

however, if from this or any other consideration my discussion of the subject takes a somewhat wider range than appears to be contemplated in your letter.

The law of Congress, granting government aid to the Union Pacific railroad and branches, provides that they shall be built as "*first-class railroads*." It also provides that the President of the United States shall appoint three commissioners, whose duty it shall be to examine the roads and certify to this fact. It also provides that the President shall appoint five government directors for the Union Pacific Railroad Company, one of whom shall be placed upon each of the standing committees of the board. It also provides that the President shall fix the eastern terminal point, the point of crossing the 100th meridian of longitude, and approve the location between these points. It also fixes the extreme limit to the grades and curves of the road, the width of gauge, and character of the iron rails.

With all these safeguards thrown about these roads, for the purpose of protecting the interests of the government and securing their proper construction, it would seem almost impossible (unless the government officers fail in the performance of their duty) for the railroad companies to evade a proper discharge of the responsibilities imposed upon them by Congress; and it will, in my opinion, be equally difficult for the board of government commissioners, directors, and engineer, referred to in your letter, to establish a common and unvarying standard for the construction and equipment of these roads.

The term "*first-class*" railroads, as generally used in this country, does not, so far as my experience and observation extend, either depend upon or apply to any particular "weight or cross-section of rail, plan of chair, spike or other joint fastenings, dimensions of and distance between ties, width of road-bed at grade in excavation and embankments, dimensions of side ditches, depth of ballast, different plans and materials for railroad bridges, weight and other characteristics of engines and rolling stock, or ratio in which rails and rolling stock deteriorate with different velocities."

You will find that all the foregoing characteristics which are specified in your letter not only vary materially on the different first-class roads throughout the country, but upon *the same road*.

I do not know of a first-class railroad of any considerable length that has not almost every variety of weight and pattern of rails, chairs, engines, cars, plan of bridges, width of road-bed and ditches, machine-shops, station-houses, &c., &c. These are or have been generally governed either by the location of the road, the grades and curvature, the peculiar views of engineers, the financial condition of the company, or the nature and extent of the traffic for which the road was constructed. You may, therefore, select any number of the acknowledged first-class roads throughout the country, and you will find that their general characteristics will vary just in proportion as their peculiar location, the views of their builders, and the character of their business varies.

You will also find that these roads have generally, if not in all cases, been constantly improving their condition in regard to structures, outfit, and other particulars, since their first construction in order to keep pace with their constantly increasing traffic, so that a road five or ten years old presents an entirely different aspect from what it did when first opened to the public as a first-class railroad. Hence it may be considered perfectly safe to assume that all these things will be regulated by the managers of the road as fast as the interests of the company or the requirements of the public may demand.

In view of the foregoing facts and considerations I have assumed that the term *first-class railroad*, as intended by Congress to be applied to the Union Pacific railroad and its branches, means a railroad suitable and proper in all respects for the nature and extent of the traffic which the whole or any portion of the road may reasonably be expected to do when first opened to the public, of which the commissioners appointed by the President were to be the judges;