

# Timeline

Alexander Meredith

Air Brakes: A Railroad Turning Point

1865

George Westinghouse developed a device to re-rail cars

Patented a rotary steam engine on October 31

1868

Westinghouse started working on the railroad frog, spanning to  
1869

1869

Patented the air brake

Westinghouse Air Brake Company incorporated on September  
28

1872

On March 5, Westinghouse receives a patent for the triple valve

1880

Bought signal and switch patents

1881

Railroad employee accident rate was 30,000; fell 60% after air  
brakes

1882

Founded Union Switch and Signal Company

1893

On March 18, President Harrison made air brakes mandatory on  
all US trains

1918

Air brakes started being used on road trucks