

T. FOGG.

Improvement in Switches for Changing the Gauge of Cars.

No. 114,123.

Patented April 25, 1871.

Fig. 1.

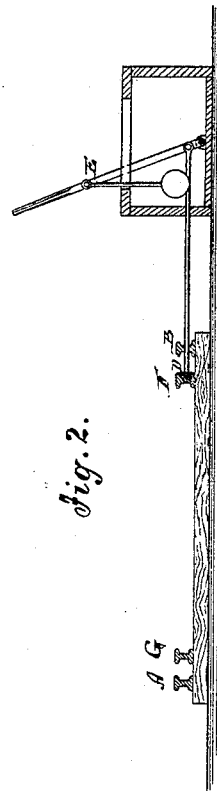
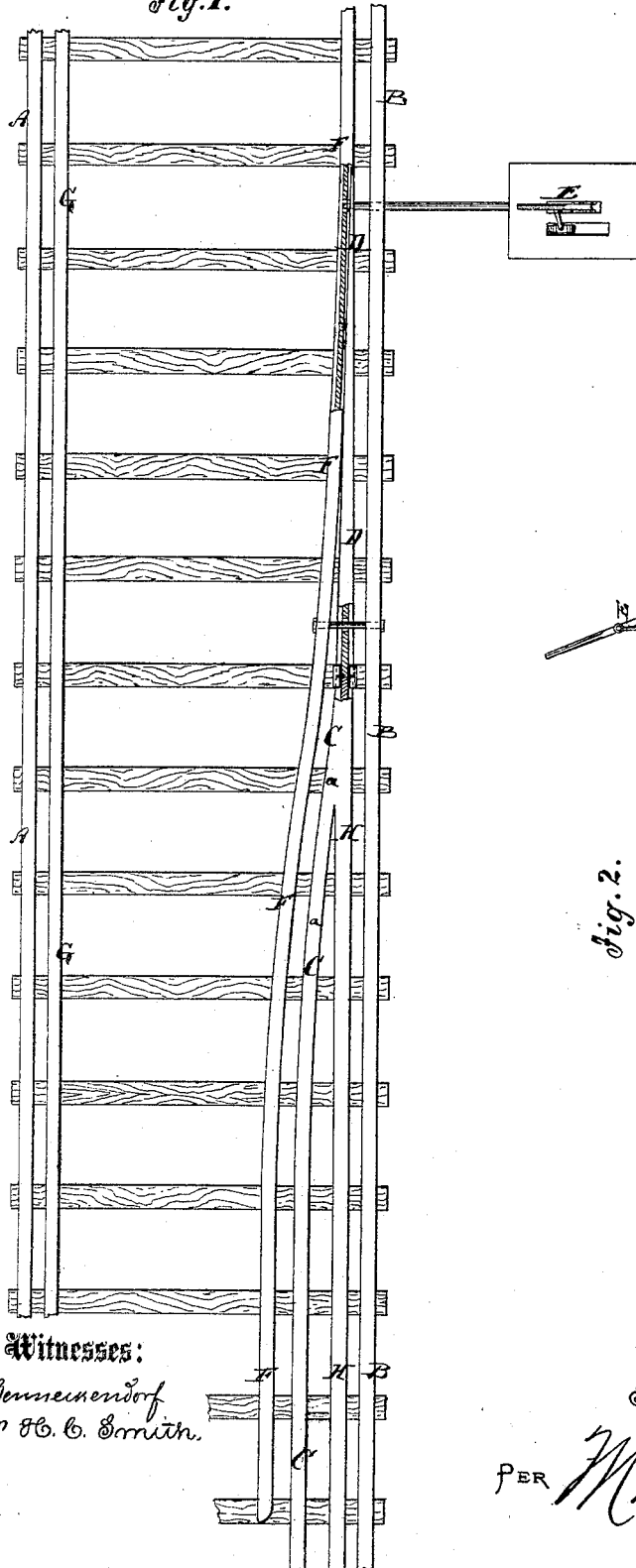


Fig. 2.

Witnesses:

A. Remmenhoff  
Wm. H. C. Smith.

Inventor:

T. Fogg.

PER

Munn & Co.  
Attorneys.

# United States Patent Office.

THOMAS FOGG, OF ST. MARY'S, CANADA.

Letters Patent No. 114,123, dated April 25, 1871.

## IMPROVEMENT IN SWITCHES FOR CHANGING GAUGE OF CARS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, THOMAS FOGG, of St. Mary's, in the Province of Ontario and Dominion of Canada, have invented a new and improved Switch for Changing Gauge of Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a plan or top view of my improved switch applied to a double-gauge track.

Figure 2 is a transverse vertical section of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to provide a switch by means of which cars having adjustable wheels can be shifted from narrow to broad-gauge tracks, or *vice versa*, by the power of a locomotive-engine.

At present the change of the wheels from narrow to broad, or from broad to narrow gauge is effected on double rails, which gradually diverge or converge to the desired width. On such ogee rails the cars can not be moved along by locomotive-engines, which have no adjustable wheels, and consequently the change has to be produced by moving each car by muscular power over the changing rails. This operation is quite tedious and laborious. To facilitate it I have made the ogee rail on one side of the track only, and combined it with a switch which will accommodate itself to the gauge of the locomotive, so that either a narrow or broad-gauge engine can be used for spreading or contracting the wheels of an entire train of cars.

A B in the drawing are the two outer rails of the track, they being laid for broad-gauge cars.

C is the narrow-gauge rail secured near the rail B.

The rail C is, at *a a*, gradually brought toward the rail B, and terminates in a swinging frog or switch-rail, D, by which it can be connected with the rail B, for transferring cars from the narrow to the broad gauge, or *vice versa*.

The switch-rail D is connected with a weighted lever, E, by which it will be held either against the rail B or against the check-rail F, as in fig. 1.

G is a check-rail for A.

H, a check-rail for B, converging with the inner rail D.

The check-rail F of C is gradually bent outwardly to become the check-rail also of B beyond the switch.

If the cars are to be moved from the narrow gauge to the broad the switch is set against the rail B. The engine can follow or precede the cars on the broad gauge, the switch giving way to it when it approaches; so also a broad-gauge engine can be used for changing the cars from a broad to a narrow gauge, the switch being set in front of the engine to keep it on the rail B while the cars are transferred to C.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The combination of the broad and narrow-gauge rails B and C with the adjustable switch-rail D, for permitting the transfer of cars from narrow to broad gauge, and *vice versa*, as specified.

THOMAS FOGG.

Witnesses:

G. B. SMITH,  
W. C. MOSCOP.