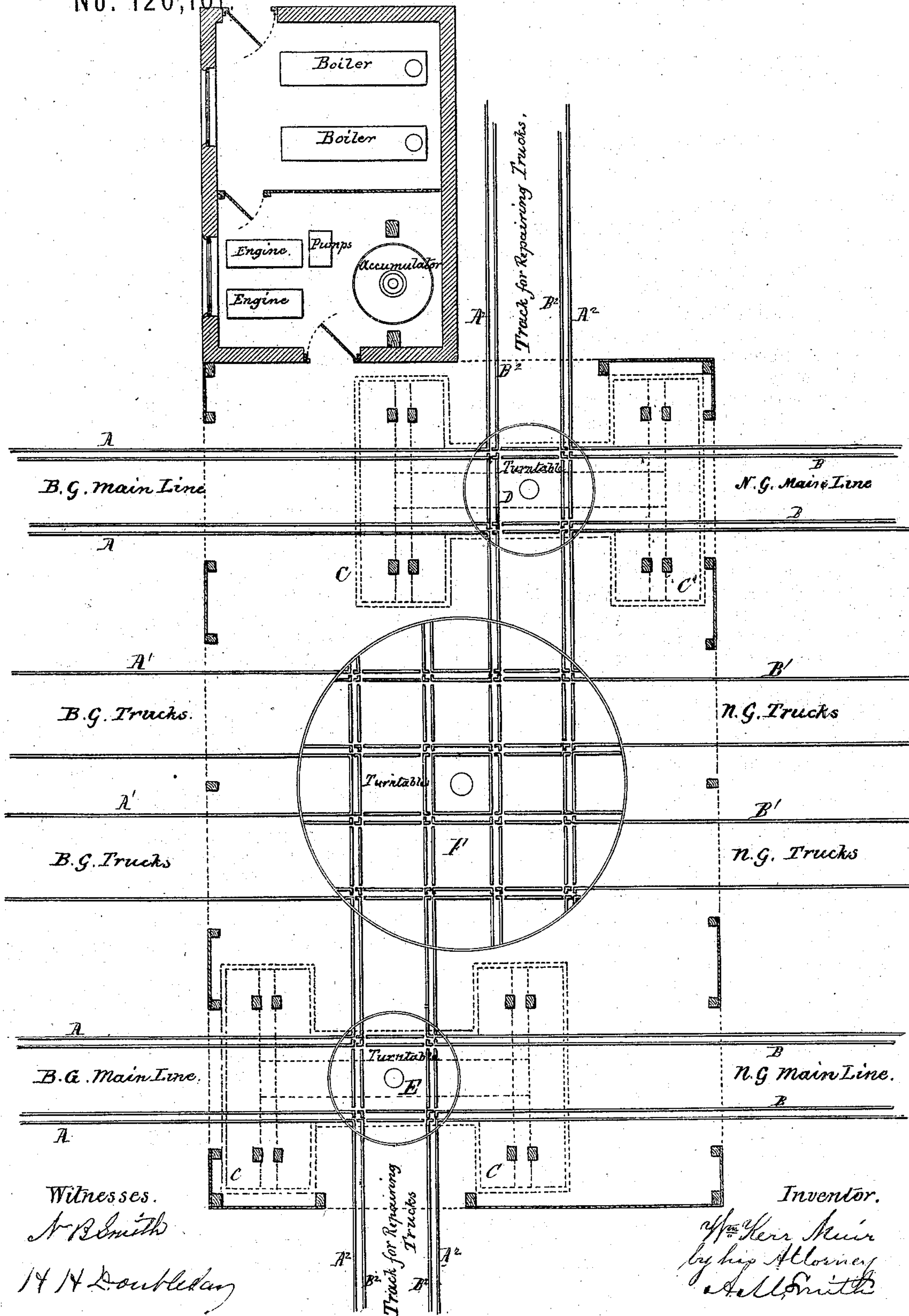


WILLIAM KERR MUIR.

