured by the American Car & Foundry Company in February, 1911, and was guaranteed for 5 years. The flange had not been worn down to the limit permitted by standard practice,

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being about 1-1/8 inches in thickness. In the tread of the wheel, a groove about 1/8 inch in depth had been worn. The circumference was 8 feet 7 1/2 inches, being 3/4 of an inch less than the circumference of the wheel on the opposite end of the axle. The flange on the wheel which remained intact was 1-3/8 inches in thickness, thus being 1/4 inch thicker than the wheel that failed.

This derailment was caused by a broken flange, but the cause of the breaking of the flange at this particular time was not definitely ascertained.