

American Railway Master Mechanics' Association,

OFFICE OF THE SECRETARY.

J. H. SETCHELL,
Secretary.

J. DAVIS BARNETT
President.

Dunkirk, Nov. 20th, 1885.

The Driver Brake Committee request an early reply to the following queries, viz..

- 1—Are there any circumstances under which you would recommend the application of driver brakes, and if on all classes of engines, viz.: passenger, freight and switching? *On switching*
- 2—What are the best substances, the best shape, and best size for brake-blocks to be used on steel tyres? *Cast iron*
- 3—Does the application of driver brakes lessen engine mileage between each tyre turning, etc? If so, to what extent? *Very little*
- 4—Does their application lessen mileage between repairs that can be got out of journals, axle boxes, horn blocks and wedges, side rod brasses, etc.? *Very little*
- 5—Is any injury done to engine or side rods by applying brake blocks on one side only, and between wheels, (wedge type,) thus forcing the axles further apart, or is there a practical advantage in gripping each wheel with brake blocks on both sides, (compression type,)? *Very little. Should think there would less wear by gripping the wheels*
- 6—Is it advantageous to couple driver, tender and train brakes, so that one handle or valve will apply the whole? *Should have the drivers used only in case of necessity.*
- 7—Which is the best position for brake blocks so as to give the greatest power and least interference with the elastic action of the main springs? *A little below the center.*
- 8—What percentage of the weight of the drivers is it judicious to utilize for brake resistance in view of the train breaking loose, and the possibility of the front (by the automatic application of the brake,) being brought to a stop earlier than the rear portion, thus resulting in a rear pitch-in? *Should not have the driving brake put on automatically*
- 9—Do you recommend the application of steam or other form of power-brake on drivers when the train is not provided with any form of continuous brake,—or, in other words,—is there any element of danger in having a powerful brake resistance at the front end of the train? *Not if properly used*
- 10—As there are several ways of applying brakes through an electric current, should the electric wire be so connected with the source of power that the touching of a button or key by train conductor, would give him the opportunity of applying the brakes on the driving and tender wheels as well on the car wheels? *Not on the drivers*

Do not confine your answers to the above leading questions, but in addition kindly give any experience, information, statistics or opinions you may have on the general subject of the application of driver brakes to locomotives, [either for or against]

On behalf of Committee.

H. A. WHITNEY, Inter-Colonial R'y.

J. DAVIS BARNETT, Grand Trunk R'y.

Replies to be addressed to

J. DAVIS BARNETT,

PORT HOPE,

ONTARIO, CANADA.

10/20/85