Improvement in Turn Tables and Railway Tracks for Changing Gauge of Cars.

No. 120,161.

Patented Oct. 24, 1871.



Witnesses.
N. B. Smith
W. H. Doubleday

Inventor.
Wm. Kerr Muir
by his Attorney
W. H. Smith

UNITED STATES PATENT OFFICE.

WILLIAM KERR MUIR, OF HAMILTON, CANADA.

IMPROVEMENT IN TURN-TABLES AND RAILWAY TRACKS FOR CHANGING GAUGE OF CARS.

Specification forming part of Letters Patent No. 120,161, dated October 24, 1871.

To all whom it may concern:

Be it known that I, WILLIAM KERR MUIR, of Hamilton, Province of Ontario, Dominion of Canada, have invented a certain new and Improved system of Turn-Tables and Railway Tracks for Changing the Gauge of Railway Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing.

In the construction and arrangement of the mechanism and tracks for shifting or transferring the bodies of railroad cars from trucks of one gauge to those of a different gauge, it is a point of the highest importance that provision should be made for effecting the changes and transfers with as little delay as possible, under all circumstances. The contingencies to be provided for will ordinarily be as follows: First, when the trucks of two cars or trains of cars arriving from different directions are to be simultaneously interchanged; second, when the trucks of one car, or a train of cars, all moving in one direction, are to be removed, and trucks of a different gauge substituted therefor; and third, when one or both of the trucks of a car are to be repaired and others substituted. It will be readily seen that a very simple adaptation or arrangement of devices could be made which would meet the requirements of any one of the different conditions above named, but might be very inconvenient when working under either of the others; and with a view of facilitating the operation under any and all exigencies which may occur, I have invented a system of turn-tables and tracks which I will now proceed to describe.

In the drawing, A represents the broad-gauge main line, and B the narrow-gauge main line. A¹ B¹ are sidings of broad and narrow gauges respectively, arranged between the main lines to accommodate the extra trucks which are needed for use under circumstances which will be explained. A² B² are tracks leading from the turn-tables to a place or places convenient for repairing trucks. The dotted lines C C represent the position occupied by the jacks or other devices employed for lifting the cars from the trucks; but as these may be of any usual or desired construction they need not be particularly described. D E are turn-tables, located in the main tracks about centrally of the cars when they (the cars)

are in position for removing the trucks. Each turn-table is provided with a short section of both gauges of tracks. F is an intermediate turn-table, large enough to accommodate two sets of tracks—that is, one upon each side of its center, as shown in the drawing. This table is located between tables D E, with which it communicates by short sections of tracks, and it will be seen that tables D E are arranged upon opposite sides of a line drawn through the center of table F, in order that trucks from the two outside tables may be run upon the central one simultaneously from opposite directions. In case I wish to interchange the trucks of two cars upon broad and narrow-gauge tracks I run them over the jacks, or other lifting devices; then lift them up and run their trucks upon tables D and E, turn these tables around a quarter turn; and run the trucks upon table F; then swing this table a half turn; and the trucks will be in proper position to deliver the opposite tables. By preference I make table D and E of such length as will accommodate two sets of trucks, in order to facilitate the work; but this may not be advisable in all cases. When the cars are all moving in one direction, so that trucks have to be taken from the sidings or supplemental tracks A¹ or B¹, the new trucks can be loaded upon tables F while the car is being jacked up, so that but little delay will occur in making the exchange. Should either or both sets of trucks of a car be disabled they can be run off upon track A² or B², as the case may be; and should but one truck need repairs care should be taken to turn the table in such direction that each truck can be run off on its appropriate track.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with turn-tables D and E, the intermediate turn-table F, substantially as described.
2. In combination with the turn-tables D E F, the main lines of the track A B and the sidings A¹ B¹.

WILLIAM KERR MUIR.

Witnesses:

FRED. TIFFIN,
C. M. CLARKE.